



WAGO Power Supplies

Edition 2021/2022



WAGO Full Line Catalogs



Volume 1, WAGO Rail-Mount Terminal Blocks and Connectors

- Rail-Mount Terminal Blocks
- Rail-Mount Terminal Blocks with Pluggable Connector (X-COM®-SYSTEM)
- Patchboard Systems
- Terminal Strips
- PUSH WIRE® Connectors for Junction Boxes
- Lighting Connectors
- Shield Connecting System



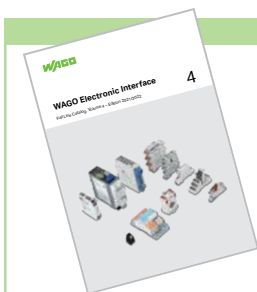
Volume 2, WAGO PCB Terminal Blocks and Connectors

- PCB Terminal Blocks
- THR/SMD PCB Terminal Blocks
- *MULTI CONNECTION SYSTEM (MCS)*
- Pluggable PCB Terminal Blocks
- Feedthrough Terminal Blocks
- Specialty Connectors
- Empty Housings



Volume 3, Automation Technology

- Solutions & Software
- Operating & Monitoring
- Controllers, Edge Devices
- Modular I/O-SYSTEM IP20, I/O-SYSTEM IP67
- Industrial Switches
- Radio Technology
- IP67 Sensor/Actuator Boxes, IP67 Cables and Connectors



Volume 4, WAGO Interface Electronic

- Relay and Optocoupler Modules
- Signal Conditioners and Isolation Amplifiers
- Current and Energy Measurement Technology
- Power Supplies
- Interface Modules and System Wiring
- Overvoltage Protection
- Empty Housings



Volume 5, WAGO Pluggable Connection System WINSTA®

- Pluggable Connectors
- Snap-In Device Connectors
- Pluggable PCB Connectors
- Distribution Connectors
- Cable Assemblies
- Flat Cable Systems
- Distribution Boxes



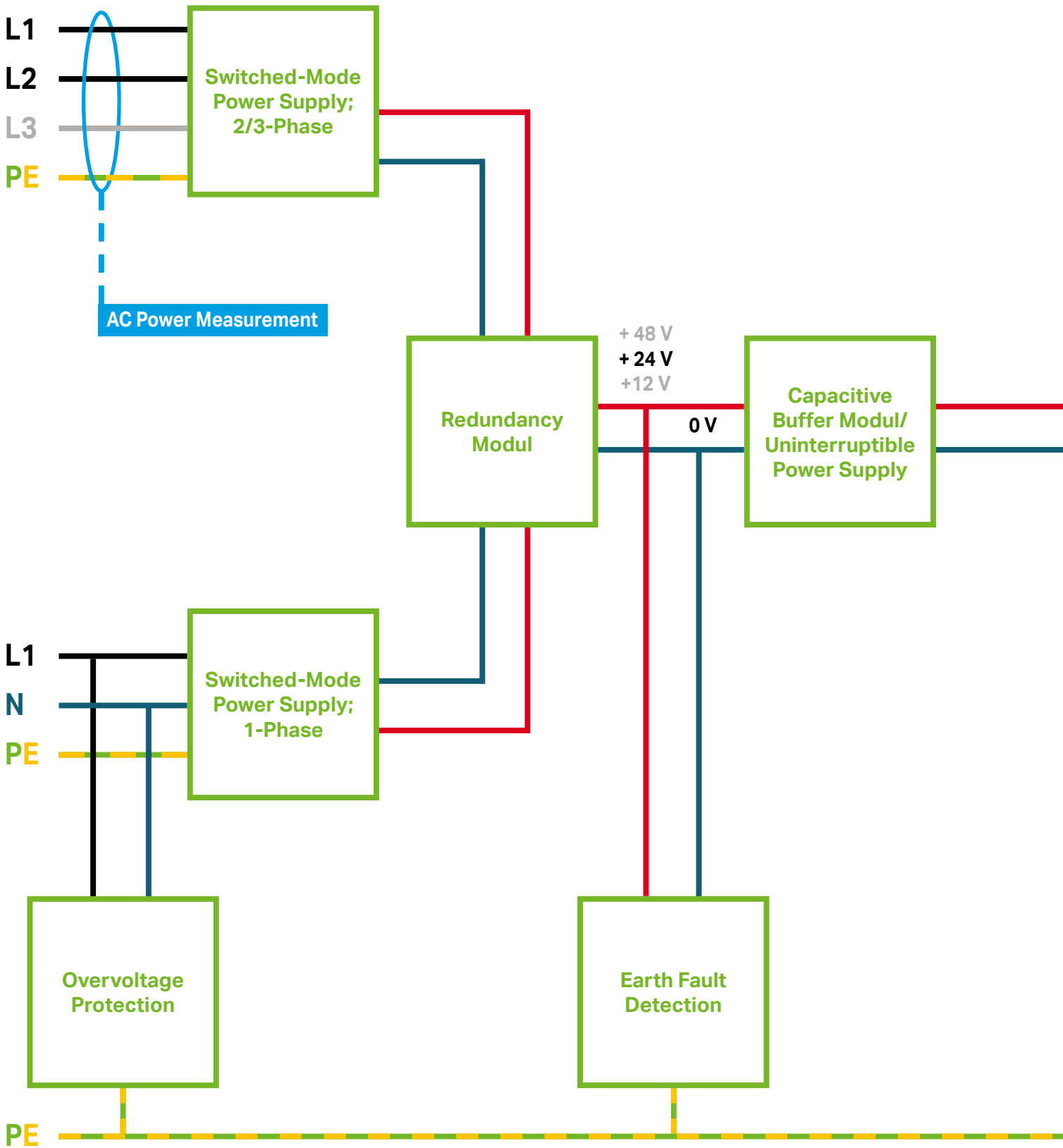
Volume 6, WAGO Marking

- Printer
- Software
- Terminal Block Marking
- Cable and Conductor Marking
- Device Marking
- Marker Carriers

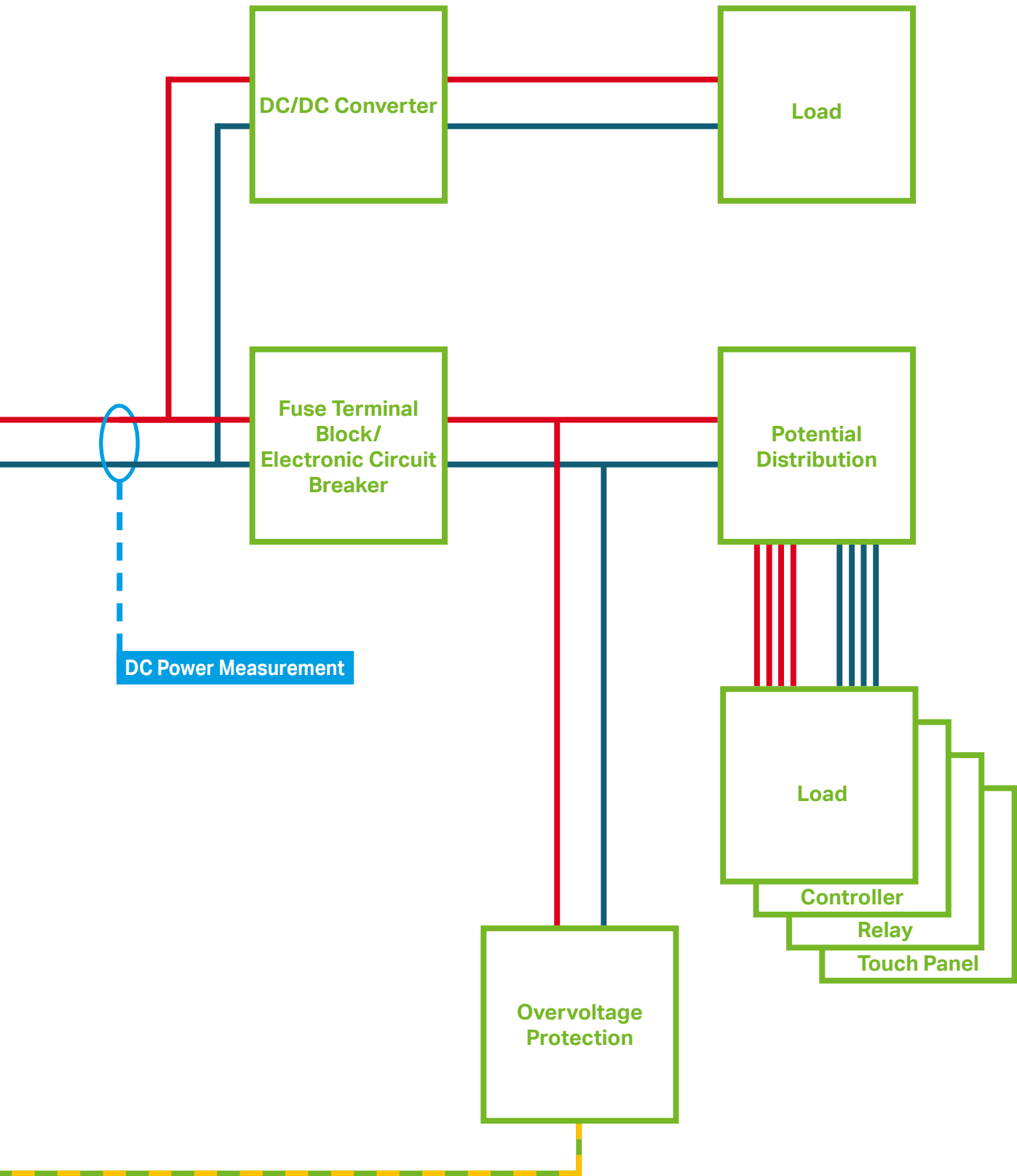
WAGO Power Supplies

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WAGO Power Supplies System Overview



WAGO Power Supplies System Overview



WAGO Power Supplies



WAGO Power Supplies Pro 2

New Generation of Professional Power Supplies for Applications Requiring High Performance, Efficiency and Reliability

WAGO's Pro 2 Power Supplies offer tremendous added value thanks to flexible configuration and comprehensive monitoring via optional communication interface (WAGO USB Communication Cable and IO-Link Communication Module).

Advantages:

- TopBoost function: Up to 600% output current for 15 ms
- PowerBoost function: 150% output power for 5 s
- High efficiency thanks to a CCFL inverter topology
- Single- and three-phase power supplies with output voltages of 24 VDC and nominal output currents from 5 to 40 A
- Communication interface for configuring threshold values, overload and DI/DO behavior, as well as monitoring output variables, warning and error messages
- Permanent communication via IO-Link through an optional pluggable communication module



WAGO Power Supplies Pro

Applications with high output requirements call for professional power supplies capable of reliably handling power peaks. WAGO's Pro Power Supplies are ideally suited for such applications.

- TopBoost function: Multiplies the nominal current for up to 50 ms
- PowerBoost function: Provides 200% of output power for four seconds
- Single- and three-phase power supplies with output voltages of 12/24/48 VDC and nominal output currents from 5 to 40 A for nearly every application
- LineMonitor (option): Easy parameter setting and input/output monitoring
- Potential-free contact/stand-by input: Switch off output with no wear and minimize power consumption
- Serial RS-232 interface (option): Communicate with PC or PLC



WAGO Power Supplies Classic

Classic is the robust power supply with optional TopBoost integration. A wide input range and extensive list of international approvals open up WAGO's Classic Power Supplies to a wide variety of applications.

- TopBoost: cost-effective, secondary-side fusing via standard circuit breakers (≥ 120 W)
- Nominal output voltage: 12, 24, 30.5 and 48 VDC
- DC OK signal/contact for easy remote monitoring
- Wide input voltage range and UL/GL approvals for worldwide applications
- CAGE CLAMP® Connection Technology: maintenance-free and time-saving
- Slim, compact design saves valuable cabinet space

WAGO Power Supplies



WAGO Power Supplies Eco

Many applications only require 24 VDC. Here, WAGO's ECO Power Supplies are the economical solution.

- Output current: 1.25 ... 40 A
- Wide input voltage range for use internationally: 90 ... 264 VAC
- Economically supports basic applications
- CAGE CLAMP® Connection Technology: maintenance-free and time-saving
- LED status indication: output voltage availability (green), overcurrent/short circuit (red)
- Flexible mounting on DIN-rail and variable installation via screw-mount clips – perfect for every application
- Flat, rugged metal housing: compact and stable design



WAGO Power Supplies Eco 2

The Eco line of power supplies now includes WAGO Eco 2 Power Supplies with push-in technology and integrated WAGO levers. The new devices' compelling features include fast, reliable and tool-free lever connections, as well as an excellent price/performance ratio. At 25 mm and 38 mm wide, the power supplies are slim and compact. The devices are also extremely durable and reliable with their high efficiency of $\geq 88\%$ (2687-2142) and lower thermal generation.

- Power supplies with a wide input voltage range of 90 ... 264 VAC (100 ... 373 VDC) Output voltage: 24 VDC, adjustable; Output power: 30 W (2687-2142) and 120 W (2687-2144)
- Integrated, tool-free lever-actuated push-in connection technology
- Slim design, high efficiency, good price/performance ratio
- Reliability, long service life (high MTBF)
- Quick, easy, maintenance- and tool-free connection technology



WAGO Power Supplies Compact

WAGO's compact, high-performance Compact Power Supplies in DIN-rail-mount housings are available with output voltages of 5, 12, 18 and 24 VDC, as well as nominal output currents up to 6.5 A.

- Wide input voltage range for use internationally: 85 ... 264 VAC
- Flexible mounting on DIN-rail and variable installation via screw-mount clips
- Push-in CAGE CLAMP® Connection Technology (option): maintenance-free and time-saving
- Improved cooling due to a removable front plate: ideal for alternative mounting positions
- Dimensions per DIN 43880: suitable for installation in distribution and meter boards

WAGO Power Supplies



Uninterruptible Power Supply (UPS)

Consisting of a 24 V UPS charger and controller with one or more connected batteries, WAGO's Uninterruptible Power Supply reliably powers an application for several hours. Trouble-free machine or system operation is guaranteed – even in the event of brief power supply failures.

- Slim charging and control units save control cabinet space
- Integrated display and RS-232 interface (option) simplify visualization and configuration
- Pluggable CAGE CLAMP® Connection Technology: maintenance-free and time-saving
- Battery control technology for predictive maintenance that extends battery life



Capacitive Buffer Modules

In addition to reliably ensuring trouble-free machine and system operation – even through brief power failures – WAGO's Capacitive Buffer Modules offer power reserves that may be required when starting heavy motors or triggering a fuse.

Decoupled output: integrated diodes for decoupling buffered loads from unbuffered loads

- Maintenance-free and time-saving connections via pluggable connectors equipped with CAGE CLAMP® Connection Technology
- Unlimited parallel connections possible
- Adjustable switching threshold
- Maintenance-free, high-energy gold caps



Redundancy Modules

WAGO's redundancy modules are ideal for reliably increasing power supply availability. These modules decouple two parallel-connected power supplies and are ideal for applications where an electrical load must be reliably supplied – even in the event of a power supply failure.

- Integrated power diodes with overload capability: suitable for Top-Boost or PowerBoost
- Potential-free contact (option) for input voltage monitoring
- Reliable connection via pluggable connectors equipped with CAGE CLAMP® or terminal strips with integrated operating levers: maintenance-free and time-saving
- Solutions for 12, 24 and 48 VDC supply, up to 76 A supply: suitable for nearly every application

WAGO Power Supplies



Electronic Circuit Breakers (ECBs)

WAGO's ECBs are the space-saving and precision solution for fusing DC voltage circuits.

- 1-, 2-, 4- and 8-channel ECBs with fixed or adjustable currents ranging from 0.5 to 12 A
- High switch-on capacity: >50,000 μF
- Communication capability: remote monitoring and reset
- Pluggable CAGE CLAMP® Connection Technology (option): maintenance-free and time-saving
- Comprehensive range of approvals: many applications



DC/DC Converters

Instead of using an additional power supply, WAGO's DC/DC Converters are ideal for specialty voltages, allowing sensors and actuators to be reliably supplied.

DC/DC converters can be used instead of an additional power supply for applications with specialty voltages.

- Slim design: "True" 6.0 mm (0.23 inch) width maximizes panel space
- Wide operating temperature range
- Ready for worldwide use in many industries, thanks to UL listing
- Common profile with 857 and 2857 Series Signal Conditioners and Relays: Enables full commoning of the supply voltage

Operating WAGO Connection Technologies

Please follow the applicable product-specific termination instructions.

PUSH-IN CAGE CLAMP®



Push-in CAGE CLAMP® terminates the following copper conductors:
solid



stranded



fine-stranded,
also with tinned
single strands



fine-stranded,
tip-bonded



fine-stranded,
with ferrule
(gastight crimped)



fine-stranded,
with pin terminal
(gastight crimped)

The universal connection with an additional advantage:

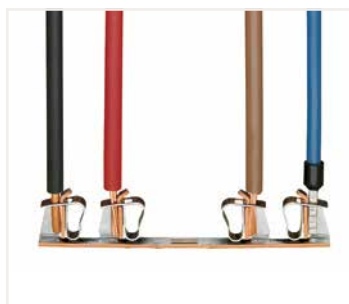
Push-in connection

Terminate solid and stranded (Class B 7 strands or less), as well as ferruled conductors, by simply pushing them in – no tools required.

Termination for all conductor types:

- Open clamping unit.
- Insert the conductor.
- Release clamp – done!

CAGE CLAMP®



CAGE CLAMP® terminates the following copper conductors:
solid



stranded



fine-stranded,
also with tinned
single strands



fine-stranded,
tip-bonded



fine-stranded,
with ferrule
(gastight crimped)



fine-stranded,
with pin terminal
(gastight crimped)

The universal connection for solid, stranded and fine-stranded conductors

Termination:

- Open clamping unit.
- Insert the conductor.
- Release clamp – done!

Operating WAGO Connection Technologies

Please follow the applicable product-specific termination instructions.

POWER CAGE CLAMP®



POWER CAGE CLAMP terminates the following copper conductors:
solid



stranded



fine-stranded,
also with tinned
single strands



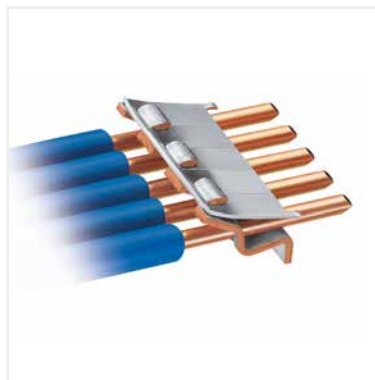
fine-stranded,
with ferrule
(gastight crimped)

The universal connection for conductors larger than 35 mm² (2 AWG)

Termination:

- Open clamp by turning a T-wrench counter-clockwise.
- Press the integrated latch to open clamping unit for hands-free wiring.
- Insert the conductor.
- A small counter-clockwise rotation closes the clamp, securing conductor.

PUSH WIRE®



PUSH WIRE® terminates the following copper conductors:
solid

PUSH WIRE® connection for solid and stranded conductors (depending on the model used)






Termination:

Tool-free, twist-free terminations for solid and rigid stranded conductors – simply push into the unit.



WAGO Power Supplies; 1-Phase

WAGO Power Supplies; 1-Phase

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WAGO Power Supplies; 1-Phase Selection Guide

1

Nominal voltage (output)	Nominal current (output) [ADC]	Input, 1-phase	Input, 2-phase	Approvals						DC OK signal/contact	RS-232 interface	TopBoost ¹⁾	PowerBoost	Efficiency typ. [%]	Surrounding air temperature [°C] ⁴⁾	Item Number	Page
				EN 60335	cURus 60950	cULus 508	cULus 61010	DNVGL	ANSI/ISA 12.12.1								
5 VDC	5.5													75.0	-25 ... +60	787-1020	70
	2.0													82.0	-25 ... +70	787-1601 ²⁾	31
12 VDC	2.0													80.0	-25 ... +60	787-1701	47
	2.0													80.0	-25 ... +60	787-1001	71
	2.5													88.0	-25 ... +70	787-1201	61
	4.0													86.0	-25 ... +70	787-1611 ²⁾	32
	4.0													81.0	-25 ... +60	787-1711	48
	4.0													85.0	-25 ... +60	787-1011	72
	5.0													89.5	-25 ... +70	787-1211	62
	6.0													87.0	-25 ... +60	787-1021	73
	7.0													86.0	-25 ... +70	787-1621	33
	8.0													84.0	-25 ... +60	787-1721	49
	8.0													91.5	-25 ... +70	787-1221	63
	10.0													93.8	-25 ... +70	2787-2134	14
	15.0													95.3	-25 ... +70	2787-2135	15
	15.0													90.0	-25 ... +70	787-1631	34
18 VDC	2.4													83.0	-25 ... +60	787-1017	74
22 VDC	1.0													84.0	-25 ... +60	787-914	85
24 VDC	0.5													83.0	-25 ... +70	787-1200	64
	1.0													86.0	-25 ... +70	787-1602 ²⁾	35
	1.25													80.0	-20 ... +60	787-1702	50
	1.25													88.0	-25 ... +70	2687-2142	59
	1.25													88.0	-20 ... +70	787-2850	69
	1.3													82.0	-25 ... +60	787-1002	75
	1.3													82.0	-25 ... +60	787-1102	76
	1.3													87.0	-25 ... +70	787-1202	65
	2.0													89.0	-25 ... +70	787-1606 ²⁾	36
	2.5													86.0	-10 ... +70	787-712	52
	2.5													81.0	-20 ... +60	787-1712	51
	2.5													88.0	-25 ... +60	787-1012	77
	2.5													88.0	-25 ... +60	787-1112	78
	2.5													89.0	-25 ... +70	787-1212	66
	3.0													87.8	-25 ... +70	787-818	25
	3.8													87.0	-25 ... +70	787-1616/000-1000 ²⁾	37
	4.0													89.0	-25 ... +70	787-1616	38
	4.0													88.0	-25 ... +60	787-1022	79
	4.0													88.0	-25 ... +60	787-1122	80
	4.0													92.3	-40 ... +85	787-6716	81
	4.2													90.0	-25 ... +70	787-1216	67
	5.0													91.5	-25 ... +70	2787-2144	16
	5.0													87.8	-25 ... +70	787-822	26
	5.0													89.0	-25 ... +70	787-1622	39
	5.0													89.0	-25 ... +70	787-1628	45
	5.0													86.0	-10 ... +60	787-722	53
	5.0													84.0	-20 ... +60	787-1722	54
	5.0													90.0	-25 ... +70	2687-2144	60
	6.0													90.0	-25 ... +70	787-1226	68
	10.0													92.8	-25 ... +70	2787-2146	17
10.0													90.0	-25 ... +70	787-832	27	
10.0													91.0	-25 ... +70	787-1632 ⁵⁾	40	
10.0													90.0	-25 ... +70	787-1638	46	
10.0													86.0	-10 ... +70	787-732	56	
10.0													84.0	-20 ... +60	787-1732	55	
20.0													94.0	-25 ... +70	2787-2147	18	
20.0													91.0	-25 ... +70	787-834	28	
20.0													92.0	-25 ... +70	787-1634	41	
20.0													90.0	-25 ... +70	787-734	57	
40.0													95.0	-25 ... +70	2787-2448	19	
40.0													90.0	-25 ... +70	787-736	58	

Nominal voltage (output)	Nominal current (output) [ADC]	Input, 1-phase	Input, 2-phase	Approvals							DC OK signal/contact	RS-232 interface	TopBoost ¹⁾	PowerBoost	Efficiency typ. [%]	Surrounding air temperature [°C] ⁴⁾	Item Number	Page
				EN 60335	cURus 60950	cULus 508	cULus 61010	DNVGL	ANSI/ISA 12.12.1	ATEX/IEC Ex								
48 VDC	2.0	■		■	■	■	■	■	■	■					86.0	-25 ... +70	787-1623	42
	5.0	■		■	■	■	■	■	■	■						-25 ... +70	2787-2154	20
	5.0	■		■	■	■	■	■	■	■					91.0	-25 ... +70	787-833	29
	5.0	■		■	■	■	■	■	■	■					92.0	-25 ... +70	787-1633	43
	10.0	■		■	■	■	■	■	■	■					95.3	-25 ... +70	2787-2157	21
	10.0	■		■	■	■	■	■	■	■					91.0	-25 ... +70	787-835	30
	10.0	■		■	■	■	■	■	■	■					93.0	-25 ... +70	787-1635 ⁵⁾	44

■ Yes □ Pending

¹⁾ TopBoost enables magnetic tripping of circuit breakers in the output circuit.

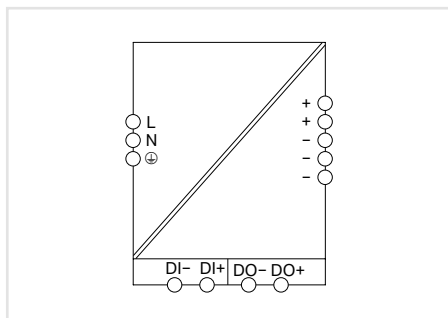
²⁾ NEC Class 2 Power Unit per cURus 1310 or cURus 60950

³⁾ With uninterruptible power supply (UPS)

⁴⁾ Device starts at -40°C, type-tested for 787-8xx, -10xx, -16xx, 2787-2xxx

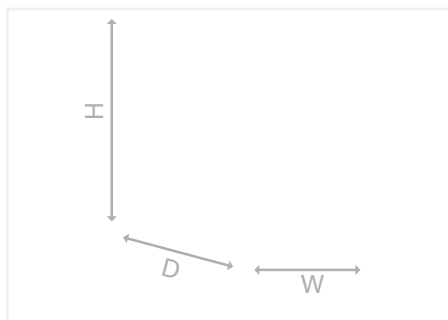
⁵⁾ .../000-070 is optionally available with protective coating

Power Supply; Pro 2; 1-Phase; 12 VDC / 10 A 2787 Series



Power supply; Pro 2; 1-phase; 12 VDC output voltage; 10 A output current; TopBoost + PowerBoost; communication capability

Item No.	Pack. Unit
2787-2134	1



Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	90 ... 264 VAC; 130 ... 373 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	1.3 ... 0.6 A (nominal load)
Inrush current	≤ 9.6 A (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 40 ms (230 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	12 VDC (SELV) / ≤ 1 %
Output voltage range	12 ... 14 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	10 A (12 VDC)
Nominal output power	120 W
Residual ripple	≤ 70 mV (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)

Signaling and Communication

Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communication	Communication interface, can be used with WAGO USB Communication Cable (750-923) or IO-Link Communication Module (2789-9080) or Modbus RTU Communication Module (2789-9015)

Efficiency/Power Losses

Power loss P_i	≤ 0.8 W (standby); ≤ 1.6 W (no load); ≤ 10 W (nominal load / 230 VAC)
Efficiency (typ.)	93.8%

Fuse Protection

Internal fuse	T 6.3 A / 250 VAC
Recommended backup fusing	16 A (for USA/Canada: 15 A)

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-GND/sec.-GND/sec.-Signal)	3.51 kVAC / 2.2 kVAC / 0.5 kVDC / 0.5 kVDC
Protection class/type	I / IP20 (per EN 60529)
Overvoltage category	III (≤ 2000 m a. s.I.); II (> 2000 m a. s.I.)
Short-circuit-protected	Yes
Parallel/series operation	Yes/Yes
MTBF	$> 1.200.000$ h (per IEC 61709)
Surrounding air temperature (operation)	$-25 ... +70$ °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/Output/Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

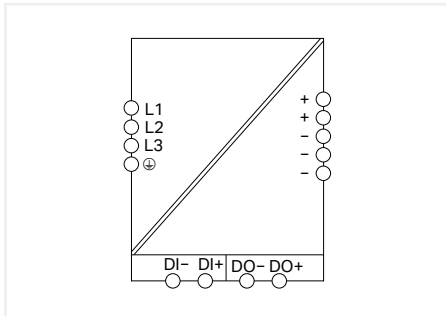
Physical Data/Mechanical Data/Material Data

Width x Height x Depth (mm)	35 x 130 x 130; Depth from upper-edge of DIN-rail; Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail
Weight	650 g

Standards and Specifications

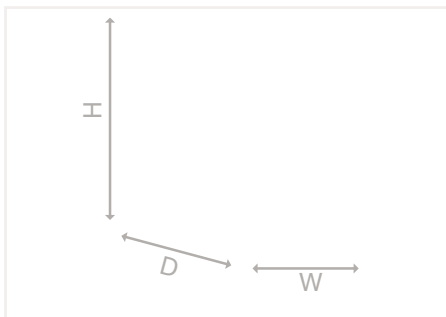
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201
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Power Supply; Pro 2; 1-Phase; 12 VDC / 15 A 2787 Series



Power supply; Pro 2; 1-phase; 12 VDC output voltage; 15 A output current; TopBoost + PowerBoost; communication capability

Item No.	Pack. Unit
2787-2135	1



Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x AC 100 ... 240 VAC
Input voltage range	90 ... 264 VAC; 130 ... 373 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	2 ... 0.88 A (nominal load)
Inrush current	≤ 12 A (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 40 ms (230 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	12 VDC (SELV) / ≤ 1 %
Output voltage range	12 ... 14 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	15 A (12 VDC)
Nominal output power	180 W
Residual ripple	≤ 70 mV (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)

Signaling and Communication

Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communication	Communication interface, can be used with WAGO USB Communication Cable (750-923) or IO-Link Communication Module (2789-9080) or Modbus RTU Communication Module (2789-9015)

Efficiency/Power Losses

Power loss P_i	≤ 0.8 W (standby); ≤ 2.3 W (no load); ≤ 14 W (nominal load / 230 VAC)
Efficiency (typ.)	95.3%

Fuse Protection

Internal fuse	T 6.3 A / 250 VAC
Recommended backup fusing	16 A (for USA/Canada: 15 A)

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-GND/sec.-GND/sec.-signal)	3.51 kVAC / 2.2 kVAC / 0.5 kVDC / 0.5 kVDC
Protection class/type	I / IP20 (per EN 60529)
Oversvoltage category	III (≤ 2000 m a. s.l.); II (> 2000 m a. s.l.)
Short-circuit-protected	Yes
Parallel/series operation	Yes/Yes
MTBF	> 1.200.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> +60°C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/Output/Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

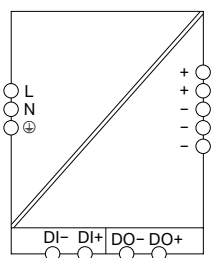
Physical Data/Mechanical Data/Material Data

Width x Height x Depth (mm)	50 x 130 x 130; Depth from upper-edge of DIN-rail; Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail
Weight	1000 g

Standards and Specifications

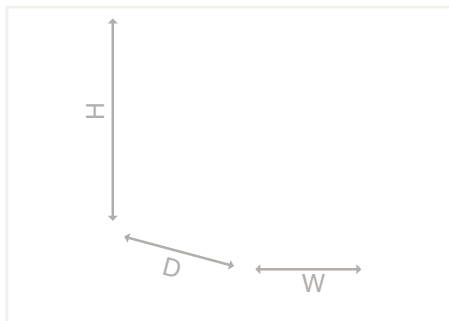
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201
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Switched-Mode Power Supply; Pro 2; 1-Phase; 24 VDC / 5 A 2787 Series



Power supply; Pro 2; 1-phase; 24 VDC output voltage; 5 A output current; TopBoost + PowerBoost; communication capability

	Item No.	Pack. Unit
	2787-2144	1
DNVGL	2787-2144/000-030	1
DNVGL + Protective coating	2787-2144/000-070	1



Features:

- Power supply unit with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output; optical status indication, function buttons
- Communication interface for configuration and monitoring
- Optional connection to IO-Link
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input

Nominal input voltage $U_{i,nom}$	1 x 100 ... 240 VAC
Input voltage range	90 ... 264 VAC; 130 ... 373 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 1 A (240 VAC; Nominal load); ≤ 1.8 A (100 VAC; Nominal load)
Inrush current	≤ 9 A (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o,nom}$	5 A (24 VDC)
Nominal output power	120 W
Residual ripple	≤ 70 mV (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)

Signaling and Communication

Signaling	Optical status indication (DC-OK; load; warning and error states); digital signal input and output; (DI/DO)
Communication	Communication interface, can be used with WAGO USB Communication Cable (750-923) or IO-Link Communication Module (2789-9080) or Modbus RTU Communication Module (2789-9015)

Efficiency/Power Losses

Power loss P_1	≤ 1 W (stand-by); ≤ 2 W (no load); ≤ 10 W (230 VAC; Nominal load)
Efficiency	93.8 % (230 VAC; 5 A; 25 °C)

Fuse Protection

Internal fuse	T 6.3 A / 250 VAC
Required backup fusing	An external DC fuse is required for the DC input voltage.
Recommended backup fusing	16 A (for USA/Canada: 15 A)

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-PE/sec.-PE/sec.-Signal)	3.51 kVDC / 2.2 kVDC / 0.5 kVDC / 0.5 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	III (≤ 2000 m a. s.l.); II (> 2000 m a. s.l.)
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/Yes
MTBF	$> 1.000.000$ h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... $+70$ °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.08 ... 0.5 mm ² / 0.08 ... 0.5 mm ² / 28 ... 20 AWG

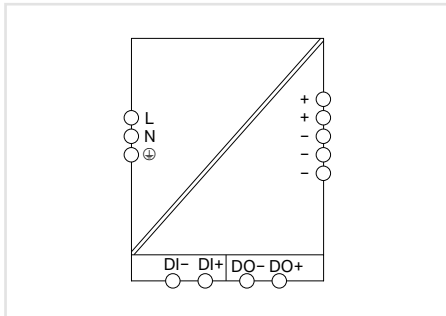
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	35 x 166 x 130; height with connector; depth from upper edge of DIN-35 rail
Mounting type	DIN-35 rail
Weight	650 g

Standards and Specifications

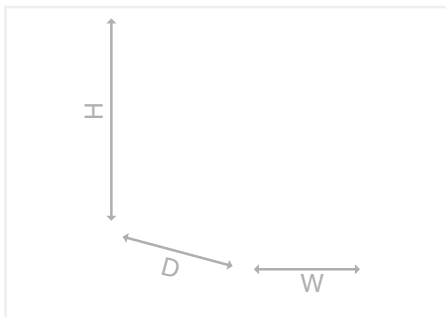
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201 (2787-2144/000-030 and 2787-2144/000-070: DNVGL; UL HazLoc)
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Switched-Mode Power Supply; Pro 2; 1-Phase; 24 VDC / 10 A 2787 Series



Power supply; Pro 2; 1-phase; 24 VDC output voltage;
10 A output current; TopBoost + PowerBoost; commu-
nication capability

	Item No.	Pack. Unit
	2787-2146	1
DNVGL	2787-2144/000-030	1
DNVGL + Protective coating	2787-2144/000-070	1



Features:

- Power supply unit with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output; optical status indication, function buttons
- Communication interface for configuration and monitoring
- Optional connection to IO-Link
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input

Nominal input voltage $U_{I, nom}$	1 x 100 ... 240 VAC
Input voltage range	90 ... 264 VAC; 130 ... 373 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_I	≤ 1.2 A (240 VAC; Nominal load); ≤ 2.7 A (100 VAC; Nominal load)
Inrush current	≤ 11 A (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC)

Output

Nominal output voltage $U_{O, nom}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{O, nom}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	≤ 70 mV (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)

Signaling and Communication

Signaling	Optical status indication (DC-OK; load; warning and error states); digital signal input and output; (DI/DO)
Communication	Communication interface, can be used with WAGO USB Communication Cable (750-923) or IO-Link Communication Module (2789-9080) or Modbus RTU Communication Module (2789-9015)

Efficiency/Power Losses

Power loss P_I	≤ 1 W (stand-by); ≤ 2.2 W (no load); ≤ 15.5 W (nominal load / 230 VAC)
Efficiency	95.3 % (230 VAC; 10 A; 25 °C)

Fuse Protection

Internal fuse	T 6.3 A / 250 VAC
Recommended backup fusing	16 A (for USA/Canada: 15 A)

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-PE/sec.-PE/ sec.-Signal)	3.51 kVDC / 2.2 kVDC / 0.5 kVDC / 0.5 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	III (≤ 2000 m a. s.l.); II (> 2000 m a. s.l.)
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/Yes
MTBF	$> 1.200.000$ h (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70$ °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

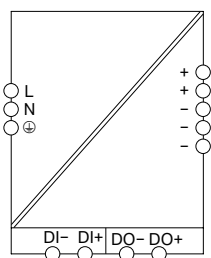
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	50 x 166 x 130; height with connector; depth from upper edge of DIN-35 rail
Mounting type	DIN-35 rail
Weight	1402 g

Standards and Specifications

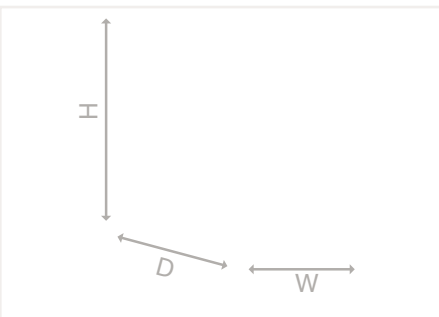
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201 (2787-2144/000-030 and 2787-2144/000-070: DNVGL; UL HazLoc)
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Switched-Mode Power Supply; Pro 2; 1-Phase; 24 VDC / 20 A 2787 Series



Power supply; Pro 2; 1-phase; 24 VDC output voltage; 20 A output current; TopBoost + PowerBoost; communication capability

	Item No.	Pack. Unit
	2787-2147	1
DNVGL	2787-2147/000-030	1
DNVGL + Protective coating	2787-2147/000-070	1



Features:

- Power supply unit with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output; optical status indication, function buttons
- Communication interface for configuration and monitoring
- Optional connection to IO-Link
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips
- Optional connection to IO-Link, Modbus RTU, Modbus TCP
- Coated PCBs, resistant to flowing mixed gas per ISA S71.04:1985, G3 Group A

Input

Nominal input voltage $U_{i,nom}$	1 x 100 ... 240 VAC
Input voltage range	90 ... 264 VAC; 130 ... 373 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 2.2 A (240 VAC; Nominal load); ≤ 5.9 A (100 VAC; Nominal load)
Inrush current	≤ 12 A (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 24 ms (230 VAC)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o,nom}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	≤ 70 mV (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)

Signaling and Communication

Signaling	Optical status indication (DC-OK; load; warning and error states); digital signal input and output; (DI/DO)
Communication	Communication interface, can be used with WAGO USB Communication Cable (750-923) or IO-Link Communication Module (2789-9080) or Modbus RTU Communication Module (2789-9015) or Modbus TCP Communication Module (2789-9052)

Efficiency/Power Losses

Power loss P_i	≤ 1.3 W (Standby); ≤ 2.6 W (No load); ≤ 24 W (230 VAC; Nominal load)
Efficiency	95.4 % (230 VAC; 20 A; 25 °C)

Fuse Protection

Internal fuse	T 10 A / 250 VAC
Recommended backup fusing	16 A (for USA/Canada: 15 A)

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-PE/sec-PE/sec.-Signal)	3.51 kVDC / 2.2 kVDC / 0.5 kVDC / 0.5 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	III (≤ 2000 m a. s.l.); II (> 2000 m a. s.l.)
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/Yes
MTBF	> 800.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... $+70$ °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-1 %/V ($> +40$ °C and $U_i < 100$ VAC); -3 %/K ($> +55$ °C and $U_i < 230$ VAC); -3 %/K ($> +60$ °C and $U_i \geq 230$ VAC); -5 %/V ($U_o > 24$ VDC)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®/Push-in CAGE CLAMP®
Input/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG

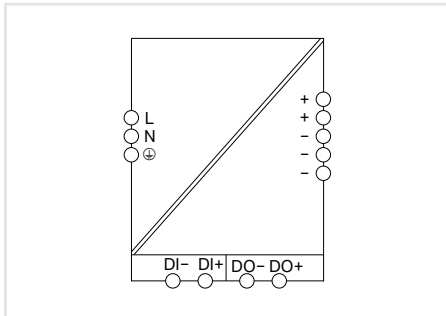
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	70 x 169 x 130; height with connector; depth from upper edge of DIN-35 rail
Mounting type	DIN-35 rail
Weight	1450 g

Standards and Specifications

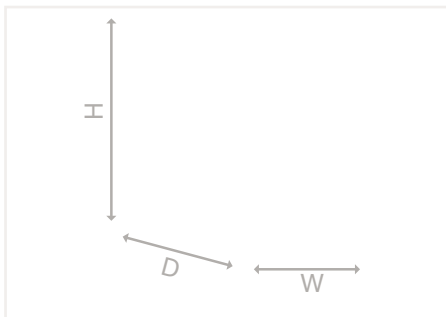
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201 (2787-2144/000-030 and 2787-2144/000-070: DNVGL; UL HazLoc)
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Switched-Mode Power Supply; Pro 2; 1-Phase; 24 VDC / 40 A 2787 Series



Power supply; Pro 2; 1-phase; 24 VDC output voltage; 40 A output current; TopBoost + PowerBoost; communication capability; Input voltage range: 200 ... 240 VAC

	Item No.	Pack. Unit
	2787-2448	1
DNVGL	2787-2448/ 000-030	1
DNVGL + Protective coating	2787-2448/ 000-070	1



Features:

- Power supply unit with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output; optical status indication, function buttons
- Communication interface for configuration and monitoring
- Optional connection to IO-Link
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x 200 ... 240 VAC
Input voltage range	180 ... 264 VAC; 255 ... 373 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 4.3 A (240 VAC; Nominal load); ≤ 5.1 A (200 VAC; Nominal load)
Inrush current	≤ 10 A (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 25 ms (230 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	40 A (24 VDC)
Nominal output power	960 W
Residual ripple	≤ 70 mV (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)

Signaling and Communication

Signaling	Optical status indication (DC-OK; load; warning and error states); digital signal input and output; (DI/DO)
Communication	Communication interface, can be used with WAGO USB Communication Cable (750-923) or IO-Link Communication Module (2789-9080) or Modbus RTU Communication Module (2789-9015)

Efficiency/Power Losses

Power loss P_i	≤ 1.5 W (stand-by); ≤ 4 W (no load); ≤ 50 W (nominal load / 230 VAC)
Efficiency	≤ 1.5 W (Standby); ≤ 2.4 W (No load); ≤ 40 W (230 VAC; Nominal load)

Fuse Protection

Internal fuse	T 10 A / 250 VAC
Recommended backup fusing	16 A (for USA/Canada: 15 A)C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-PE/sec-PE/sec.-Signal)	3.51 kVDC / 2.2 kVDC / 0.5 kVDC / 0.5 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	III (≤ 2000 m a. s.l.); II (> 2000 m a. s.l.)
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/Yes
MTBF	> 900.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... $+70$ °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K ($> +55$ °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG

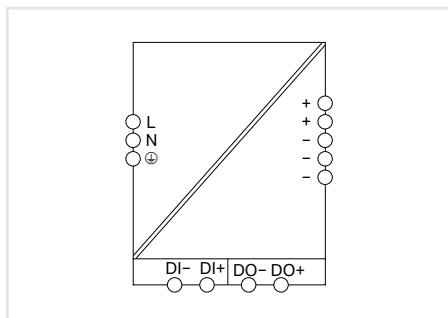
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	120 x 169 x 130; height with connector; depth from upper edge of DIN-35 rail
Mounting type	DIN-35 rail
Weight	1900 g

Standards and Specifications

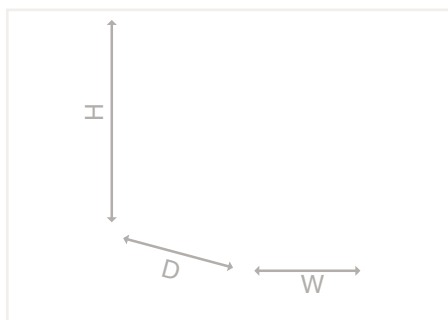
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201 (2787-2144/000-030 and 2787-2144/000-070: DNVGL; UL HazLoc)
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Power Supply; Pro 2; 1-Phase; 48 VDC / 2.5 A 2787 Series



Power supply; Pro 2; 1-phase; 48 VDC output voltage; 2.5 A output current; TopBoost + PowerBoost; communication capability

Item No.	Pack. Unit
2787-2154	1



Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input

Nominal input voltage $U_{i,nom}$	1 x 100 ... 240 VAC
Input voltage range	90 ... 264 VAC; 130 ... 373 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	1.3 ... 0.6 A (nominal load)
Inrush current	≤ 11 A (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 40 ms (230 VAC)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	48 VDC (SELV) / $\leq 1\%$
Output voltage range	48 ... 56 VDC (adjustable)
Nominal output current $I_{o,nom}$	5 A (48 VDC)
Nominal output power	240 W
Residual ripple	≤ 70 mV (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)

Signaling and Communication

Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communication	Communication interface, can be used with WAGO USB Communication Cable (750-923) or IO-Link Communication Module (2789-9080) or Modbus RTU Communication Module (2789-9015)

Efficiency/Power Losses

Power loss P_i	≤ 0.8 W (standby); ≤ 1.7 W (no load); ≤ 9 W (nominal load / 230 VAC)
Efficiency (typ.)	95.3 %

Fuse Protection

Internal fuse	T 6.3 A / 250 VAC
Recommended backup fusing	16 A (for USA/Canada: 15 A)

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-GND/sec.-GND/sec.-Signal)	3.51 kVAC / 2.2 kVAC / 0.5 kVDC / 0.5 kVDC
Protection class/type	I / IP20 (per EN 60529)
Overvoltage category	III (≤ 2000 m a. s.I.); II (> 2000 m a. s.I.)
Short-circuit-protected	Yes
Parallel/series operation	Yes/Yes
MTBF	> 900.000 h (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70$ °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/Output/Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

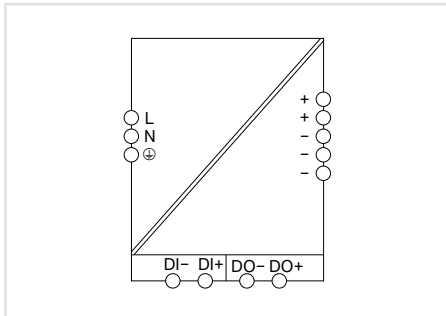
Physical Data/Mechanical Data/Material Data

Width x Height x Depth (mm)	35 x 130 x 130; Depth from upper-edge of DIN-rail; Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail
Weight	650 g

Standards and Specifications

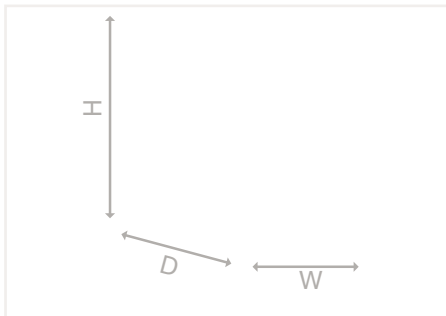
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201
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Power Supply; Pro 2; 1-Phase; 48 VDC / 10 A 2787 Series



Power supply; Pro 2; 1-phase; 48 VDC output voltage; 10 A output current; TopBoost + PowerBoost; communication capability

Item No.	Pack. Unit
2787-2157	1



Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot for WAGO Marker Cards (WMB) and WAGO Marking Strips

Input	
Nominal input voltage $U_{i,nom}$	1 x 100 ... 240 VAC
Input voltage range	90 ... 264 VAC; 130 ... 373 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	5.9 ... 2.2 A (nominal load)
Inrush current	≤ 12 A (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 24 ms (230 VAC)

Output	
Nominal output voltage $U_{o,nom}$ /adjustment accuracy	48 VDC (SELV) / ≤ 1 %
Output voltage range	48 ... 56 VDC (adjustable)
Nominal output current $I_{o,nom}$	10 A (48 VDC)
Nominal output power	480 W
Residual ripple	≤ 70 mV (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)

Signaling and Communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communication	Communication interface, can be used with WAGO USB Communication Cable (750-923) or IO-Link Communication Module (2789-9080) or Modbus RTU Communication Module (2789-9015)

Efficiency/Power Losses	
Power loss P_i	≤ 1.3 W (standby); ≤ 2.6 W (no load); ≤ 24 W (nominal load / 230 VAC)
Efficiency (typ.)	95.3 %

Fuse Protection	
Internal fuse	T 10 A / 250 VAC
Recommended backup fusing	16 A (for USA/Canada: 15 A)

Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec./pri.-GND/sec.-GND/sec.-Signal)	3.51 kVAC / 2.2 kVAC / 0.5 kVAC / 0.5 kVDC
Protection class/type	I / IP20 (per EN 60529)
Oversvoltage category	III (≤ 2000 m a. s.l.); II (> 2000 m a. s.l.)
Short-circuit-protected	Yes
Parallel/series operation	Yes/Yes
MTBF	> 900.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Physical Data/Mechanical Data/Material Data	
Width x Height x Depth (mm)	70 x 130 x 130; Depth from upper-edge of DIN-rail; Height without connector; Height with connector: 166 mm
Mounting type	DIN-35 rail
Weight	1450 g

Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201

Accessories for Pro 2 Power Supplies

Modbus® Communication Module



Communication module; MODBUS TCP/UDP; RJ45; communication capability

Item No.	Pack. Unit
2789-9052	1

Features:

- This communication module snaps onto a Pro 2 Power Supply's communication interface.
- Modbus TCP/UDP
- Suitable for monitoring the subordinate power supply
- Function blocks for standard control systems available upon request
- Integrated ETHERNET switch for convenient wiring
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Signaling and Communication

Signaling	LED red (ERR); LED green (COM OK); ETHERNET ports: LED green (LNK/ACTx); LED orange (SPEEDx)
Communication	Modbus (TCP, UDP)
ETHERNET protocols	HTTP(S); BootP; DHCP; SNTP
Configuration options	Web-Based Management
Visualization	Web Visu
Transmission rate	ETHERNET: 10/100 Mbit/s

Safety and Protection

Isolation	Functional insulation 500 V
Protection class	III
Protection type	IP20 (per EN 60529)

Environmental Conditions

Surrounding air temperature (operation)	-25 ... +55 °C
Relative humidity	5 ... 96 % (no condensation permissible)

Connection Data

Connection technology	Modbus TCP/UDP: 2 x RJ-45
Transmission medium	ETHERNET: twisted pair, S/UTP; 100 Ω; cat. 5
Cable length	≤ 100 m

Physical Data

Width	35 mm
Height	80 mm
Depth	22 mm

Mechanical Data

Mounting type	Snaps onto a Pro 2 Power Supply's communication interface (X4)
Weight	45 g

Standards and Specifications

Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201

Accessories for Pro 2 Power Supplies

Modbus RTU Communication Module

2789 Series



Communication module; Modbus RTU; RJ45; communication capability

Item No.	Pack. Unit
2789-9015	1

Features:

- Communication module snaps onto Pro 2 Power Supplies' communication interface
- Modbus RTU (RS-485)
- Suitable for monitoring the subordinate power supply
- Function blocks for standard control systems available upon request
- Pluggable connection technology
- Marker slot for WAGO Marker Cards (WMB) and WAGO Marking Strips
- Requires RJ-45 terminating resistor (120 Ω) for long cables (2789-9915)



Input	
Nominal input voltage $U_{i, \text{nom}}$	5 VDC (SELV)
Input voltage range	4.5 ... 5.5 VDC (SELV)
Input current I_i	≤ 40 mA
Signaling and Communication	
Signaling	1 green LED (PWR); 1 yellow LED (Rx/D); 1 yellow LED (Tx/D)
Communication	Modbus RTU via RS-485
Baud rate	4.8 ... 115.2 kBd
Number of devices (max.)	247
Safety and Protection/Environmental Requirements	
Test voltage (input/output)	2 kVAC; 50 Hz; 1 min
Test voltage (input/output/shield)	1 kVAC; 50 Hz; 1 min
Overtoltage category	III
Pollution degree	2
Protection class	III
Insulation type	Functional insulation
Protection class	IP20
Surrounding air temperature (operation)	-25 ... +70 °C
Surrounding air temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 95 % (non-condensing)
Operating altitude (max.)	5000 m
Connection Data	
Connection technology	2 x RJ-45
Transmission medium	Shielded copper cable
Physical Data/Mechanical Data/Material Data	
Width x Height x Depth (mm)	35 x 80 x 22
Mounting type	Snaps onto a Pro 2 Power Supply's communication interface (X4)
Weight	35 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201

Accessories for Pro 2 Power Supplies

Communication module IO-Link

1



Communication module; IO-Link; communication capability

Item No.	Pack. Unit
2789-9080	1

Features:

- Communication module to snap onto communication interface of Pro 2 power supply
- IO-Link device; supports IO-Link specification 1.1
- Suitable for configuring and monitoring the subordinate power supply
- Function block for current control systems available on request
- Pluggable connection technology
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips



Operating Data

Supply voltage	DC 24 V (SELV; via IO-Link Master)
Current consumption	≤ 15 mA

Signaling and Communication

Signaling	LED red (ERR); LED green (COM)
Communication	IO-Link
IO-Link version	1.1
Baud rate	230.4 kbit/s (COM 3)
Data width	5 bytes
Data update rate	25 ms

Safety and Protection/Environmental Requirements

Isolation	0.63 kVDC
Protection class	IP20 (per EN 60529)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)

Connection Data

Connection technology	CAGE CLAMP®
Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Cable length	≤ 20 m

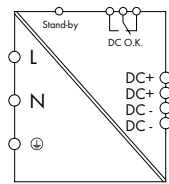
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	35 x 95 x 22; height including connector; depth in mounted position
Mounting type	Snap onto communication interface (X4) of Pro 2 power supply
Weight	35 g

Standards and Specifications

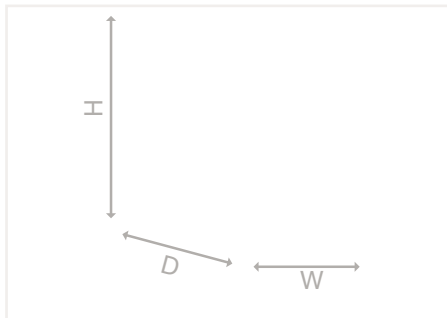
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201
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Switched-Mode Power Supply; Pro; 1-Phase; 24 VDC / 3 A 787 Series



Switched-Mode Power Supply; Pro; 1-phase; Output voltage: 24 VDC; Output current: 3 A; TopBoost + PowerBoost; DC OK contact

Item No.	Pack. Unit
787-818	1



Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	-5 %/V (< 95 VAC)
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	≤ 0.51 A (240 VAC; 3 ADC)
Inrush current	≤ 30 A (peak)
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 70 ms (230 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	22 ... 29.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	3 A (24 VDC)
Nominal output power	72 W
Residual ripple	≤ 70 mV (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Constant current mode

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)

Efficiency/Power Losses	
Power loss P_i	≤ 0.5 W (stand-by); ≤ 3 W (no load); ≤ 8.8 W (nominal load)
Efficiency (typ.)	87.8 %

Fuse Protection	
Internal fuse	T 2 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

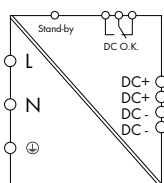
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec./pri.-GND/sec.-GND)	4.242 kVDC / 2.2 kVDC / 0.7 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> +50 °C)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
LED indication (solid/fine-stranded/AWG)	0.08 ... 0.5 mm ² / 0.08 ... 0.5 mm ² / 28 ... 20 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	40 x 163 x 163; height including connector; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	960 g

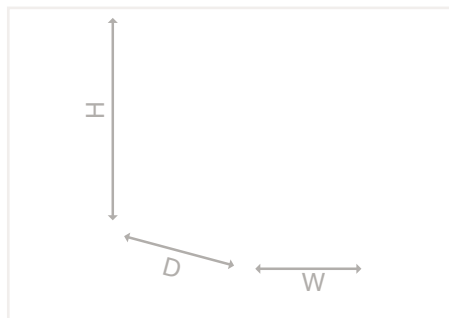
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Switched-Mode Power Supply; Pro; 1-Phase; 24 VDC / 5 A 787 Series



Switched-mode power supply; Pro; 1-phase; 24 VDC output voltage; 5 A output current; TopBoost + PowerBoost; DC OK contact

Item No.	Pack. Unit
787-822	1



Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	≤ 0.97 A (240 VAC; 5 ADC)
Inrush current	≤ 30 A (peak)
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 35 ms (230 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	22 ... 29.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	5 A (24 VDC)
Nominal output power	120 W
Residual ripple	≤ 70 mV (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Constant current mode

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)
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Efficiency/Power Losses

Power loss P_i	≤ 0.5 W (stand-by); ≤ 5 W (no load); ≤ 14.6 W (nominal load)
Efficiency (typ.)	87.8 %

Fuse Protection

Internal fuse	T 4 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-GND/sec.-GND)	4.242 kVDC / 2.2 kVDC / 0.7 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70$ °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K ($> +50$ °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
LED indication (solid/fine-stranded/AWG)	0.08 ... 0.5 mm ² / 0.08 ... 0.5 mm ² / 28 ... 20 AWG

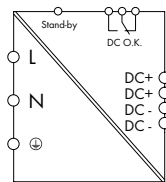
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	57 x 163 x 163; height including connector; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1268 g

Standards and Specifications

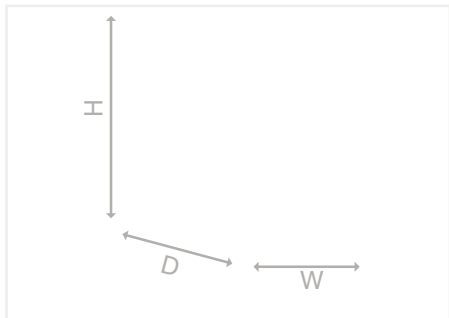
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508
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Switched-Mode Power Supply; Pro; 1-Phase; 24 VDC / 10 A 787 Series



Switched-mode power supply; Pro; 1-phase; 24 VDC output voltage; 10 A output current; TopBoost + PowerBoost; DC OK contact

Item No.	Pack. Unit
787-832	1



Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	≤ 1.2 A (240 VAC; 10 ADC)
Inrush current	≤ 8 A (active PFC)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 24 ms (230 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	22 ... 29.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	≤ 70 mV (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Constant current mode

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)

Efficiency/Power Losses	
Power loss P_i	≤ 0.8 W (stand-by); ≤ 3.8 W (no load); ≤ 24 W (nominal load)
Efficiency (typ.)	90 %

Fuse Protection	
Internal fuse	T 6.3 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

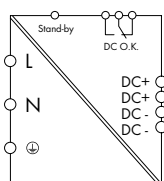
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec./pri.-GND/sec.-GND)	4.242 kVDC / 2.2 kVDC / 0.7 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70$ °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K ($> +50$ °C)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
LED indication (solid/fine-stranded/AWG)	0.08 ... 0.5 mm ² / 0.08 ... 0.5 mm ² / 28 ... 20 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	57 x 163 x 179; height including connector; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1472.2 g

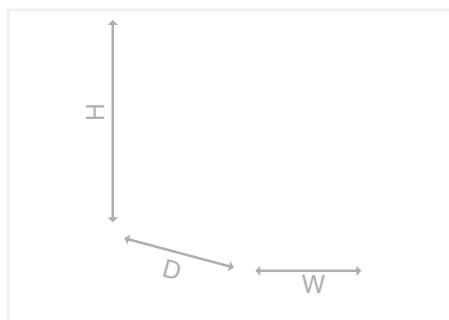
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Switched-Mode Power Supply; Pro; 1-Phase; 24 VDC / 20 A 787 Series



Switched-mode power supply; Pro; 1-phase; 24 VDC output voltage; 20 A output current; TopBoost + PowerBoost; DC OK contact

Item No.	Pack. Unit
787-834	1



Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204

Input

Nominal input voltage $U_{i,nom}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	-1.5 %/V (< 110 VAC)
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	≤ 2.3 A (230 VAC; 20 ADC)
Inrush current	≤ 8 A (active PFC)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 25 ms (230 VAC)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	22 ... 29.5 VDC (adjustable)
Nominal output current $I_{o,nom}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	≤ 70 mV (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Constant current mode

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)
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Efficiency/Power Losses

Power loss P_i	≤ 0.8 W (stand-by); ≤ 4.8 W (no load); ≤ 43.2 W (nominal load)
Efficiency (typ.)	91 %

Fuse Protection

Internal fuse	T 10 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-GND/sec.-GND)	4.242 kVDC / 2.2 kVDC / 0.7 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> +50 °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
LED indication (solid/fine-stranded/AWG)	0.08 ... 0.5 mm ² / 0.08 ... 0.5 mm ² / 28 ... 20 AWG

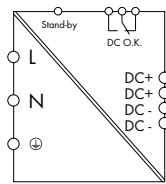
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	97 x 171 x 187; height including connector; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	2300 g

Standards and Specifications

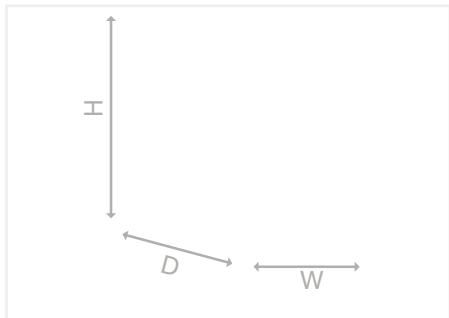
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508
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Switched-Mode Power Supply; Pro; 1-Phase; 48 VDC / 5 A 787 Series



Switched-mode power supply; Pro; 1-phase; 48 VDC output voltage; 5 A output current; TopBoost + PowerBoost; DC OK contact

Item No.	Pack. Unit
787-833	1



Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	-1.5 %/V (< 110 VAC)
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	≤ 1.2 A (230 VAC; 5 ADC)
Inrush current	≤ 8 A (active PFC)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$ /adjustment accuracy	48 VDC (SELV) / ≤ 1 %
Output voltage range	33 ... 52 VDC (adjustable)
Nominal output current $I_{o, nom}$	5 A (48 VDC)
Nominal output power	240 W
Residual ripple	≤ 70 mV (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Constant current mode

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)

Efficiency/Power Losses	
Power loss P_i	≤ 0.8 W (stand-by); ≤ 7.4 W (no load); ≤ 21.6 W (nominal load)
Efficiency (typ.)	91 %

Fuse Protection	
Internal fuse	T 6.3 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

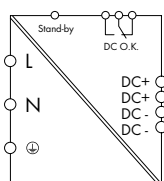
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec./pri.-GND/sec.-GND)	4.242 kVDC / 2.2 kVDC / 0.7 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> +50 °C)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
LED indication (solid/fine-stranded/AWG)	0.08 ... 0.5 mm ² / 0.08 ... 0.5 mm ² / 28 ... 20 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	57 x 163 x 179; height including connector; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1475 g

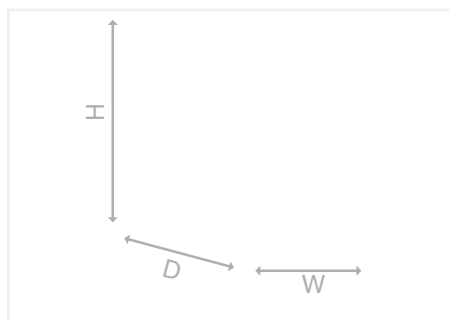
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Switched-Mode Power Supply; Pro; 1-Phase; 48 VDC / 10 A 787 Series



Switched-mode power supply; Pro; 1-phase; 48 VDC output voltage; 10 A output current; TopBoost + PowerBoost; DC OK contact

Item No.	Pack. Unit
787-835	1



Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 61010-1; 61010-2-201; UL 60950-1; PELV per EN 60204

Input

Nominal input voltage $U_{i,nom}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	-1.5 %/V (< 110 VAC)
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	≤ 2.3 A (230 VAC; 10 ADC)
Inrush current	≤ 8 A (active PFC)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	48 VDC (SELV) / ≤ 1 %
Output voltage range	33 ... 52 VDC (adjustable)
Nominal output current $I_{o,nom}$	10 A (48 VDC)
Nominal output power	480 W
Residual ripple	≤ 70 mV (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Constant current mode

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)
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Efficiency/Power Losses

Power loss P_1	≤ 0.8 W (stand-by); ≤ 4.8 W (no load); ≤ 43.2 W (nominal load)
Efficiency (typ.)	91 %

Fuse Protection

Internal fuse	T 10 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-GND/sec.-GND)	4.242 kVDC / 2.2 kVDC / 0.7 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> +50 °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
LED indication (solid/fine-stranded/AWG)	0.08 ... 0.5 mm ² / 0.08 ... 0.5 mm ² / 28 ... 20 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	97 x 171 x 187; height including connector; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	2460 g

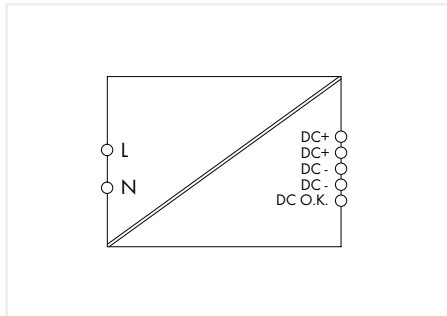
Standards and Specifications

Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; EN 61558-2-16; UL 60950; UL 508
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Switched-Mode Power Supply; Classic; 1-Phase; 12 VDC / 2 A 787 Series

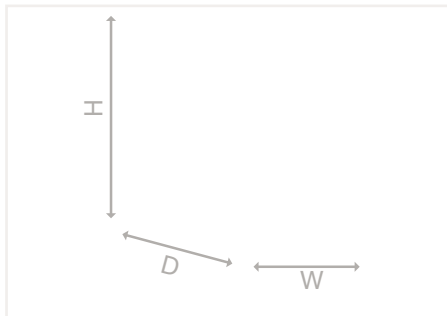


Similar to picture



Switched-mode power supply; Classic; 1-phase; 12 VDC output voltage; 2 A output current; NEC Class 2; DC OK signal

Item No.	Pack. Unit
787-1601	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Bounce-free switching signal (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/61010-2-2011/UL 60950-1; PELV per EN 60204
- GL approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module
- NEC Class 2 per UL 60950

Input	
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 372 VDC
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.29 A (240 VAC); ≤ 0.5 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 120 ms (230 VAC); > 15 ms (100 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	12 VDC (SELV) / ≤ 1 %
Output voltage range	11.5 ... 14.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	2 A (12 VDC); 2.1 A (< +40 °C)
Nominal output power	24 W
Residual ripple	≤ 20 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x DC OK active signal output (12 VDC; 40 mA)

Efficiency/Power Losses	
Power loss P_i	≤ 0.7 W (230 VAC; no load); ≤ 5.3 W (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	≤ 5.7 W (100 VAC / 12 VDC; 2 A)
Efficiency (typ.)	82 %

Fuse Protection	
Internal fuse	T 2 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

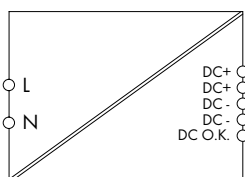
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K ($> +50$ °C)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	22.5 x 90 x 107.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	128 g

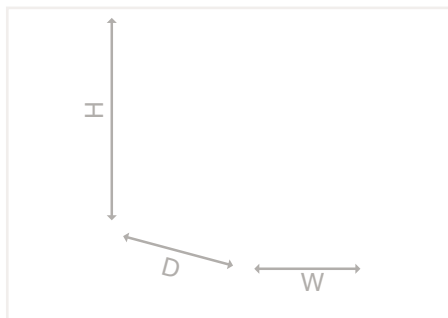
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508; GL

Switched-Mode Power Supply; Classic; 1-Phase; 12 VDC / 4 A 787 Series



Switched-mode power supply; Classic; 1-phase; 12 VDC output voltage; 4 A output current; NEC Class 2; DC OK signal

Item No.	Pack. Unit
787-1611	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Bounce-free switching signal (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204
- GL approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module
- NEC Class 2 per UL 60950

Input

Nominal input voltage $U_{i,nom}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 372 VDC
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.46 A (240 VAC); ≤ 0.86 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 120 ms (230 VAC); > 15 ms (100 VAC)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	12 VDC (SELV) / ≤ 1 %
Output voltage range	11.5 ... 14.5 VDC (adjustable)
Nominal output current $I_{o,nom}$	4 A (12 VDC); 4.2 A (< +40 °C)
Nominal output power	48 W
Residual ripple	≤ 20 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x DC OK active signal output (12 VDC; 40 mA)
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Efficiency/Power Losses

Power loss P_1	≤ 1 W (230 VAC; no load); ≤ 8 W (230 VAC; nominal load)
Power loss (max.) $P_{1,max}$	9.1 W (100 VAC / 12 VDC; 4 A)
Efficiency (typ.)	86 %

Fuse Protection

Internal fuse	T 4 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> +50 °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	45 x 90 x 107.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	257.6 g

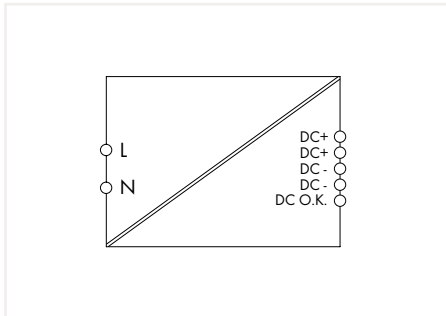
Standards and Specifications

Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508; GL
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Switched-Mode Power Supply; Classic; 1-Phase; 12 VDC / 7 A 787 Series

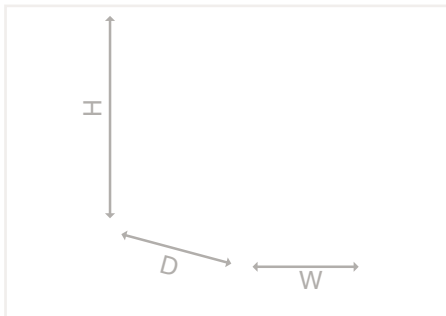


Similar to picture



Switched-Mode Power Supply; Classic; 1-phase; Output voltage: 12 VDC; Output current: 7 A; DC OK signal

	Item No.	Pack. Unit
	787-1621	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Bounce-free switching signal (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/61010-2-201/UL 60950-1; PELV per EN 60204
- GL approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module

Input	
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 372 VDC
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.9 A (240 VAC); ≤ 1.66 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 80 ms (230 VAC); > 15 ms (100 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	12 VDC (SELV) / ≤ 1 %
Output voltage range	11.5 ... 14.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	7 A (12 VDC); 7.5 A (< +40 °C)
Nominal output power	84 W
Residual ripple	≤ 20 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x DC OK active signal output (12 VDC; 40 mA)

Efficiency/Power Losses	
Power loss P_i	≤ 1 W (230 VAC; no load); ≤ 16.2 W (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	19.8 W (100 VAC / 12 VDC; 7 A)
Efficiency (typ.)	86 %

Fuse Protection	
Internal fuse	T 4 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K ($> +50$ °C)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

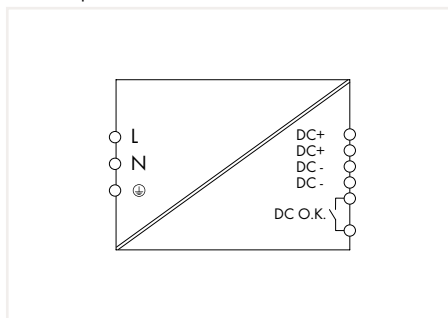
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	52 x 90 x 119; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	384 g

Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508; GL

Switched-Mode Power Supply; Classic; 1-Phase; 12 VDC / 15 A 787 Series

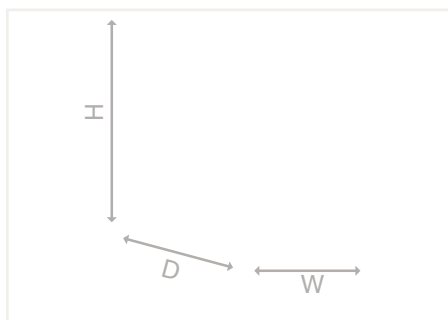


Similar to picture



Switched-Mode Power Supply; Classic; 1-phase; Output voltage: 12 VDC; Output current: 15 A; TopBoost; DC OK signal

Item No.	Pack. Unit
787-1631	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Bounce-free switching signal (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204
- GL approval
- Integrated TopBoost enables secondary-side protection via miniature circuit breakers.

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 372 VDC
Input voltage derating	-2.5 %/V (< 100 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.93 A (240 VAC); ≤ 2.05 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 28 ms (230 VAC); > 28 ms (100 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	12 VDC (SELV) / ≤ 1 %
Output voltage range	11.5 ... 15 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	15 A (12 VDC)
Nominal output power	180 W
Residual ripple	≤ 35 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)
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Efficiency/Power Losses

Power loss P_1	≤ 4.4 W (230 VAC; no load); ≤ 21.8 W (230 VAC; nominal load)
Power loss (max.) $P_{1, \text{max}}$	24.7 W (100 VAC / 12 VDC; 15 A)
Efficiency (typ.)	90 %

Fuse Protection

Internal fuse	T 6.3 A / 250 VAC
Recommended backup fusing	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-GND/sec.-GND)	4.242 kVDC / 2.2 kVDC / 0.7 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K ($> +60$ °C; 196... 264 VAC); -2.5 %/K ($> +50$ °C; 85 ... 195 VAC)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	55 x 127 x 172 ; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	930 g

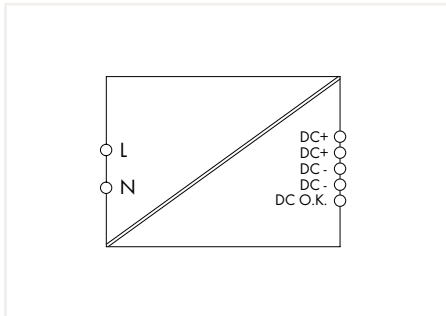
Standards and Specifications

Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; UL 60950-1; UL 508; GL
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Switched-Mode Power Supply; Classic; 1-Phase; 24 VDC / 1 A 787 Series

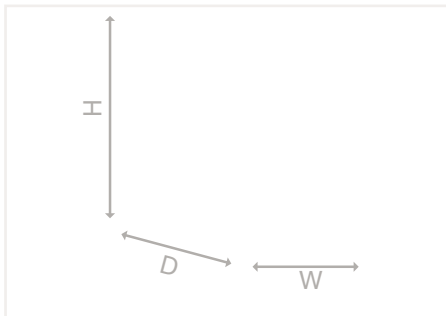


Similar to picture



Switched-Mode Power Supply; Classic; 1-phase;
Output voltage: 24 VDC; Output current: 1 A; NEC Class
2; DC OK signal

Item No.	Pack. Unit
787-1602	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Bounce-free switching signal (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204
- GL approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module
- NEC Class 2 per UL 60950

Input	
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 372 VDC
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.28 A (240 VAC); ≤ 0.49 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 120 ms (230 VAC); > 20 ms (100 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	1 A (24 VDC); 1.2 A (< 40 °C)
Nominal output power	24 W
Residual ripple	≤ 20 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x DC OK active signal output (24 VDC; 20 mA)

Efficiency/Power Losses	
Power loss P_i	≤ 1 W (230 VAC; no load); ≤ 4 W (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	5 W (100 VAC / 24 VDC; 1 A)
Efficiency (typ.)	86 %

Fuse Protection	
Internal fuse	T 2 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K ($> +50$ °C)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

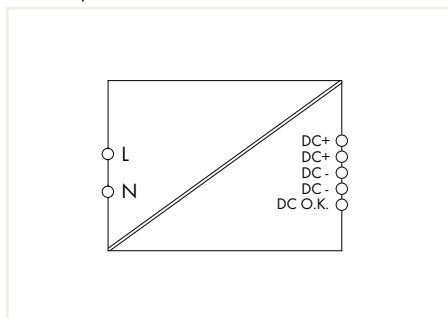
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	22.5 x 90 x 107.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	128 g

Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508; GL

Switched-Mode Power Supply; Classic; 1-Phase; 24 VDC / 2 A 787 Series

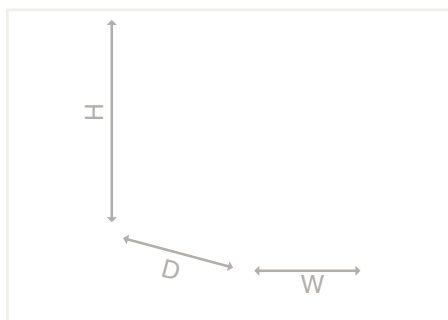


Similar to picture



Switched-Mode Power Supply; Classic; 1-phase;
Output voltage: 24 VDC; Output current: 2 A; NEC Class
2; DC OK signal

Item No.	Pack. Unit
787-1606	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Bounce-free switching signal (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204
- GL approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module
- NEC Class 2 per UL 60950

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 372 VDC
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.48 A (240 VAC); ≤ 0.82 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 120 ms (230 VAC); > 20 ms (100 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	2 A (24 VDC); 2.2 A (< +40 °C)
Nominal output power	48 W
Residual ripple	≤ 20 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x DC OK active signal output (24 VDC; 20 mA)
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Efficiency/Power Losses

Power loss P_1	≤ 1 W (230 VAC; no load); ≤ 6 W (230 VAC; nominal load)
Power loss (max.) $P_{1, \text{max}}$	7 W (100 VAC / 24 VDC; 2 A)
Efficiency (typ.)	89 %

Fuse Protection

Internal fuse	T 4 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> +50 °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	45 x 90 x 107.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	210 g

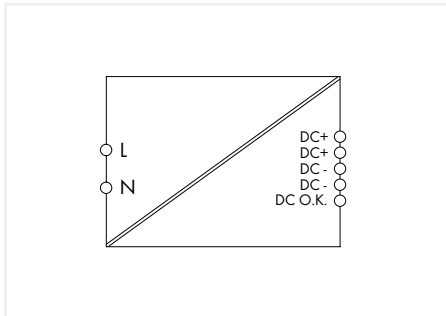
Standards and Specifications

Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508; GL
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Switched-Mode Power Supply; Classic; 1-Phase; 24 VDC / 3.8 A 787 Series

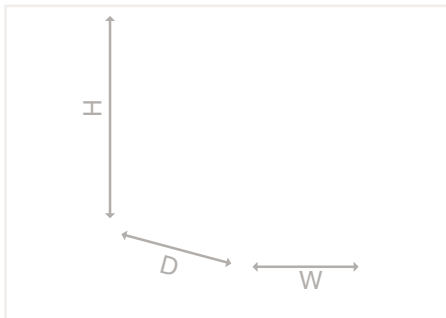


Similar to picture



Switched-Mode Power Supply; Classic; 1-phase; Output voltage: 24 VDC; Output current: 3.8 A; NEC Class 2; DC OK signal

Item No.	Pack. Unit
787-1616/000-1000	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Bounce-free switching signal (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204
- GL approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module
- Limited Power Source (LPS) per NEC Class 2 (UL 1310 and UL 60950)

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 372 VDC
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 0.95 \text{ A}$ (240 VAC); $\leq 1.73 \text{ A}$ (100 VAC)
Inrush current	$\leq 30 \text{ A}$
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 80 \text{ ms}$ (230 VAC); $> 15 \text{ ms}$ (100 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1 \%$
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	3.8 A (24 VDC)
Nominal output power	91.2 W
Residual ripple	$\leq 20 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x DC OK active signal output (24 VDC; 20 mA)
-----------	---

Efficiency/Power Losses

Power loss P_i	$\leq 2.8 \text{ W}$ (230 VAC; no load); $\leq 14 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	20 W (100 VAC / 91 W)
Efficiency (typ.)	87 %

Fuse Protection

Internal fuse	T 4 A / 250 VAC
Recommended backup fusing	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	$> 500.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K ($> +50 \text{ °C}$)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	52 x 90 x 119; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	384 g

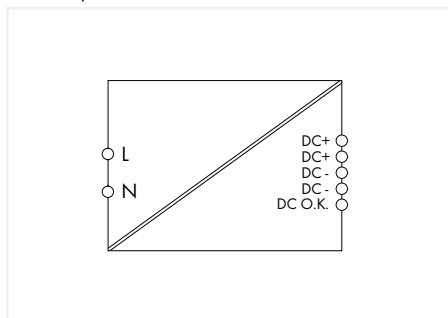
Standards and Specifications

Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508; UL 1310; GL
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Switched-Mode Power Supply; Classic; 1-Phase; 24 VDC / 4 A 787 Series

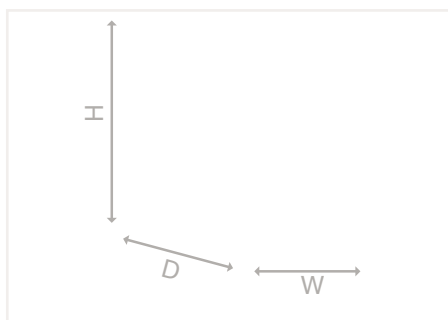


Similar to picture



Switched-Mode Power Supply; Classic; 1-phase; Out-
put voltage: 24 VDC; Output current: 4 A; DC OK signal

	Item No.	Pack. Unit
	787-1616	1
with coated PCBs	787-1616/000-070	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Bounce-free switching signal (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204
- GL approval

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 372 VDC
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 0.98 \text{ A}$ (240 VAC); $\leq 1.82 \text{ A}$ (100 VAC)
Inrush current	$\leq 30 \text{ A}$
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 80 \text{ ms}$ (230 VAC); $> 15 \text{ ms}$ (100 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1 \%$
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	4 A (24 VDC); 4.2 A (< +40 °C)
Nominal output power	96 W
Residual ripple	$\leq 20 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x DC OK active signal output (24 VDC; 20 mA)
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Efficiency/Power Losses

Power loss P_1	$\leq 1 \text{ W}$ (230 VAC; no load); $\leq 12.4 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{1, \text{max}}$	15 W (100 VAC / 24 VDC; 4 A)
Efficiency (typ.)	89 %

Fuse Protection

Internal fuse	T 4 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Overtoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	$> 500.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> +50 °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	52 x 90 x 119.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	384 g

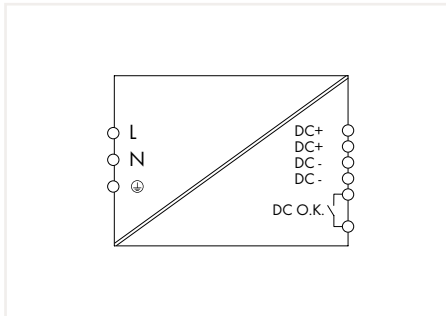
Standards and Specifications

Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508; GL
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Switched-Mode Power Supply; Classic; 1-Phase; 24 VDC / 5 A 787 Series

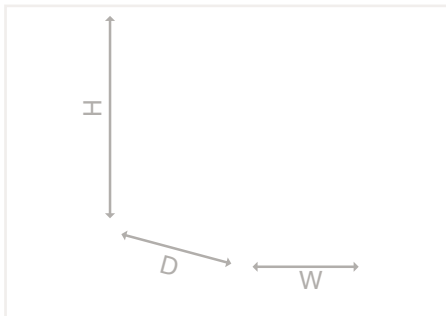


Similar to picture



Switched-Mode Power Supply; Classic; 1-phase;
Output voltage: 24 VDC; Output current: 5 A; TopBoost;
DC OK signal

Item No.	Pack. Unit
787-1622	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Bounce-free switching signal (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204
- GL approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module
- Integrated TopBoost enables secondary-side protection via miniature circuit breakers.

Input	
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 372 VDC
Input voltage derating	-2.5 %/V (< 97 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 1.24 A (230 VAC); ≤ 2.3 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 80 ms (230 VAC); > 10 ms (100 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	5 A (24 VDC)
Nominal output power	210 W
Residual ripple	≤ 30 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)

Efficiency/Power Losses	
Power loss P_i	≤ 1.2 W (230 VAC; no load); ≤ 14.6 W (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	19.4 W (100 VAC / 24 VDC; 5 A)
Efficiency (typ.)	89 %

Fuse Protection	
Internal fuse	T 4 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K ($> +60$ °C; 196... 264 VAC); -2.5 %/K ($> +50$ °C; 85 ... 195 VAC)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

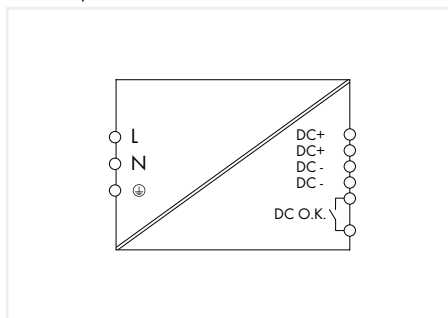
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	42 x 127 x 137.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	385 g

Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508; GL

Switched-Mode Power Supply; Classic; 1-Phase; 24 VDC / 10 A 787 Series

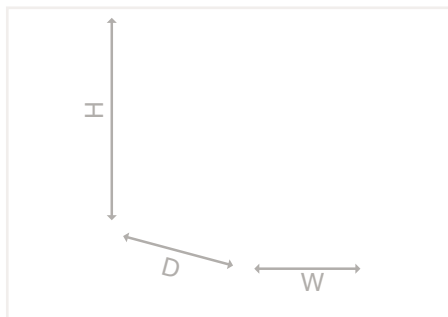


Similar to picture



Switched-Mode Power Supply; Classic; 1-phase; Output voltage: 24 VDC; Output current: 10 A; TopBoost; DC OK signal

	Item No.	Pack. Unit
	787-1632	1
with coated PCBs	787-1632/000-070	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Bounce-free switching signal (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204
- GL approval
- Integrated TopBoost enables secondary-side protection via miniature circuit breakers
- Input voltage 90 ... 372 VDC possible at operating temperatures of 0 ... +70 °C

Input

Nominal input voltage $U_{i,nom}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 100 ... 372 VDC
Input voltage derating	-2.5 %/V (< AC 100 V); -1 %/V (< DC 130 V)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 1.25 A (230 VAC); ≤ 2.74 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 17 ms (230 VAC); > 15 ms (100 VAC)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o,nom}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	≤ 50 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)
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Efficiency/Power Losses

Power loss P_1	≤ 6.6 W (230 VAC; no load); ≤ 24.4 W (230 VAC; nominal load)
Power loss (max.) $P_{1,max}$	31.3 W (100 VAC / 24 VDC; 10 A)
Efficiency (typ.)	91 %

Fuse Protection

Internal fuse	T 6.3 A / 250 VAC
Recommended backup fusing	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K ($> +60$ °C; 196... 264 VAC); -2.5 %/K ($> +50$ °C; 85 ... 195 VAC)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	55 x 127 x 172; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1140 g

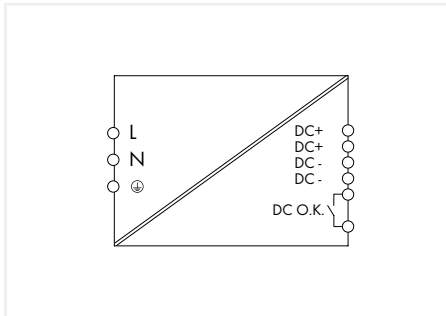
Standards and Specifications

Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; UL 60950-1; UL 508; GL
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Switched-Mode Power Supply; Classic; 1-Phase; 24 VDC / 20 A 787 Series

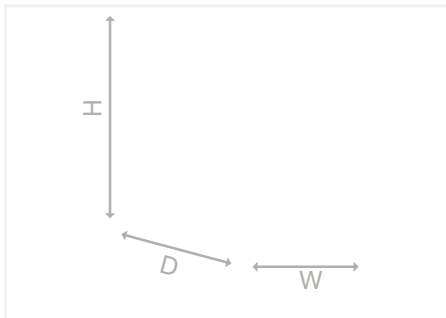


Similar to picture



Switched-Mode Power Supply; Classic; 1-phase; Output voltage: 24 VDC; Output current: 20 A; TopBoost; DC OK signal

Item No.	Pack. Unit
787-1634	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Bounce-free switching signal (DC O.K.)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/61010-2-201/UL 60950-1; PELV per EN 60204
- GL approval
- Integrated TopBoost enables secondary-side protection via miniature circuit breakers.

Input	
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 372 VDC
Input voltage derating	-1.8 %/V (< 105 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 2.23 A (230 VAC); ≤ 5.56 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC); > 8 ms (100 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	≤ 70 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)

Efficiency/Power Losses	
Power loss P_i	≤ 7.2 W (230 VAC; no load); ≤ 42.4 W (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	68.3 W (100 VAC / 24 VDC; 20 A)
Efficiency (typ.)	92 %

Fuse Protection	
Internal fuse	T 10 A / 250 VAC
Recommended backup fusing	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K ($> +60$ °C; 196 ... 264 VAC); -2.5 %/K ($> +50$ °C; 85 ... 195 VAC)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	95 x 127 x 170; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1600 g

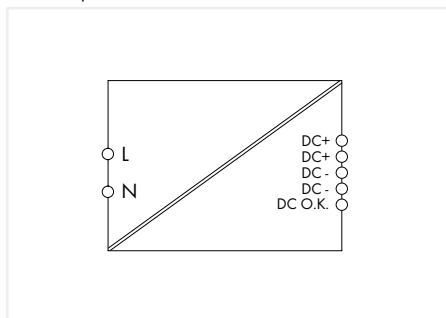
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; UL 60950-1; UL 508; GL

1

Switched-Mode Power Supply; Classic; 1-Phase; 48 VDC / 2 A 787 Series

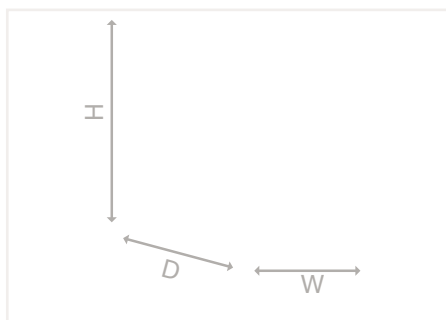


Similar to pictured device



Switched-Mode Power Supply; Classic; 1-phase; Out-
put voltage: 48 VDC; Output current: 2 A; DC OK signal

Item No.	Pack. Unit
787-1623	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Bounce-free switching signal (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204
- GL approval

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 372 VDC
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.97 A (240 VAC); ≤ 1.84 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 80 ms (230 VAC); > 15 ms (100 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	48 VDC (SELV) / ≤ 1 %
Output voltage range	40 ... 53 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	2 A (48 VDC); 2.1 A (< +40 °C)
Nominal output power	96 W
Residual ripple	≤ 20 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x DC OK active signal output (48 VDC; 10 mA)
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Efficiency/Power Losses

Power loss P_1	≤ 1 W (230 VAC; no load); ≤ 16.2 W (230 VAC; nominal load)
Power loss (max.) $P_{1, \text{max}}$	19.8 W (100 VAC / 48 VDC; 2 A)
Efficiency (typ.)	86 %

Fuse Protection

Internal fuse	T 4 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Overtoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> +50 °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	52 x 90 x 119; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	590 g

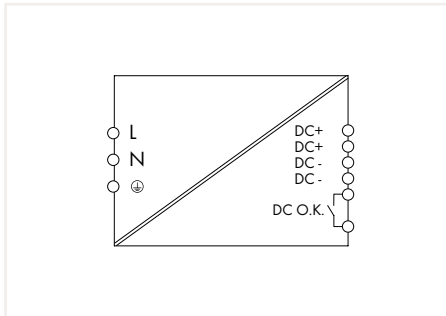
Standards and Specifications

Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; EN 60335-1; UL 60950-1; UL 508; GL
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Switched-Mode Power Supply; Classic; 1-Phase; 48 VDC / 5 A 787 Series

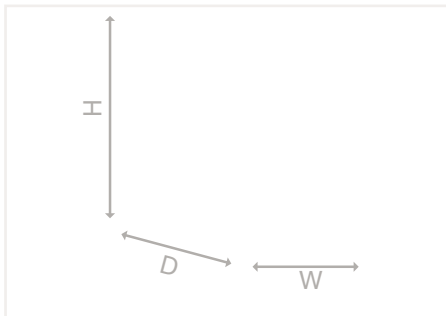


Similar to pictured device



Switched-Mode Power Supply; Classic; 1-phase;
Output voltage: 48 VDC; Output current: 5 A; TopBoost;
DC OK signal

Item No.	Pack. Unit
787-1633	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Bounce-free switching signal (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204
- GL approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module
- Integrated TopBoost enables secondary-side protection via miniature circuit breakers. Input voltage 100 ... 372 VDC is possible.

Input

Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 372 VDC
Input voltage derating	-2.5 %/V (< 100 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 1.25 A (230 VAC); ≤ 2.74 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 21 ms (230 VAC); > 21 ms (100 VAC)

Output

Nominal output voltage $U_{o, nom}$ /adjustment accuracy	48 VDC (SELV) / ≤ 1 %
Output voltage range	40 ... 56 VDC (adjustable)
Nominal output current $I_{o, nom}$	5 A (48 VDC)
Nominal output power	240 W
Residual ripple	≤ 30 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)
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Efficiency/Power Losses

Power loss P_i	≤ 7 W (230 VAC; no load); ≤ 40.8 W (230 VAC; nominal load)
Power loss (max.) $P_{i, max}$	26.5 W (100 VAC / 48 VDC; 5 A)
Efficiency (typ.)	≥ 2 %

Fuse Protection

Internal fuse	T 6.3 A / 250 VAC
Recommended backup fusing	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K ($> +60$ °C; 196 ... 264 VAC); -2.5 %/K ($> +50$ °C; 85 ... 195 VAC)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	55 x 127 x 172; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	930 g

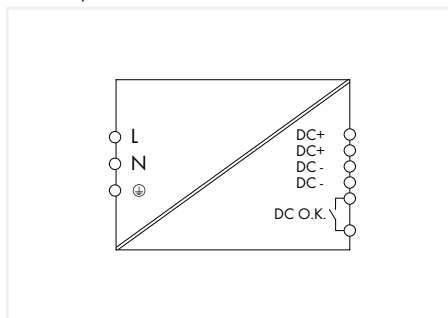
Standards and Specifications

Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; UL 60950-1; UL 508; GL
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Switched-Mode Power Supply; Classic; 1-Phase; 48 VDC / 10 A 787 Series

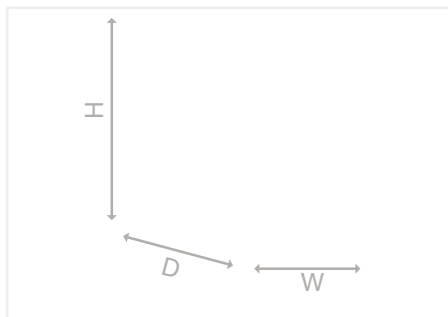


Similar to pictured device



Switched-Mode Power Supply; Classic; 1-phase; Output voltage: 48 VDC; Output current: 10 A; TopBoost; DC OK signal

	Item No.	Pack. Unit
	787-1635	1
with coated PCBs	787-1635/000-070	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Bounce-free switching signal (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204
- GL approval
- Integrated TopBoost enables secondary-side protection via miniature circuit breakers.

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 372 VDC
Input voltage derating	-2.5 %/V (< 100 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 2.23 A (230 VAC); ≤ 5.56 A (100 VAC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC); > 20 ms (100 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	48 VDC (SELV) / ≤ 1 %
Output voltage range	40 ... 56 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	10 A (48 VDC)
Nominal output power	480 W
Residual ripple	≤ 80 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)
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Efficiency/Power Losses

Power loss P_1	≤ 11.7 W (230 VAC; no load); ≤ 36.3 W (230 VAC; nominal load)
Power loss (max.) $P_{1, \text{max}}$	64.9 W (100 VAC / 48 VDC; 10 A)
Efficiency (typ.)	93 %

Fuse Protection

Internal fuse	T 10 A / 250 VAC
Recommended backup fusing	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K ($> +60$ °C; 196... 264 VAC); -2.5 %/K ($> +50$ °C; 85 ... 195 VAC)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG

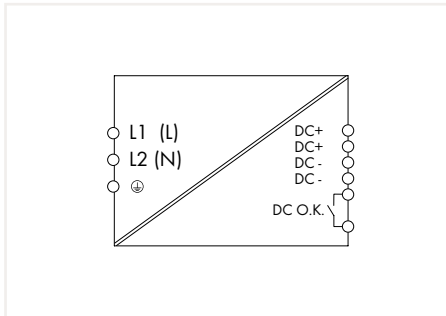
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	95 x 127 x 170; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1600 g

Standards and Specifications

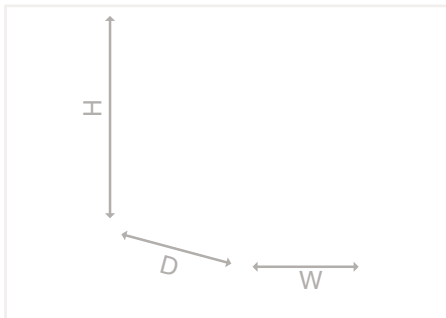
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; UL 60950-1; UL 508; GL
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Switched-Mode Power Supply; Classic; 1-/2-Phase; 24 VDC / 5 A 787 Series



Switched-Mode Power Supply; Classic; 2-phase;
Output voltage: 24 VDC; Output current: 5 A; TopBoost;
DC OK signal

	Item No.	Pack. Unit
	787-1628	1



Features:

- Switched-mode power supply with TopBoost, enabling secondary-side protection via circuit breakers
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Contact (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i, \text{nom}}$	(1 / 2) x 200 ... 500 VAC
Input voltage range	(1 / 2) x 180 ... 550 VAC; 254 ... 780 VDC
Input voltage derating	-0.5 %/V (< 200 VAC); -0.4 %/V (< 280 VDC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 1.25 A (200 VAC); ≤ 0.67 A (500 VAC)
Inrush current	≤ 30 A (NTC)
Power factor	≥ 0.52
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 126 ms (500 VAC); > 15 ms (200 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	5 A (24 VDC)
Nominal output power	120 W
Residual ripple	≤ 30 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)

Efficiency/Power Losses	
Power loss P_i	≤ 0.94 W (no load); ≤ 16.36 W (230 VAC; nominal load); ≤ 14.55 W (400 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	18.2 W (200 VAC / 24 VDC; 5 A)
Efficiency (typ.)	89 %

Fuse Protection	
Internal fuse	T 3.15 A / 500 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

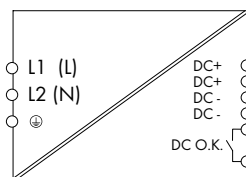
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-2.5 %/K ($> +55$ °C)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	42 x 127 x 143.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	600 g

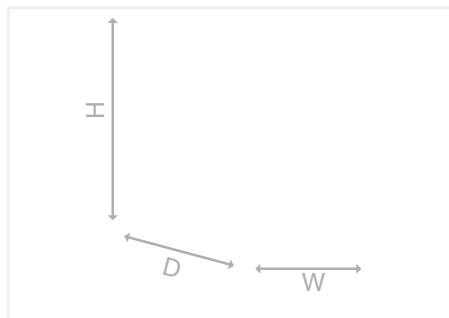
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV GL

Switched-Mode Power Supply; Classic; 1-/2-Phase; 24 VDC / 10 A 787 Series



Switched-Mode Power Supply; Classic; 2-phase; Output voltage: 24 VDC; Output current: 10 A; TopBoost; DC OK signal

Item No.	Pack. Unit
787-1638	1



Features:

- Switched-mode power supply with TopBoost, enabling secondary-side protection via circuit breakers
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Contact (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204

Input

Nominal input voltage $U_{i, \text{nom}}$	(1 / 2) x 200 ... 500 VAC
Input voltage range	(1 / 2) x 180 ... 550 VAC; 254 ... 780 VDC
Input voltage derating	-0.5 %/V (< 200 VAC); -0.4 %/V (< 280 VDC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 1.98 A (230 VAC); ≤ 1.36 A (230 VAC)
Inrush current	≤ 30 A (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 78 ms (400 VAC); > 20 ms (200 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	≤ 30 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)
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Efficiency/Power Losses

Power loss P_1	≤ 1.3 W (no load); ≤ 27.8 W (230 VAC; nominal load); ≤ 20.3 W (400 VAC; nominal load)
Power loss (max.) $P_{1, \text{max}}$	27.8 W (230 VAC / 24 VDC; 10 A)
Efficiency (typ.)	89 % (230 VAC); ≥ 92.5 % (400 VAC)

Fuse Protection

Internal fuse	T 6.3 A / 500 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overtoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-2.5 %/K ($> +55$ °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	55 x 127 x 146.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	830 g

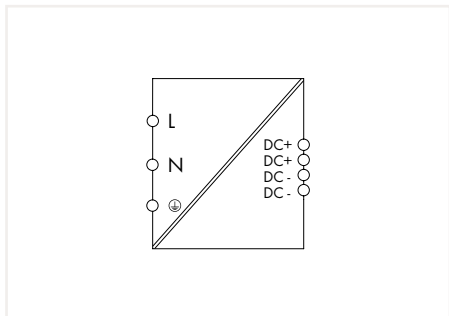
Standards and Specifications

Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV GL
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Switched-Mode Power Supply; Eco; 1-Phase; 12 VDC / 2 A 787 Series

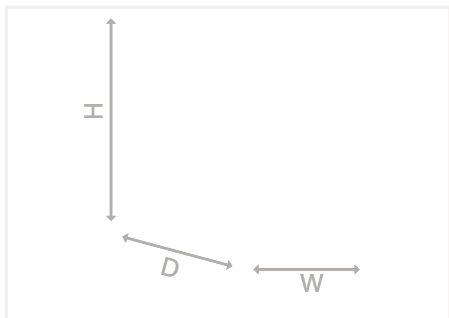


Similar to picture



Switched-mode power supply; Eco; 1-phase; 12 VDC output voltage; 2 A output current; DC-OK LED

	Item No.	Pack. Unit
	787-1701	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 62368-1 and EN 60335-1; PELV per EN 60204
- DIN-35 rail mountable in different positions
- Direct installation on mounting plate via cable grip

Input	
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	90 ... 264 VAC; 125 ... 375 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 0.7 A (100 VAC)
Inrush current	≤ 18 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 10 ms (230 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	12 VDC (SELV) / ≤ 1 %
Output voltage range	10 ... 14 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	2 A (12 VDC; 110 ... 240 VAC); 1.6 A (12 VDC; 100 ... 240 VAC)
Nominal output power	24 W
Residual ripple	≤ 150 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.4 x $I_{o, \text{nom}}$); Shutdown and automatic restart in the event of a short circuit

Signaling and Communication	
Signaling	1 x DC OK LED (green)

Efficiency/Power Losses	
Efficiency	≥ 80 % (230 VAC; 2 ADC)

Fuse Protection	
Internal fuse	F 1 A / 250 VAC
Recommended backup fusing	Circuit breaker: B6, B10

Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes, for two devices of the same type
MTBF	> 300.000 h (per IEC 61709)
Surrounding air temperature (operation)	-20 ... $+60$ °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-4 %/K ($> +45$ °C)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

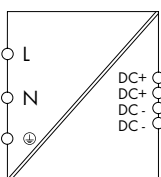
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	30 x 90 x 99; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail; Screw mounting
Weight	250 g

Standards and Specifications	
Approvals/standards/specifications	CE; EN 61204-3; EN 60335-1; EN 61558-2-6; EN 62368-1

Switched-Mode Power Supply; Eco; 1-Phase; 12 VDC / 4 A 787 Series

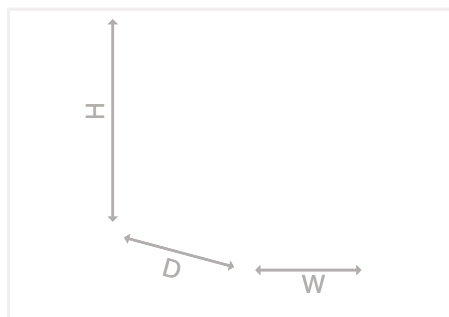


Similar to picture



Switched-mode power supply; Eco; 1-phase; 12 VDC output voltage; 4 A output current; DC-OK LED

	Item No.	Pack. Unit
	787-1711	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 62368-1 and EN 60335-1; PELV per EN 60204
- DIN-35 rail mountable in different positions
- Direct installation on mounting plate via cable grip

Input

Nominal input voltage $U_{i,nom}$	1 x 100 ... 240 VAC
Input voltage range	90 ... 264 VAC; 125 ... 375 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 1.8 A (100 VAC)
Inrush current	≤ 18 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 10 ms (230 VAC)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	12 VDC (SELV) / ≤ 1 %
Output voltage range	10 ... 14 VDC (adjustable)
Nominal output current $I_{o,nom}$	4 A (12 VDC; 110 ... 240 VAC); 3.2 A (12 VDC; 100 ... 240 VAC)
Nominal output power	48 W
Residual ripple	≤ 150 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.4 x $I_{o,nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and Communication

Signaling	1 x DC OK LED (green)
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Efficiency/Power Losses

Efficiency	≥ 80 % (230 VAC; 4 ADC)
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Fuse Protection

Internal fuse	F 2 A / 250 VAC
Recommended backup fusing	Circuit breaker: B6, B10

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes, for two devices of the same type
MTBF	> 300.000 h (per IEC 61709)
Surrounding air temperature (operation)	-20 ... $+60$ °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-4 %/K ($> +45$ °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	40 x 90 x 99; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail; Screw mounting
Weight	250 g

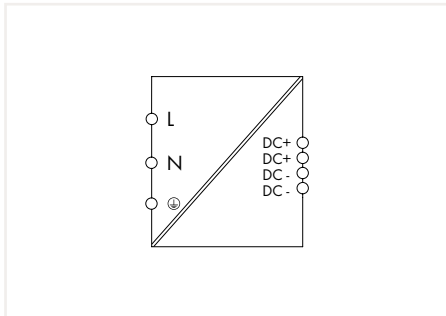
Standards and Specifications

Approvals/standards/specifications	CE; EN 61204-3; EN 60335-1; EN 61558-2-6; EN 62368-1
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Switched-Mode Power Supply; Eco; 1-Phase; 12 VDC / 8 A 787 Series

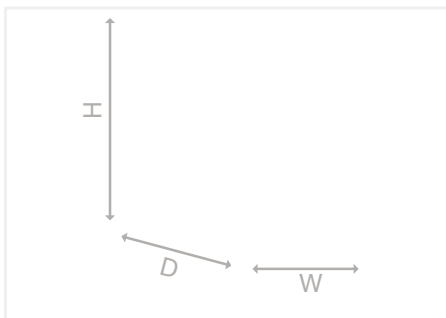


Similar to picture



Primär getaktete Stromversorgung; Eco; 1-phasig;
Ausgangsspannung DC 12 V; Ausgangsstrom 8 A;
DC-OK LED

	Item No.	Pack. Unit
	787-1721	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 62368-1 and EN 60335-1; PELV per EN 60204
- DIN-35 rail mountable in different positions
- Direct installation on mounting plate via cable grip

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	90 ... 264 VAC; 125 ... 375 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 3 A (100 VAC)
Inrush current	≤ 18 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 10 ms (230 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	12 VDC (SELV) / ≤ 1 %
Output voltage range	10 ... 14 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	8 A (12 VDC; 110 ... 240 VAC); 6.4 A (12 VDC; 100 ... 240 VAC)
Nominal output power	96 W
Residual ripple	≤ 150 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.4 x $I_{o, \text{nom}}$); Shutdown and automatic restart in the event of a short circuit

Signaling and Communication

Signaling	1 x DC OK LED (green)
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Efficiency/Power Losses

Efficiency	≥ 80 % (230 VAC; 8 ADC)
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Fuse Protection

Internal fuse	F 3.15 A / 250 VAC
Recommended backup fusing	Circuit breaker: B6, B10

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes, for two devices of the same type
MTBF	> 300.000 h (per IEC 61709)
Surrounding air temperature (operation)	-20 ... +60 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-3 %/K (> +40 °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

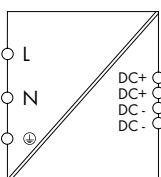
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	60 x 130 x 99; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail; Screw mounting
Weight	520 g

Standards and Specifications

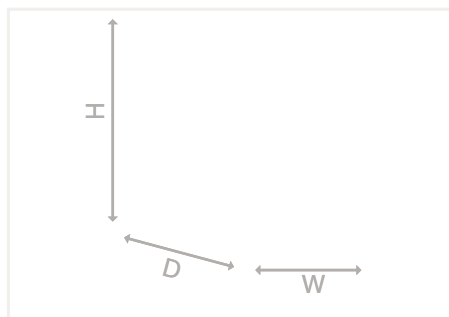
Approvals/standards/specifications	CE; EN 61204-3; EN 60335-1; EN 61558-2-6; EN 62368-1
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Switched-Mode Power Supply; Eco; 1-Phase; 24 VDC / 1.25 A 787 Series



Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 1.25 A output current; DC-OK LED

Item No.	Pack. Unit
787-1702	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 62368-1; UL 60950-1 and EN 60335-1; PELV per EN 60204
- DIN-35 rail mountable in different positions
- Direct installation on mounting plate via cable grip

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	90 ... 264 VAC; 125 ... 375 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 0.3 \text{ A}$ (230 VAC); $\leq 0.6 \text{ A}$ (115 VAC)
Inrush current	$\leq 18 \text{ A}$
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 10 \text{ ms}$ (230 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1 \%$
Output voltage range	22 ... 26 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	1.25 A (24 VDC; 110 ... 240 VAC); 1 A (24 VDC; 100 ... 240 VAC)
Nominal output power	30 W
Residual ripple	$\leq 200 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.4 x $I_{o, \text{nom}}$); Shutdown and automatic restart in the event of a short circuit

Signaling and Communication

Signaling	1 x DC OK LED (green)
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Efficiency/Power Losses

Efficiency	$\geq 87 \%$ (230 VAC; 1.25 ADC)
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Fuse Protection

Internal fuse	F 1 A / 250 VAC
Recommended backup fusing	Circuit breaker: B6, B10

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes, for two devices of the same type
MTBF	> 300.000 h (per IEC 61709)
Surrounding air temperature (operation)	-20 ... +60 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-4 %/K (> +45 °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

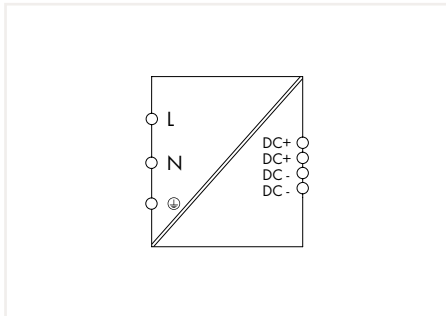
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	30 x 90 x 99; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail; Screw mounting
Weight	300 g

Standards and Specifications

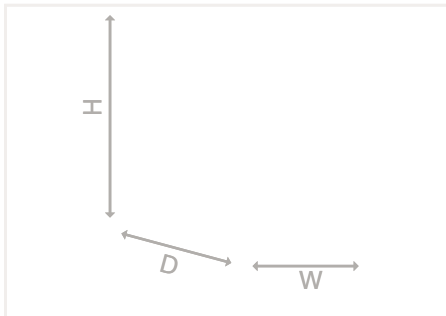
Approvals/standards/specifications	CE; EN 61204-3; EN 60335-1; EN 62368-1; UL 60950-1; UL 508
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Switched-Mode Power Supply; Eco; 1-Phase; 24 VDC / 2.5 A 787 Series



Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 2.5 A output current; DC-OK LED

	Item No.	Pack. Unit
	787-1712	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 62368-1; UL 60950-1 and EN 60335-1; PELV per EN 60204
- DIN-35 rail mountable in different positions
- Direct installation on mounting plate via cable grip

Input	
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	90 ... 264 VAC; 125 ... 375 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 0.6 A (230 VAC); ≤ 1.2 A (115 VAC)
Inrush current	≤ 18 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 10 ms (230 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	22 ... 26 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	2.5 A (24 VDC; 110 ... 240 VAC); 2 A (24 VDC; 100 ... 240 VAC)
Nominal output power	60 W (max.)
Residual ripple	≤ 200 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.4 x $I_{o, \text{nom}}$); Shutdown and automatic restart in the event of a short circuit

Signaling and Communication	
Signaling	1 x DC OK LED (green)

Efficiency/Power Losses	
Efficiency	≥ 88 % (230 VAC; 2.5 ADC)

Fuse Protection	
Internal fuse	F 2 A / 250 VAC
Recommended backup fusing	Circuit breaker: B6, B10

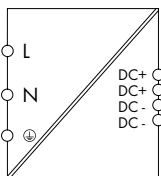
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes, for two devices of the same type
MTBF	> 300.000 h (per IEC 61709)
Surrounding air temperature (operation)	-20 ... +60 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-4 %/K (> +45 °C)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	40 x 90 x 99; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail; Screw mounting
Weight	300 g

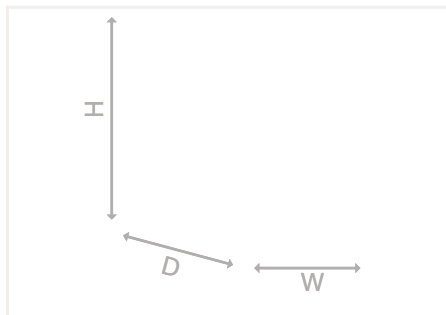
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61204-3; EN 60335-1; EN 62368-1; UL 60950-1; UL 508

Switched-Mode Power Supply; Eco; 1-Phase; 24 VDC / 2.5 A 787 Series



Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 2.5 A output current; DC-OK LED

Item No.	Pack. Unit
787-712	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 62368-1; UL 60950-1; PELV per EN 60204

Input

Nominal input voltage $U_{i,nom}$	1 x 110 ... 240 VAC
Input voltage range	85 ... 264 VAC; 90 ... 373 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 0.7 A (230 VAC); ≤ 1.2 A (115 VAC)
Inrush current	≤ 30 A
Power factor	≥ 0.5 (230 VAC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 20 ms (230 VAC)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	22 ... 28 VDC (adjustable)
Nominal output current $I_{o,nom}$	2.5 A (24 VDC)
Nominal output power	60 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.15 ... 1.4 x $I_{o,nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x Overload LED (red)
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Efficiency/Power Losses

Power loss P_i	≤ 8.3 W (230 VAC; nominal load)
Power loss (max.) $P_{i,max}$	11.5 W (110 VAC / 24 VDC; 2.75 A)
Efficiency (typ.)	86 % (230 VAC)

Fuse Protection

Internal fuse	F 2.5 A / 250 VAC
Recommended backup fusing	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	480.000 h (per IEC 61709)
Surrounding air temperature (operation)	-10 ... +70 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-3.3 %/K (> +50 °C; 230 VAC)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 4 mm ² / 0.08 ... 4 mm ² / 28 ... 12 AWG

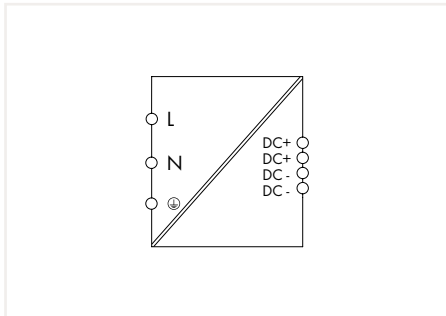
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	50 x 92 x 136; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	470 g

Standards and Specifications

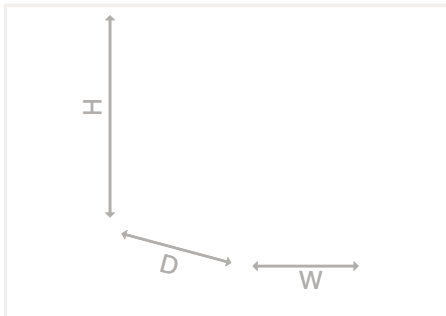
Approvals/standards/specifications	CE; EN 62368-1; EN 61204-3; cURus 60950-1; cULus 508; ANSI/ISA 12.12.01 (Class I Div. 2); ATEX; IEC Ex
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Switched-Mode Power Supply; Eco; 1-Phase; 24 VDC / 5 A 787 Series



Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 5 A output current; DC-OK LED

	Item No.	Pack. Unit
	787-722	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 62368-1; UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i, nom}$	1 x 110 ... 240 VAC
Input voltage range	85 ... 264 VAC; 90 ... 373 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 1 A (230 VAC); ≤ 2 A (115 VAC)
Inrush current	≤ 30 A
Power factor	≥ 0.94 (230 VAC); ≥ 0.98 (115 VAC)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	22 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	5 A (24 VDC)
Nominal output power	120 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.15 ... 1.4 x $I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x Overload LED (red)

Efficiency/Power Losses	
Power loss P_i	≤ 19.5 W (230 VAC; nominal load)
Power loss (max.) $P_{i, max}$	23.5 W (110 VAC / 24 VDC; 5.5 A)
Efficiency (typ.)	86 % (230 VAC)

Fuse Protection	
Internal fuse	F 3.15 A / 250 VAC
Recommended backup fusing	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

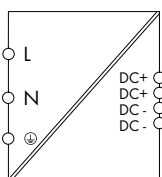
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	480.000 h (per IEC 61709)
Surrounding air temperature (operation)	-10 ... +60 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-5.33 %/K (> +45 °C; 230 VAC)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 4 mm ² / 0.08 ... 4 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	75 x 92 x 136; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	850 g

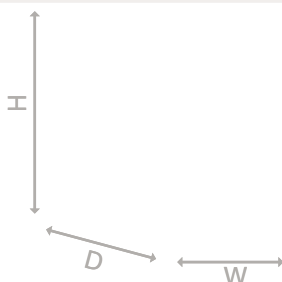
Standards and Specifications	
Approvals/standards/specifications	CE; EN 62368-1; EN 61204-3; cURus 60950-1; cULus 508; ANSI/ISA 12.12.01 (Class I Div. 2); ATEX; IEC Ex

Switched-Mode Power Supply; Eco; 1-Phase; 24 VDC / 5 A 787 Series



Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 5 A output current; DC-OK LED

Item No.	Pack. Unit
787-1722	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 62368-1; UL 60950-1 and EN 60335-1; PELV per EN 60204
- DIN-35 rail mountable in different positions
- Direct installation on mounting plate via cable grip

Input

Nominal input voltage $U_{i,nom}$	1 x 100 ... 240 VAC
Input voltage range	90 ... 264 VAC; 125 ... 375 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 1 A (230 VAC); ≤ 2 A (115 VAC)
Inrush current	≤ 18 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 10 ms (230 VAC)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	22 ... 26 VDC (adjustable)
Nominal output current $I_{o,nom}$	5 A (24 VDC; 110 ... 240 VAC); 4 A (24 VDC; 100 ... 240 VAC)
Nominal output power	120 W
Residual ripple	≤ 200 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.4 x $I_{o,nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and Communication

Signaling	1 x DC OK LED (green)
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Efficiency/Power Losses

Efficiency (typ.)	88 % (230 VAC; 5 ADC)
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Fuse Protection

Internal fuse	F 2.5 A / 250 VAC
Recommended backup fusing	Circuit breaker: B6, B10

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes, for two devices of the same type
MTBF	> 300.000 h (per IEC 61709)
Surrounding air temperature (operation)	-20 ... +60 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-3 %/K (> +45 °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

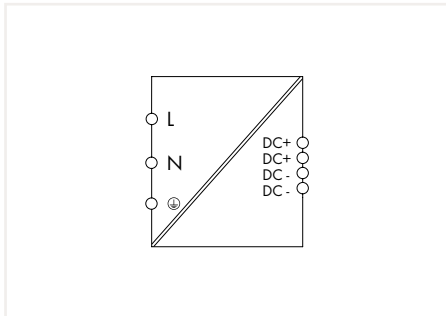
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	60 x 130 x 99; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail; Screw mounting
Weight	550 g

Standards and Specifications

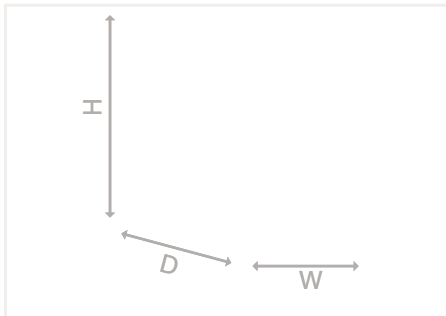
Approvals/standards/specifications	CE; EN 61204-3; EN 60335-1; EN 62368-1; UL 60950-1; UL 508
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Switched-Mode Power Supply; Eco; 1-Phase; 24 VDC / 10 A 787 Series



Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 10 A output current; DC-OK LED

	Item No.	Pack. Unit
	787-1732	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 62368-1; UL 60950-1 and EN 60335-1; PELV per EN 60204
- DIN-35 rail mountable in different positions
- Direct installation on mounting plate via cable grip

Input	
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	90 ... 264 VAC; 125 ... 375 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 2 A (230 VAC); ≤ 4 A (115 VAC)
Inrush current	≤ 18 A
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 10 ms (230 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	22 ... 26 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	10 A (24 VDC; 110 ... 240 VAC); 8 A (24 VDC; 100 ... 240 VAC)
Nominal output power	240 W
Residual ripple	≤ 200 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.4 x $I_{o, \text{nom}}$); Shutdown and automatic restart in the event of a short circuit

Signaling and Communication	
Signaling	1 x DC OK LED (green)

Efficiency/Power Losses	
Efficiency (typ.)	91 % (230 VAC; 10 ADC)

Fuse Protection	
Internal fuse	F 3.15 A / 250 VAC
Recommended backup fusing	Circuit breaker: B6, B10

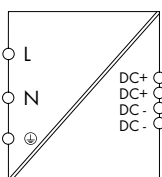
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes, for two devices of the same type
MTBF	> 300.000 h (per IEC 61709)
Surrounding air temperature (operation)	-20 ... +60 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-4 %/K (> +45 °C)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	70 x 165 x 99; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail; Screw mounting
Weight	840 g

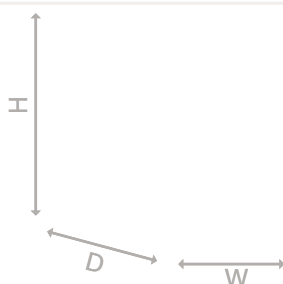
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61204-3; EN 60335-1; EN 62368-1; UL 60950-1; UL 508

Switched-Mode Power Supply; Eco; 1-Phase; 24 VDC / 10 A 787 Series



Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 10 A output current; DC-OK LED

Item No.	Pack. Unit
787-732	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 62368-1; UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i, \text{nom}}$	1 x 110 ... 240 VAC
Input voltage range	85 ... 264 VAC; 90 ... 373 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 1.5 A (230 VAC); ≤ 3 A (115 VAC)
Inrush current	≤ 30 A
Power factor	≥ 0.94 (230 VAC); ≥ 0.98 (115 VAC)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	22 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.15 ... 1.4 x $I_{o, \text{nom}}$); Shutdown and automatic restart in the event of a short circuit

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x Overload LED (red)

Efficiency/Power Losses	
Power loss P_i	≤ 37.5 W (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	53 W (110 VAC / 24 VDC; 11 A)
Efficiency (typ.)	86 % (230 VAC)

Fuse Protection	
Internal fuse	F 5 A / 250 VAC
Recommended backup fusing	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

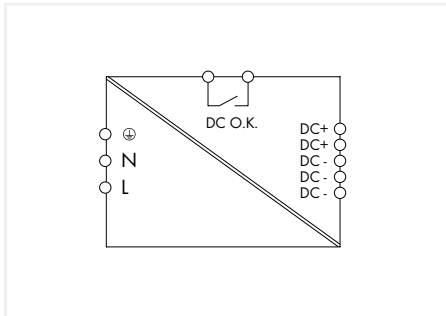
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	480.000 h (per IEC 61709)
Surrounding air temperature (operation)	-10 ... +70 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.33 %/K (> +40 °C; 230 VAC)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 4 mm ² / 0.08 ... 4 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	110 x 92 x 136; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1200 g

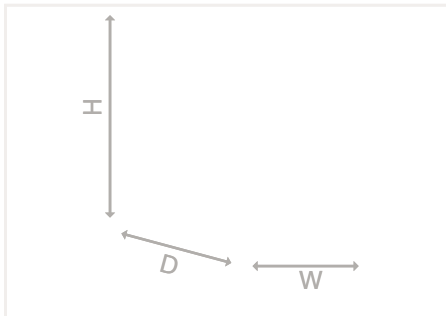
Standards and Specifications	
Approvals/standards/specifications	CE; EN 62368-1; EN 61204-3; cURus 60950-1; cULus 508; ANSI/ISA 12.12.01 (Class I Div. 2); ATEX; IEC Ex

Switched-Mode Power Supply; Eco; 1-Phase; 24 VDC / 20 A 787 Series



Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 20 A output current; DC OK contact

Item No.	Pack. Unit
787-734	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 62368-1; UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i, nom}$	1 x 110 ... 240 VAC
Input voltage range	85 ... 264 VAC; 130 ... 373 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 3 A (230 VAC); ≤ 6.3 A (115 VAC)
Inrush current	≤ 30 A
Power factor	≥ 0.94 (230 VAC); ≥ 0.98 (115 VAC)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC)

Output	
Nominal output voltage $U_{o, nom}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1\%$
Output voltage range	22 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.15 ... 1.4 x $I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x Overload LED (red); 1 x DC OK signal output (optocoupler as make contact; max. 31.2 V; 20 mA)

Efficiency/Power Losses	
Power loss P_i	≤ 65 W (230 VAC; nominal load)
Power loss (max.) $P_{i, max}$	107 W (110 VAC / 24 VDC; 23 A)
Efficiency (typ.)	90 %

Fuse Protection	
Internal fuse	T 10 A / 250 VAC
Recommended backup fusing	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

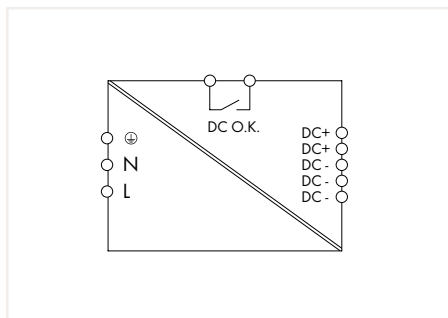
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-GND/sec.-GND/sec.-signal/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Resistance to reverse feed	
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 250.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... $+70$ °C
Relative humidity	95 % (no condensation permissible)
Derating	See instruction manual
Pollution degree	2

Connection Data	
Connection technology	Push-in CAGE CLAMP®
Input/signaling (solid/fine-stranded/AWG)	0.5 ... 6 mm ² / 0.5 ... 6 mm ² / 20 ... 10 AWG
Output (solid/fine-stranded/AWG)	1.5 ... 16 mm ² / 1.5 ... 16 mm ² / 16 ... 6 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	115 x 136 x 144; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	2120 g

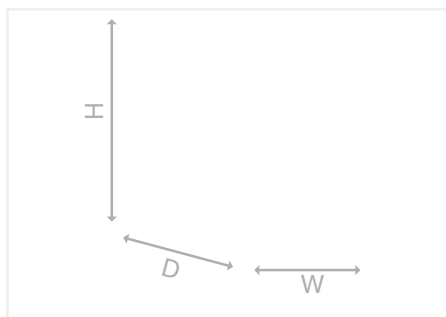
Standards and Specifications	
Approvals/standards/specifications	CE; EN 62368-1; EN 61204-3; EN 61000-6-2; EN 61000-6-3; UL 60950-1; UL 508

Switched-Mode Power Supply; Eco; 1-Phase; 24 VDC / 40 A 787 Series



Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 40 A output current; DC OK contact

Item No.	Pack. Unit
787-736	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 62368-1; UL 60950-1; PELV per EN 60204

Input

Nominal input voltage $U_{i,nom}$	1 x 110 ... 240 VAC
Input voltage range	90 ... 264 VAC; 130 ... 373 VDC
Input voltage derating	-2 %/V (< 100 VAC)
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 6 A (230 VAC); ≤ 12 A (115 VAC)
Inrush current	≤ 30 A
Power factor	≥ 0.94 (230 VAC); ≥ 0.98 (115 VAC)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 17 ms (230 VAC)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	22 ... 28 VDC (adjustable)
Nominal output current $I_{o,nom}$	40 A (24 VDC)
Nominal output power	960 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.15 ... 1.4 x $I_{o,nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x Overload LED (red); 1 x DC OK signal output (optocoupler as make contact; max. 31.2 V; 20 mA)
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Efficiency/Power Losses

Power loss P_i	≤ 107 W (230 VAC; nominal load)
Efficiency (typ.)	90 %

Fuse Protection

Internal fuse	T 20 A / 250 VAC
Recommended backup fusing	Circuit breaker: 13 A, 16 A, 20 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-GND/sec.-GND/sec.-signal/ pri.-sec.)	2.2 kVDC / 0.7 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 250.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.66 %/K (> +55 °C)
Pollution degree	2

Connection Data

Connection technology	Push-in CAGE CLAMP®
Input/signaling (solid/fine-stranded/AWG)	0.5 ... 6 mm ² / 0.5 ... 6 mm ² / 20 ... 10 AWG
Output (solid/fine-stranded/AWG)	1.5 ... 16 mm ² / 1.5 ... 16 mm ² / 16 ... 6 AWG

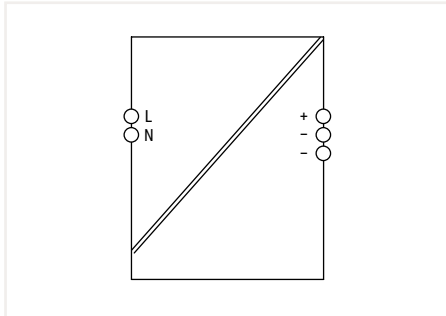
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	170 x 136 x 150; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	3500 g

Standards and Specifications

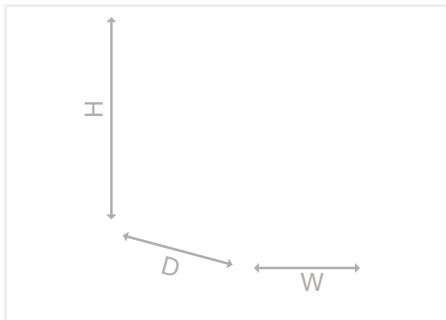
Approvals/standards/specifications	CE; EN 62368-1; EN 61204-3; EN 61000-6-2; EN 61000-6-3; UL 60950-1; UL 508
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Power Supply; Eco 2; 1-Phase; 24 VDC / 1.25 A 2687 Series



Power Supply; Eco 2; 1-phase;
Output voltage: 24 VDC; Output current: 1.25 A

Item No.	Pack. Unit
2687-2142	1



Features:

- Optical status indication
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Fast and tool-free termination via lever-actuated terminals with push-in connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	90 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	≤ 0.3 A (230 VAC; nominal load); ≤ 0.6 A (100 VAC; nominal load)
Inrush current	≤ 10 A (after 1 ms)
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 120 ms (230 VAC); ≥ 15 ms (110 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	22 ... 29 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	1.25 A (24 VDC)
Nominal output power	30 W
Residual ripple	≤ 60 mV (peak-to-peak)
Overload behavior	Constant power up to 125 %; shutdown and automatic restart in the event of a short circuit

Signaling and Communication	
Signaling	Optical status indication (DC OK)

Efficiency/Power Losses	
Power loss P_i	≤ 0.2 W (no load); ≤ 4.3 W (nominal load)
Efficiency (typ.)	87.5 %

Fuse Protection	
Internal fuse	T 1 A / 250 VAC
Recommended backup fusing	16 A (for USA/Canada: 15 A)

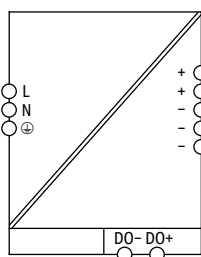
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec./pri.-GND/sec.-GND/sec.-DO)	3.51 kVAC / 2.2 kVAC / 0.5 kVDC / 0.5 kVDC
Protection class/type	II / IP20 (per EN 60529)
Resistance to reverse feed	≤ 33 V
Overvoltage category	III (≤ 2000 m a. s.l.); II (> 2000 m a. s.l.)
Short-circuit-protected	Yes
Parallel/series operation	Yes/Yes
MTBF	$> 1.000.000$ h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... $+70$ °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Operating altitude, max.	5000 m
Derating	See type label/manual
Pollution degree	2

Connection Data	
Connection technology	Push-in CAGE CLAMP®
Input/Output/Signaling (solid/fine-stranded/AWG)	0.2 ... 4 mm ² / 0.2 ... 4 mm ² / 24 ... 12 AWG

Physical Data/Mechanical Data/Material Data	
Width x Height x Depth (mm)	25 x 100 x 90; Depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	170 g

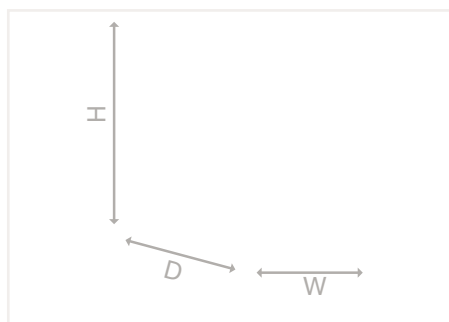
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201

Power Supply; Eco 2; 1-Phase; 24 VDC / 5 A 2687 Series



Power Supply; Eco 2; 1-phase;
Output voltage: 24 VDC; Output current: 5 A; DO; Com-
munication interface

	Item No.	Pack. Unit
	2687-2144	1



Features:

- Signal output, optical status indication
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Fast and tool-free termination via lever-actuated terminals with push-in connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	90 ... 264 VAC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 0.65 A (230 VAC; nominal load); ≤ 1.4 A (100 VAC; nominal load)
Inrush current	≤ 20 A (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 20 ms (230 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	23 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	5 A (24 VDC)
Nominal output power	120 W
Residual ripple	≤ 75 mV (peak-to-peak)
Overload behavior	Constant current up to 105 %; shutdown and automatic restart in the event of a short circuit

Signaling and Communication

Signaling	Optical status indication (Overload); Optical status indication (DC OK); Digital signal output (DO)
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Efficiency/Power Losses

Power loss P_i	≤ 3 W (no load); ≤ 12 W (nominal load)
Efficiency (typ.)	≤ 90 %

Fuse Protection

Internal fuse	T 3.15 A / 250 VAC
Recommended backup fusing	16 A (for USA/Canada: 15 A)

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-GND/sec.-GND/sec.-DO)	3.51 kVAC / 2.2 kVAC / 0.5 kVDC / 0.5 kVDC
Protection class/type	I / IP20 (per EN 60529)
Overvoltage category	III (≤ 2000 m a. s.l.); II (> 2000 m a. s.l.)
Short-circuit-protected	Yes
Parallel/series operation	Yes/Yes
MTBF	$> 1.000.000$ h (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70$ °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Operating altitude, max.	5000 m
Derating	See type label
Pollution degree	2

Connection Data

Connection technology	Push-in CAGE CLAMP®
Input/Output/Signaling (solid/fine-stranded/AWG)	0.2 ... 4 mm ² / 0.2 ... 4 mm ² / 24 ... 12 AWG

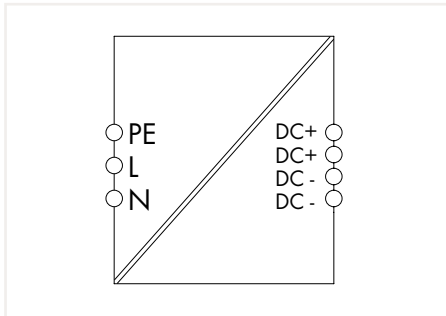
Physical Data/Mechanical Data/Material Data

Width x Height x Depth (mm)	38 x 100 x 130; Depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	650 g

Standards and Specifications

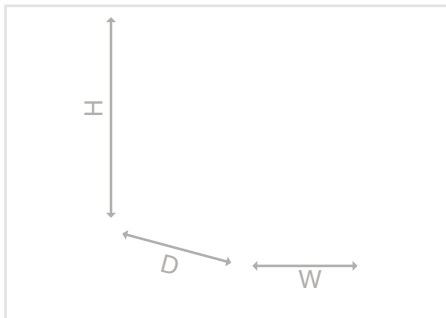
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201
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Power Supply; Compact; 1-Phase; 12 VDC / 2.5 A 787 Series



Switched-mode power supply; Compact; 1-phase; 12 VDC output voltage; 2.5 A output current; DC-OK LED

Item No.	Pack. Unit
787-1201	1



Features:

- Stepped profile, ideal for distribution boards/boxes
- Removable front panel and screw mounts for alternative installation in distribution boxes or devices
- Pluggable *picoMAX*[®] Connection Technology (tool-free)
- Electrically isolated output voltage (SELV) per EN 60335-1
- Suitable for both parallel and series operation

Input	
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC; 140 ... 340 VDC
Input voltage range	90 ... 264 VAC; 125 ... 375 VDC
Input voltage derating	-1.5 %/V (< 100 VAC)
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 0.6 A (100 VAC; 2.5 ADC)
Inrush current	≤ 30 A (NTC)
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 100 ms (230 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	12 VDC (SELV) / ≤ 1 %
Output voltage range	10 ... 14 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	2.5 A
Nominal output power	30 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.35 x $I_{o, \text{nom}}$); Shutdown and automatic restart in the event of a short circuit or permanent overload

Signaling and Communication	
Signaling	1 x LED DC OK (green)

Efficiency/Power Losses	
Power loss P_i	≤ 0.5 W (230 VAC; no load)
Power loss (max.) $P_{i, \text{max}}$	4.5 W (100 VAC / 12 VDC; 2.5 A)
Efficiency (typ.)	88 % (230 VAC; nominal load); 87.5 % (110 VAC; nominal load);

Fuse Protection	
Internal fuse	T 1 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A or higher; Tripping characteristic: B

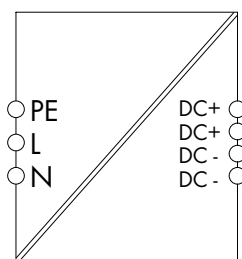
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec./pri.-GND)	4.242 kVDC / 2.12 kVDC
Protection class/type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel/series operation	Yes, for devices of the same type/Yes, for two devices of the same type
MTBF	> 3.500.000 h (at 25 °C; per IEC 61709); > 800.000 h (at 40 °C; per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	20 ... 90 % (no condensation permissible)
Derating	-0.8 %/K (> 45 °C)
Pollution degree	2

Connection Data	
Connection technology	Push-in CAGE CLAMP [®]
Input/output (solid/fine-stranded/AWG)	0.2 ... 2.5 mm ² / 0.2 ... 2.5 mm ² / 24 ... 12 AWG

Physical Data/Mechanical Data/Material Data	
Width x Height x Depth (mm)	54 x 90 x 52.5; Depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail; Screw mount (back/side)
Weight	241 g

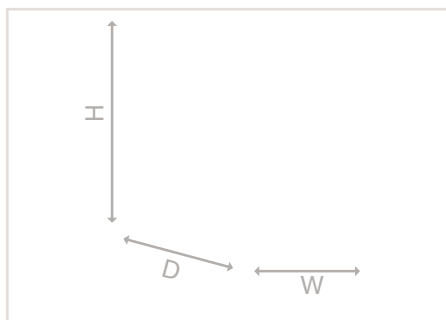
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61204-3; EN 60335-1; UL 508

Switched-Mode Power Supply; Compact; 1-Phase; 12 VDC / 5 A 787 Series



Switched-mode power supply; Compact; 1-phase; 12 VDC output voltage; 5 A output current; DC-OK LED

Item No.	Pack. Unit
787-1211	1



Features:

- Switched-mode power supply
- Stepped profile, ideal for distribution boards/boxes
- Removable front panel and screw mounts provide an ideal installation alternative in distribution boxes or devices
- Pluggable *picoMAX*® Connection Technology (tool-free)
- Electrically isolated output voltage (SELV) per EN 62368/UL 62368 and EN 60335-1; PELV per EN 60204
- Suitable for both parallel and series operation

Input	
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC; 140 ... 340 VDC
Input voltage range	85 ... 264 VAC; 125 ... 375 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 0.6 A
Input voltage derating	-2 %/V (<100 VAC); -1.33 %/V (< 140 VDC)
Inrush current	≤ 30 A (NTC)
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 600 ms (230 VAC); > 12 ms (110 VAC)

Output	
Nominal output voltage $U_{o, nom}$ /adjustment accuracy	12 VDC (SELV) / ≤ 1 %
Output voltage range	10 ... 14 VDC (adjustable)
Nominal output current $I_{o, nom}$	5 A
Nominal output power	60 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.22 ... 1.7 x $I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and Communication	
Signaling	1 x DC OK LED (green)

Efficiency/Power Losses	
Efficiency (typ.)	88.5 % (230 VAC; nominal load); 87.5 % (110 VAC, nominal load)
Power loss P_i	≤ 0.6 W (230 VAC; no load)
Power loss (max.) $P_{i, max}$	9 W (100 VAC / 12 VDC; 5 A)

Fuse Protection	
Internal fuse	T 3.15 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A or higher; Tripping characteristic: B

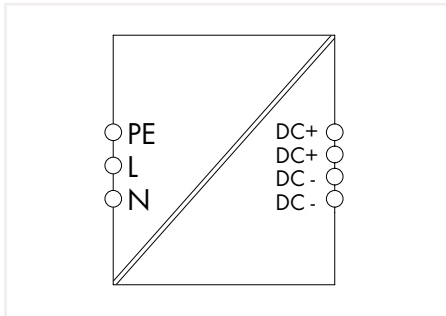
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec./pri.-GND)	4.242 kVDC / 2.2 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Parallel operation/series operation	Yes, for devices of the same type/yes, for two devices of the same type
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	20 ... 90 % (no condensation permissible)
Pollution degree	2

Connection Data	
Connection technology	Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.2 ... 2.5 mm ² / 0.2 ... 2.5 mm ² / 24 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	72 x 90 x 52.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail; Screw mount (back/side)
Weight	270 g

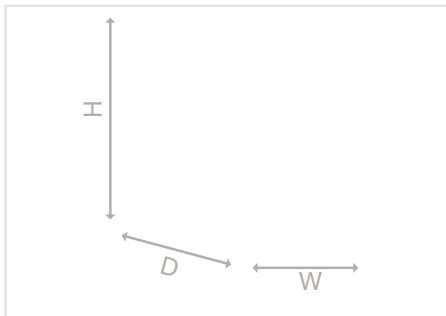
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61204-3; EN 60335-1; EN 62368-1 ; UL 60950-1; UL 508

Power Supply; Compact; 1-Phase; 12 VDC / 8 A 787 Series



Switched-mode power supply; Compact; 1-phase; 12 VDC output voltage; 8 A output current; DC-OK LED

	Item No.	Pack. Unit
	787-1221	1



Features:

- Stepped profile, ideal for distribution boards/boxes
- Pluggable *picoMAX*® Connection Technology (tool-free)
- Electrically isolated output voltage (SELV) per EN 60335-1
- Suitable for both parallel and series operation

Input

Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC; 140 ... 340 VDC
Input voltage range	90 ... 264 VAC; 125 ... 375 VDC
Input voltage derating	-2 %/V (<100 VAC); -1.33 %/V (< 140 VDC)
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 1.6 A (100 VAC; 8 ADC)
Inrush current	≤ 30 A (NTC)
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 50 ms (230 VAC)

Output

Nominal output voltage $U_{o, nom}$ /adjustment accuracy	12 VDC (SELV)
Output voltage range	10 ... 14 VDC (adjustable)
Nominal output current $I_{o, nom}$	8 A
Nominal output power	96 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.35 x $I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit or permanent overload

Signaling and Communication

Signaling	1 x LED DC OK (green)
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Efficiency/Power Losses

Power loss P_i	≤ 0.7 W (230 VAC; no load)
Power loss (max.) $P_{i, max}$	11.8 W (100 VAC / 12 VDC; 8 A)
Efficiency (typ.)	91.5 % (230 VAC; nominal load); 90 % (110 VAC; nominal load);

Fuse Protection

Internal fuse	T 3.15 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A or higher; Tripping characteristic: B

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-GND)	4.242 kVDC / 2.12 kVDC
Protection class/type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel/series operation	Yes/Yes, for 2 devices of the same type
MTBF	> 1.300.000 h (at 25 °C; per IEC 61709); > 250.000 h (at 40 °C; per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	20 ... 90 % (no condensation permissible)
Derating	-2 %/K (> 45 °C)
Pollution degree	2

Connection Data

Connection technology	Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.2 ... 2.5 mm ² / 0.2 ... 2.5 mm ² / 24 ... 12 AWG

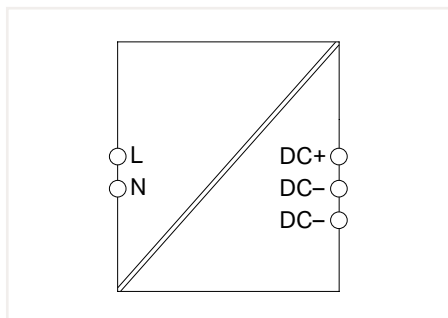
Physical Data/Mechanical Data/Material Data

Width x Height x Depth (mm)	108 x 90 x 52.5; Depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail; Screw mount (back)
Weight	423 g

Standards and Specifications

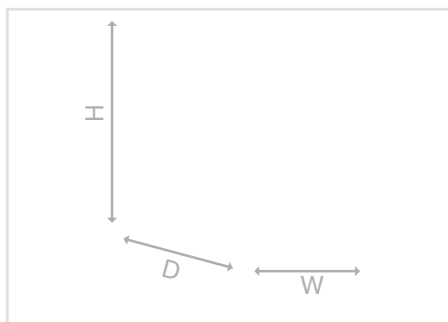
Approvals/standards/specifications	CE; EN 61204-3; EN 60335-1; UL 508
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Switched-Mode Power Supply; Compact; 1-Phase; 24 VDC / 0.5 A 787 Series



Switched-mode power supply; Compact; 1-phase; 24 VDC output voltage; 0.5 A output current; DC-OK LED

	Item No.	Pack. Unit
	787-1200	1



Features:

- Switched-mode power supply
- Stepped profile, ideal for distribution boards/boxes
- Pluggable *picoMAX*[®] Connection Technology (tool-free)
- Electrically isolated output voltage (SELV) per EN 62368/UL 62368 and EN 60335-1; PELV per EN 60204
- Series operation

Input

Nominal input voltage $U_{i,nom}$	1 x 100 ... 240 VAC
Input voltage range	90 ... 264 VAC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 0.27 A (100 VAC; 0.5 ADC)
Input voltage derating	-2 %/V (<100 VAC)
Inrush current	≤ 30 A (NTC)
Power factor	≥ 0.5
Power factor correction (PFC)	None
Mains failure hold-up time	≥ 100 ms (230 VAC)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Nominal output current $I_{o,nom}$	0.5 A
Nominal output power	12 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Shutdown and automatic restart in the event of a short circuit

Signaling and Communication

Signaling	1 x Status indication LED (green)
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Efficiency/Power Losses

Efficiency (typ.)	83 % (230 VAC; nominal load); 82 % (110 VAC; nominal load)
Power loss P_i	≤ 0.2 W (230 VAC; no load)
Power loss (max.) $P_{i,max}$	2.5 W (100 VAC / 24 VDC; 0.5 A)

Fuse Protection

Internal fuse	T 1 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A; Tripping characteristic: B

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Overvoltage category	II
Parallel operation/series operation	No/yes, for two devices of the same type
MTBF	> 700.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	20 ... 90 % (no condensation permissible)
Derating	-2.6 %/K (> +55 °C)
Pollution degree	2

Connection Data

Connection technology	Push-in CAGE CLAMP [®]
Input (solid/fine-stranded/AWG)	0.2 ... 2.5 mm ² / 0.2 ... 2.5 mm ² / 24 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.2 ... 1.5 mm ² / 0.2 ... 1.5 mm ² / 24 ... 14 AWG

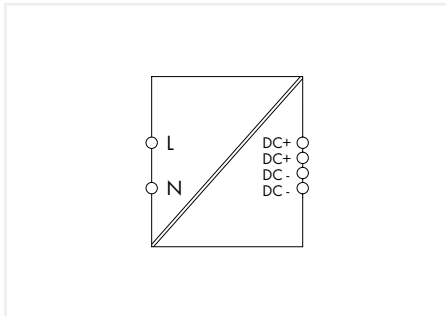
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	18 x 90 x 52.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail; Screw mount (back/side)
Weight	63 g

Standards and Specifications

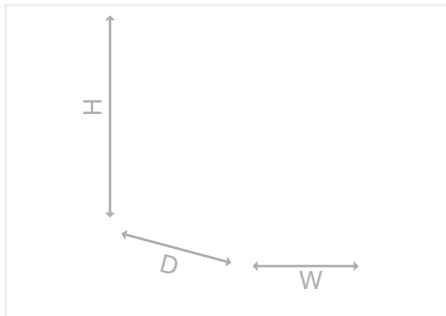
Approvals/standards/specifications	CE; EN 61204-3; EN 60335-1; EN 62368; UL 62368; UL 508
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Switched-Mode Power Supply; Compact; 1-Phase; 24 VDC / 1.3 A 787 Series



Switched-mode power supply; Compact; 1-phase; 24 VDC output voltage; 1.3 A output current; DC-OK LED

Item No.	Pack. Unit
787-1202	1



Features:

- Switched-mode power supply
- Stepped profile, ideal for distribution boards or distribution boxes
- Removable front panel and screw mounts provide an ideal installation alternative in distribution boxes or devices
- Pluggable *picoMAX*® connection technology (tool-free)
- Electrically isolated output voltage (SELV) per EN 62368-1; UL 60950-1 and EN 60335-1; PELV per EN 60204
- Suitable for both parallel and series operation

Input	
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 125 ... 375 VDC
Input voltage derating	-2 %/V (<100 VAC); -1.33 %/V (< 140 VDC)
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 0.6 A
Inrush current	≤ 20 A
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 70 ms

Output	
Nominal output voltage $U_{o, nom}$ /adjustment accuracy	24 VDC (SELV) / ± 1 %
Output voltage range	22 ... 26 VDC (adjustable)
Nominal output current $I_{o, nom}$	1.3 A
Nominal output power	31.2 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.35 x $I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit or permanent overload

Signaling and Communication	
Signaling	1 x DC OK LED (green)

Efficiency/Power Losses	
Power loss P_i	≤ 0.43 W (230 VAC; no load)
Power loss (max.) $P_{I, max}$	5.5 W (100 VAC / 24 VDC; 1.3 A)
Efficiency (typ.)	87 % (230 VAC); ≥ 82 % (110 VAC)

Fuse Protection	
Internal fuse	T 1 A / 250 VAC
Recommended backup fusing	Circuit breaker 6 A (C characteristic), 10 A (B characteristic) or higher

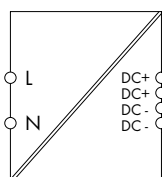
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 700.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.66 %/K (> +55 °C)
Pollution degree	2

Connection Data	
Connection technology	Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.2 ... 2.5 mm ² / 0.2 ... 2.5 mm ² / 24 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	54 x 90 x 52.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail; Screw mount (back/side)
Weight	234 g

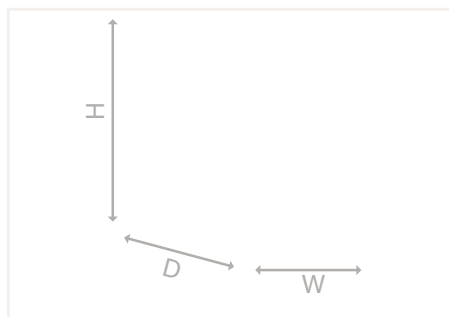
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61204-3; EN 60335-1; EN 62368-1; UL 60950; UL 508

Switched-Mode Power Supply; Compact; 1-Phase; 24 VDC / 2.5 A 787 Series



Switched-mode power supply; Compact; 1-phase; 24 VDC output voltage; 2.5 A output current; DC-OK LED

Item No.	Pack. Unit
787-1212	1



Features:

- Switched-mode power supply
- Stepped profile, ideal for distribution boards or distribution boxes
- Removable front panel and screw mounts provide an ideal installation alternative in distribution boxes or devices
- Pluggable *picoMAX*® connection technology (tool-free)
- Electrically isolated output voltage (SELV) per EN 62368-1; UL 60950-1 and EN 60335-1; PELV per EN 60204
- Suitable for both parallel and series operation

Input

Nominal input voltage $U_{i,nom}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 125 ... 375 VDC
Input voltage derating	-2 %/V (<100 VAC); -1.33 %/V (< 140 VDC)
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 1.5 A
Inrush current	≤ 20 A
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 60 ms

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	22 ... 26 VDC (adjustable)
Nominal output current $I_{o,nom}$	2.5 A; 2 A (< 110 VAC)
Nominal output power	60 W (max.)
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.35 x $I_{o,nom}$); Shutdown and automatic restart in the event of a short circuit or permanent overload

Signaling and Communication

Signaling	1 x DC OK LED (green)
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Efficiency/Power Losses

Power loss P_i	≤ 0.6 W (230 VAC; no load)
Power loss (max.) $P_{i,max}$	9 W (100 VAC / 24 VDC; 2.5 A)
Efficiency (typ.)	89 % (230 VAC); ≥ 87 % (110 VAC)

Fuse Protection

Internal fuse	T 2 A / 250 VAC
Recommended backup fusing	Circuit breaker 6 A (C characteristic), 10 A (B characteristic) or higher

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.66 %/K (> +55 °C)
Pollution degree	2

Connection Data

Connection technology	Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.2 ... 2.5 mm² / 0.2 ... 2.5 mm² / 24 ... 12 AWG

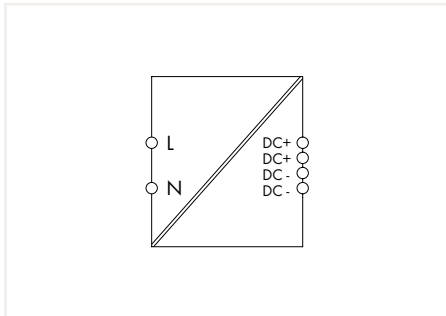
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	72 x 90 x 52.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail; Screw mount (back/side)
Weight	288 g

Standards and Specifications

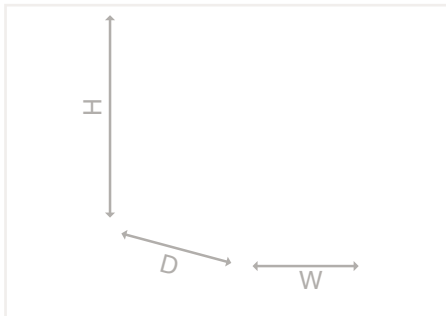
Approvals/standards/specifications	CE; EN 61204-3; EN 60335-1; EN 62368-1; UL 60950; UL 508
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Switched-Mode Power Supply; Compact; 1-Phase; 24 VDC / 4.2 A 787 Series



Switched-mode power supply; Compact; 1-phase; 24 VDC output voltage; 4.2 A output current; DC-OK LED

Item No.	Pack. Unit
787-1216	1



Features:

- Switched-mode power supply
- Stepped profile, ideal for distribution boards or distribution boxes
- Removable front panel and screw mounts provide an ideal installation alternative in distribution boxes or devices
- Pluggable *picoMAX*® connection technology (tool-free)
- Electrically isolated output voltage (SELV) per EN 62368-1; UL 60950-1 and EN 60335-1; PELV per EN 60204
- Suitable for both parallel and series operation

Input	
Nominal input voltage $U_{i,nom}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 125 ... 375 VDC
Input voltage derating	-2 %/V (<100 VAC); -1.33 %/V (< 140 VDC)
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 2.5 A
Inrush current	≤ 20 A
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 50 ms

Output	
Nominal output voltage $U_{o,nom}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	22 ... 26 VDC (adjustable)
Nominal output current $I_{o,nom}$	4.2 A; 3.3 A (< 110 VAC)
Nominal output power	100 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.35 x $I_{o,nom}$); Shutdown and automatic restart in the event of a short circuit or permanent overload

Signaling and Communication	
Signaling	1 x DC OK LED (green)

Efficiency/Power Losses	
Power loss P_l	≤ 0.7 W (230 VAC; no load)
Power loss (max.) $P_{l,max}$	15 W (100 VAC / 24 VDC; 4.2 A)
Efficiency (typ.)	90 % (230 VAC); ≥ 87 % (110 VAC)

Fuse Protection	
Internal fuse	T 3.15 A / 250 VAC
Recommended backup fusing	Circuit breaker 6 A (C characteristic), 10 A (B characteristic) or higher

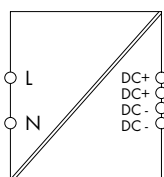
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.66 %/K (> +55 °C)
Pollution degree	2

Connection Data	
Connection technology	Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.2 ... 2.5 mm ² / 0.2 ... 2.5 mm ² / 24 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	108 x 90 x 52.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail; Screw mount (back/side)
Weight	456.9 g

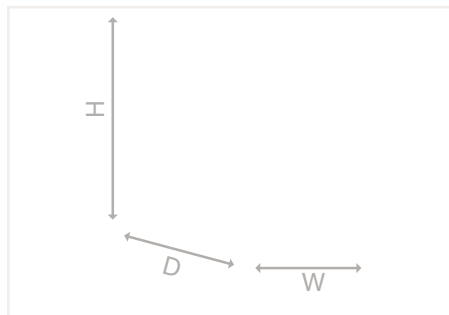
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61204-3; EN 60335-1; EN 62368-1; UL 60950; UL 508

Switched-Mode Power Supply; Compact; 1-Phase; 24 VDC / 6 A 787 Series



Switched-mode power supply; Compact; 1-phase; 24 VDC output voltage; 6 A output current; DC-OK LED

	Item No.	Pack. Unit
	787-1226	1



Features:

- Switched-mode power supply
- Stepped profile, ideal for distribution boards or distribution boxes
- Removable front panel and screw mounts provide an ideal installation alternative in distribution boxes or devices
- Pluggable *picoMAX*[®] connection technology (tool-free)
- Electrically isolated output voltage (SELV) per EN 62368-1; UL 60950-1 and EN 60335-1; PELV per EN 60204
- Suitable for both parallel and series operation

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 120 VAC; 200 ... 240 VAC
Input voltage range	90 ... 132 VAC; 180 ... 264 VAC; 250 ... 375 VDC
Input voltage derating	-2 %/V (< 100 VAC)
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 3.8 A
Inrush current	≤ 20 A
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 30 ms

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	22 ... 26 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	6 A; 4.8 A (< 110 VAC)
Nominal output power	150 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.35 x $I_{o, \text{nom}}$); Shutdown and automatic restart in the event of a short circuit or permanent overload

Signaling and Communication

Signaling	1 x DC OK LED (green)
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Efficiency/Power Losses

Power loss P_i	≤ 0.4 W (230 VAC; no load)
Power loss (max.) $P_{i, \text{max}}$	16.5 W (100 VAC / 24 VDC; 6 A)
Efficiency (typ.)	90 % (230 VAC); ≥ 89 % (110 VAC)

Fuse Protection

Internal fuse	T 3.15 A / 250 VAC
Recommended backup fusing	Circuit breaker 6 A (C characteristic), 10 A (B characteristic) or higher

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.66 %/K (> +55 °C)
Pollution degree	2

Connection Data

Connection technology	Push-in CAGE CLAMP [®]
Input/output (solid/fine-stranded/AWG)	0.2 ... 2.5 mm ² / 0.2 ... 2.5 mm ² / 24 ... 12 AWG

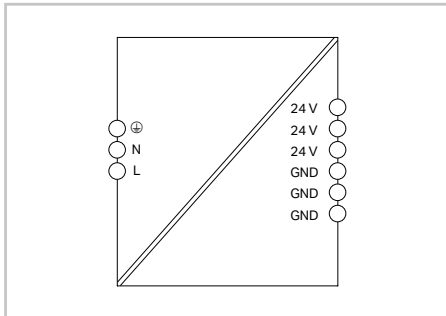
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	144 x 90 x 52.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail; Screw mount (back/side)
Weight	510 g

Standards and Specifications

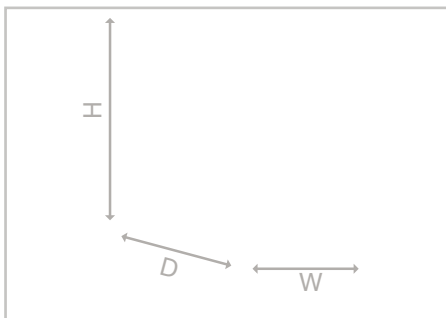
Approvals/standards/specifications	CE; EN 61204-3; EN 60335-1; EN 62368-1; UL 60950; UL 508
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Power Supply; Compact; 1-Phase; 24 VDC / 1.25 A 787 Series



Switched-mode power supply; Compact; 1-phase; 24 VDC output voltage; 1.25 A output current

Item No.	Pack. Unit
787-2850	1



Features:

- Stepped profile for installation in standard distribution boards
- Connection technology with Push-in CAGE-CLAMP®
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN/UL 61010-1 or EU/UL 61010-2-201

Input	
Nominal input voltage $U_{i, \text{nom}}$	110 ... 240 VAC
Input voltage range	100 ... 264 VAC
Nominal mains frequency range	47 ... 63 Hz
Input current I_i	≤ 0.55 A (110 VAC); ≤ 0.33 A (240 VAC)
Inrush current	≤ 24 A (NTC)
Mains failure hold-up time	≥ 95 ms (230 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / ≤ 2 %
Output voltage range	24 VDC (fixed setting)
Nominal output current $I_{o, \text{nom}}$	1.25 A (24 VDC)
Nominal output power	30 W
Residual ripple	≤ 60 mV (peak-to-peak)
Overload behavior	Hiccup

Signaling and Communication	
Signaling	1 x Status indication LED (green)

Efficiency/Power Losses	
Power loss P_i	≤ 0.5 W (230 VAC; no load); ≤ 4 W (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	5 W (110 VAC / 24 VDC; 1.35 A)
Efficiency (typ.)	88 %

Fuse Protection	
Internal fuse	T 1.25 A / 250 VAC
Recommended backup fusing	Circuit breaker: 16 A; Tripping characteristic: B or C

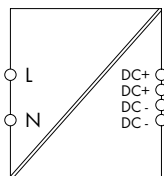
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec./pri.-GND/sec.-GND)	2.47 kVDC / 3.92 kVDC / 0.5 kVDC
Protection class/type	I / IP20 (per EN 60529)
Overvoltage category	III
Short-circuit-protected	Yes
Parallel/series operation	Yes/Yes
MTBF	$> 2.500.000$ h (per EN/IEC 61709 at +40 °C)
Surrounding air temperature (operation)	-20 ... +70 °C (in nominal mounting position); -20 ... +55 °C (in any mounting position)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-1.7 %/K ($> +55$ °C)
Pollution degree	2

Connection Data	
Connection technology	Push-in CAGE CLAMP®
Input (solid/fine-stranded/AWG)	0.25 ... 2.5 mm ² / 0.25 ... 2.5 mm ² / 20 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.2 ... 1.5 mm ² / 0.2 ... 1.5 mm ² / 24 ... 16 AWG

Physical Data/Mechanical Data/Material Data	
Width x Height x Depth (mm)	36 x 90 x 55; Depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	120 g

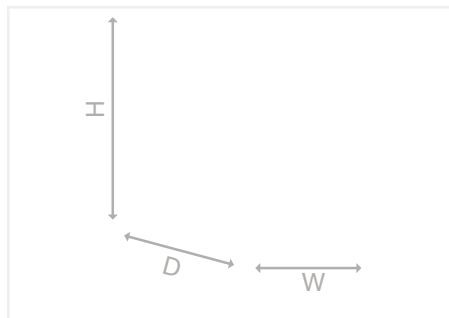
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61204-3; EN 61010-1; EN 61010-2-201; cULus 61010-1; cULus 61010-2-201; DNV GL

Switched-Mode Power Supply; Compact; 1-Phase; 5 VDC / 5.5 A 787 Series



Switched-mode power supply; Compact; 1-phase; 5 VDC output voltage; 5.5 A output current; DC OK signal

Item No.	Pack. Unit
787-1020	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards or distribution boxes
- Overhead mounting is possible with derating
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204

Input

Nominal input voltage $U_{i,nom}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.29 A (230 VAC); ≤ 0.56 A (110 VAC)
Inrush current	≤ 30 A (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 80 ms (230 VAC); > 10 ms (110 VAC)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	5 VDC (SELV) / $\leq 2\%$
Output voltage range	4.5 ... 8.5 VDC (adjustable)
Nominal output current $I_{o,nom}$	5.5 A (5 VDC); 3.5 A (in any mounting position)
Nominal output power	27.5 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x Status indication LED (green)
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Efficiency/Power Losses

Power loss P_i	≤ 2.4 W (230 VAC; no load); ≤ 9.4 W (230 VAC; nominal load)
Power loss (max.) $P_{i,max}$	9.9 W (264 VAC / 5 VDC; 5.5 A)
Efficiency (typ.)	75 %

Fuse Protection

Internal fuse	T 2 A / 250 VAC
Recommended backup fusing	Circuit breaker 6 A (C characteristic), 10 A (B characteristic) or higher

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec.)	4.2 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +60$ °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-3\%/K$ ($> +45$ °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

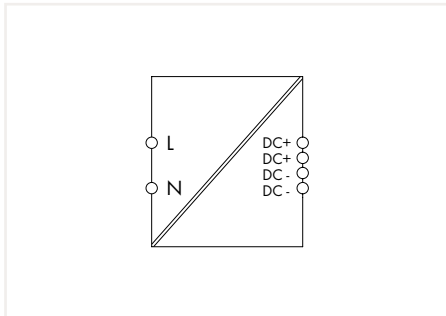
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	72 x 89 x 55; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	240 g

Standards and Specifications

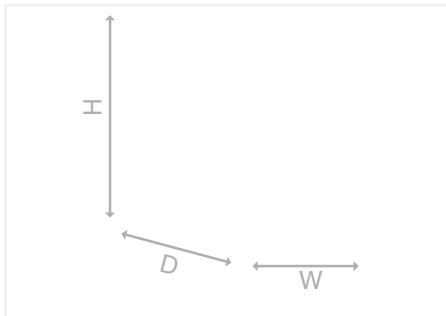
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV GL* (*pending)
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Switched-Mode Power Supply; Compact; 1-Phase; 12 VDC / 2 A 787 Series



Switched-Mode Power Supply; Compact; 1-phase;
Output voltage: 12 VDC; Output current: 2 A

	Item No.	Pack. Unit
	787-1001	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards or distribution boxes
- Overhead mounting is possible with derating
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	$I_o \leq 1.5 \text{ A}$ (< 100 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 0.4 \text{ A}$ (230 VAC); $\leq 0.6 \text{ A}$ (110 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 80 \text{ ms}$ (230 VAC); $> 10 \text{ ms}$ (110 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	12 VDC (SELV) / $\leq 2 \%$
Output voltage range	10.5 ... 18 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	2 A (12 VDC); 1.4 A (12 VDC; in any mounting position); 0.75 A (18 VDC)
Nominal output power	24 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication	
Signaling	1 x Status indication LED (green)

Efficiency/Power Losses	
Power loss P_i	$\leq 2.6 \text{ W}$ (230 VAC; no load); $\leq 6 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	6 W (100 VAC / 12 VDC; 2 A)
Efficiency (typ.)	80 %

Fuse Protection	
Internal fuse	T 2 A / 250 VAC
Recommended backup fusing	Circuit breaker 6 A (C characteristic), 10 A (B characteristic) or higher

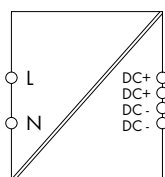
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	$> 500.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +60 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-3 \text{ } \%/ \text{K}$ ($> +45 \text{ }^\circ\text{C}$)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	54 x 89 x 55; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	180 g

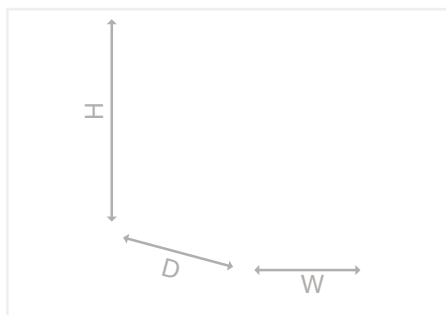
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV GL

Switched-Mode Power Supply; Compact; 1-Phase; 12 VDC / 4 A 787 Series



Switched-Mode Power Supply; Compact; 1-phase;
Output voltage: 12 VDC; Output current: 4 A

Item No.	Pack. Unit
787-1011	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards or distribution boxes
- Overhead mounting is possible with derating
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i,nom}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	$I_o \leq 3.5$ A (< 100 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.5 A (230 VAC); ≤ 0.9 A (110 VAC)
Inrush current	≤ 30 A (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 80 ms (230 VAC); > 10 ms (110 VAC)

Output	
Nominal output voltage $U_{o,nom}$ /adjustment accuracy	12 VDC (SELV) / ≤ 2 %
Output voltage range	10.5 ... 15.5 VDC (adjustable)
Nominal output current $I_{o,nom}$	4 A (12 VDC); 2.4 A (in any mounting position)
Nominal output power	48 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication	
Signaling	1 x Status indication LED (green)

Efficiency/Power Losses	
Power loss P_i	≤ 2.2 W (230 VAC; no load); ≤ 8.5 W (230 VAC; nominal load)
Power loss (max.) $P_{i,max}$	9 W (100 VAC / 12 VDC; 4 A)
Efficiency (typ.)	85 %

Fuse Protection	
Internal fuse	T 2 A / 250 VAC
Recommended backup fusing	Circuit breaker 6 A (C characteristic), 10 A (B characteristic) or higher

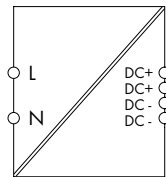
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... $+60$ °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K ($> +45$ °C)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	72 x 89 x 55; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	255 g

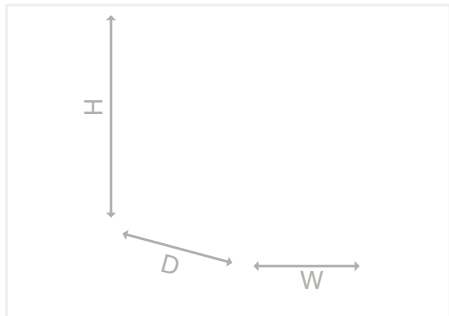
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV GL

Switched-Mode Power Supply; Compact; 1-Phase; 12 VDC / 6 A 787 Series



Switched-mode power supply; Compact; 1-phase; 12 VDC output voltage; 6.5 A output current

	Item No.	Pack. Unit
	787-1021	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards or distribution boxes
- Overhead mounting is possible with derating
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	$I_o \leq 6 \text{ A}$ (< 100 VAC); $I_o \leq 5.5 \text{ A}$ (< 90 VAC)
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 0.9 \text{ A}$ (230 VAC); $\leq 1.6 \text{ A}$ (110 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 100 \text{ ms}$ (230 VAC); $> 15 \text{ ms}$ (110 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	12 VDC (SELV) / $\leq 2 \%$
Output voltage range	10.5 ... 15.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	6 A (12 VDC); 3.9 A (12 VDC; in any mounting position)
Nominal output power	78 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x Status indication LED (green)
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Efficiency/Power Losses

Power loss P_i	$\leq 1 \text{ W}$ (230 VAC; no load); $\leq 15 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	15 W (100 VAC / 12 VDC; 6.5 A)
Efficiency (typ.)	87 %

Fuse Protection

Internal fuse	T 4 A / 250 VAC
Recommended backup fusing	Circuit breaker 6 A (C characteristic), 10 A (B characteristic) or higher

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	$> 500.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +60 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3% /K ($> +45 \text{ }^\circ\text{C}$)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

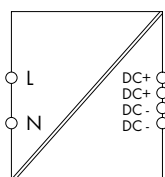
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	90 x 89 x 55; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	300 g

Standards and Specifications

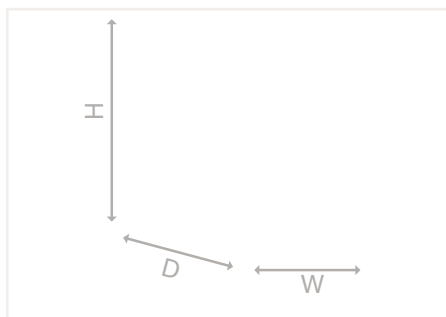
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV GL
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Switched-Mode Power Supply; Compact; 1-Phase; 18 VDC / 2.4 A 787 Series



Switched-Mode Power Supply; Compact; 1-phase;
Output voltage: 18 VDC; Output current: 2.5 A

Item No.	Pack. Unit
787-1017	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards or distribution boxes
- Overhead mounting is possible with derating
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	$I_o \leq 2 \text{ A}$ (< 100 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 0.5 \text{ A}$ (230 VAC); $\leq 0.9 \text{ A}$ (110 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 10 \text{ ms}$ (230 VAC); $> 10 \text{ ms}$ (110 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	18 VDC / $\leq 2 \%$
Output voltage range	15 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	2.4 A (18 VDC); 2 A (24 VDC; in any mounting position)
Nominal output power	43 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x Status indication LED (green)
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Efficiency/Power Losses

Power loss P_i	$\leq 2.6 \text{ W}$ (230 VAC; no load); $\leq 8.1 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	8.2 W (100 VAC / 18 VDC; 2.4 A)
Efficiency (typ.)	84 %

Fuse Protection

Internal fuse	T 2 A / 250 VAC
Recommended backup fusing	Circuit breaker 6 A (C characteristic), 10 A (B characteristic) or higher

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	$> 500.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +60 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-3 \text{ } \%/ \text{K}$ ($> +45 \text{ }^\circ\text{C}$)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

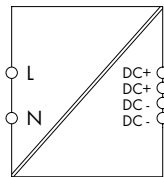
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	72 x 89 x 55; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	264 g

Standards and Specifications

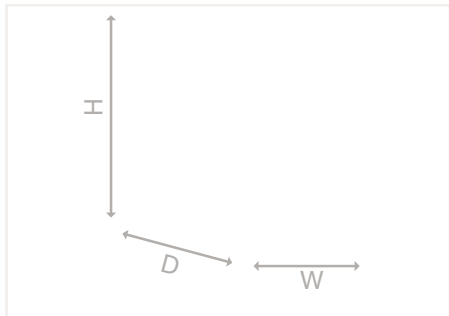
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; UL 60950-1; UL 508
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Switched-Mode Power Supply; Compact; 1-Phase; 24 VDC / 1.3 A 787 Series



Switched-Mode Power Supply; Compact; 1-phase;
Output voltage: 24 VDC; Output current: 1.3 A

	Item No.	Pack. Unit
	787-1002	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards or distribution boxes
- Overhead mounting is possible with derating
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	$I_o \leq 1 \text{ A}$ (< 100 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 0.5 \text{ A}$ (230 VAC); $\leq 0.7 \text{ A}$ (110 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 80 \text{ ms}$ (230 VAC); $> 10 \text{ ms}$ (110 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 2 \%$
Output voltage range	22.8 ... 26.4 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	1.3 A (24 VDC); 0.9 A (in any mounting position)
Nominal output power	31.2 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x Status indication LED (green)
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Efficiency/Power Losses

Power loss P_i	$\leq 2.6 \text{ W}$ (230 VAC; no load); $\leq 7 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	7.3 W (100 VAC / 24 VDC; 1.3 A)
Efficiency (typ.)	82 %

Fuse Protection

Internal fuse	T 2 A / 250 VAC
Recommended backup fusing	Circuit breaker 6 A (C characteristic), 10 A (B characteristic) or higher

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	$> 500.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +60 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-3 \text{ } \%/ \text{K}$ ($> +45 \text{ }^\circ\text{C}$)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

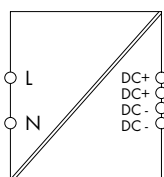
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	54 x 89 x 55; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	180 g

Standards and Specifications

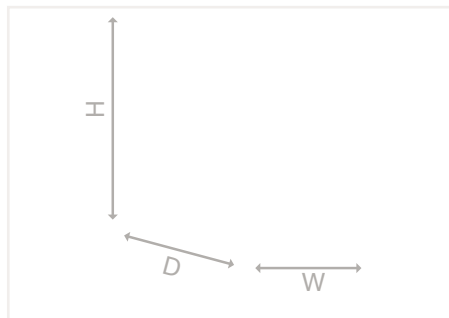
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV GL
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Switched-Mode Power Supply; Compact; 1-Phase; 24 VDC / 1.3 A 787 Series



Switched-mode power supply; Compact; 1-phase; 24 VDC output voltage; 1.3 A output current; DC OK signal

	Item No.	Pack. Unit
	787-1102	1



Features:

- Switched-mode power supply
- Stepped profile for installation in standard distribution boards
- Pluggable *picoMAX*® connection technology (tool-free)
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204
- Suitable for both parallel and series operation

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	$I_o \leq 1 \text{ A}$ (< 100 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 0.5 \text{ A}$ (230 VAC); $\leq 0.7 \text{ A}$ (110 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 80 \text{ ms}$ (230 VAC); $> 10 \text{ ms}$ (110 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 2 \%$
Output voltage range	22.8 ... 26.4 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	1.3 A (24 VDC); 0.9 A (in any mounting position)
Nominal output power	31 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x Status indication LED (green)
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Efficiency/Power Losses

Power loss P_i	$\leq 2.6 \text{ W}$ (230 VAC; no load); $\leq 7 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	7.3 W (100 VAC / 24 VDC; 1.3 A)
Efficiency (typ.)	82 %

Fuse Protection

Internal fuse	T 2 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	$> 500.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +60 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-3 \text{ } \%/ \text{K}$ ($> +45 \text{ }^\circ\text{C}$)
Pollution degree	2

Connection Data

Connection technology	Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.2 ... 2.5 mm ² / 0.2 ... 2.5 mm ² / 24 ... 12 AWG

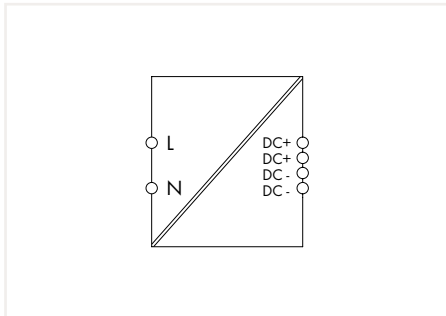
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	54 x 89 x 55; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	170 g

Standards and Specifications

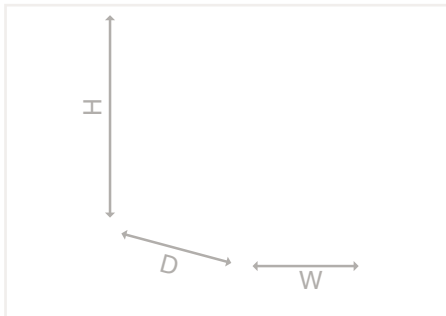
Approvals/standards/specifications	CE; EN 60950-1; EN 61204-3; UL 60950-1; UL 508; DNV GL
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Switched-Mode Power Supply; Compact; 1-Phase; 24 VDC / 2.5 A 787 Series



Switched-Mode Power Supply; Compact; 1-phase;
Output voltage: 24 VDC; Output current: 2.5 A

	Item No.	Pack. Unit
	787-1012	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards or distribution boxes
- Overhead mounting is possible with derating
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	$I_o \leq 2 \text{ A}$ (< 100 VAC); $I_o \leq 1.8 \text{ A}$ (< 90 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 0.6 \text{ A}$ (230 VAC); $\leq 1.4 \text{ A}$ (110 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 80 \text{ ms}$ (230 VAC); $> 10 \text{ ms}$ (110 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 2 \%$
Output voltage range	22.8 ... 26.4 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	2.5 A (24 VDC); 1.6 A (in any mounting position)
Nominal output power	60 W (max.)
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication	
Signaling	1 x Status indication LED (green)

Efficiency/Power Losses	
Power loss P_i	$\leq 2.2 \text{ W}$ (230 VAC; no load); $\leq 8.5 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	10.5 W (100 VAC / 24 VDC; 2.5 A)
Efficiency (typ.)	88 %

Fuse Protection	
Internal fuse	T 2 A / 250 VAC
Recommended backup fusing	Circuit breaker 6 A (C characteristic), 10 A (B characteristic) or higher

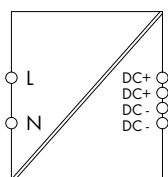
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	$> 500.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +60 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-3 \text{ } \%/ \text{K}$ ($> +45 \text{ }^\circ\text{C}$)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	72 x 89 x 55; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	255 g

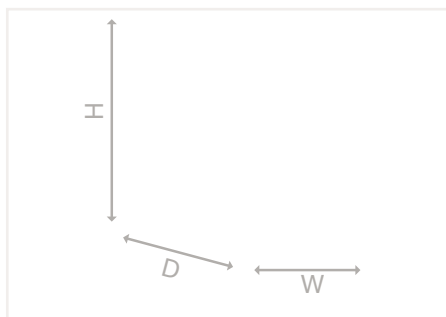
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV GL

Switched-Mode Power Supply; Compact; 1-Phase; 24 VDC / 2.5 A 787 Series



Switched-Mode Power Supply; Compact; 1-phase;
Output voltage: 24 VDC; Output current: 2.5 A

Item No.	Pack. Unit
787-1112	1



Features:

- Switched-mode power supply
- Stepped profile for installation in standard distribution boards
- Pluggable *picoMAX*[®] connection technology (tool-free)
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204
- Suitable for both parallel and series operation

Input	
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	$I_o \leq 2 \text{ A}$ (< 100 VAC); $I_o \leq 1.8 \text{ A}$ (< 90 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 0.6 \text{ A}$ (230 VAC); $\leq 1.4 \text{ A}$ (110 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 80 \text{ ms}$ (230 VAC); $> 10 \text{ ms}$ (110 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 2 \%$
Output voltage range	22.8 ... 26.4 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	2.5 A (24 VDC); 1.6 A (in any mounting position)
Nominal output power	60 W (max.)
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication	
Signaling	1 x Status indication LED (green)

Efficiency/Power Losses	
Power loss P_i	$\leq 2.2 \text{ W}$ (230 VAC; no load); $\leq 8.5 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	10.5 W (100 VAC / 24 VDC; 2.5 A)
Efficiency (typ.)	88 %

Fuse Protection	
Internal fuse	T 2 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

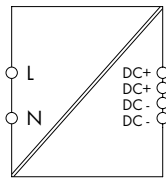
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	$> 500.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-3 \text{ } \%/ \text{K}$ ($> +45 \text{ }^\circ\text{C}$)
Pollution degree	2

Connection Data	
Connection technology	Push-in CAGE CLAMP [®]
Input/output (solid/fine-stranded/AWG)	0.2 ... 2.5 mm ² / 0.2 ... 2.5 mm ² / 24 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	72 x 89 x 55; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	240 g

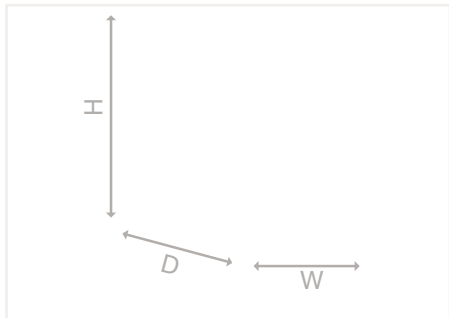
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950-1; EN 61204-3; UL 60950-1; UL 508; DNV GL

Switched-Mode Power Supply; Compact; 1-Phase; 24 VDC / 4 A 787 Series



Switched-Mode Power Supply; Compact; 1-phase;
Output voltage: 24 VDC; Output current: 4 A

	Item No.	Pack. Unit
	787-1022	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards or distribution boxes
- Overhead mounting is possible with derating
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1/ 61010-2-201/ UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	upon request
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.9 A (230 VAC); ≤ 1.6 A (110 VAC)
Inrush current	≤ 30 A (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 100 ms (230 VAC); > 15 ms (110 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / ≤ 2 %
Output voltage range	22.8 ... 26.4 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	4 A (24 VDC); 2.4 A (in any mounting position)
Nominal output power	96 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication	
Signaling	1 x Status indication LED (green)

Efficiency/Power Losses	
Power loss P_i	≤ 0.8 W (230 VAC; no load); ≤ 13.1 W (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	14.8 W (264 VAC / 24 VDC; 4 A)
Efficiency (typ.)	88 %

Fuse Protection	
Internal fuse	T 4 A / 250 VAC
Recommended backup fusing	Circuit breaker ≥ 6 A; Tripping characteristic: B or C

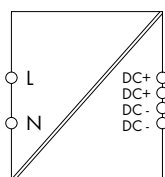
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... $+60$ °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K ($> +45$ °C)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	90 x 89 x 55; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	310 g

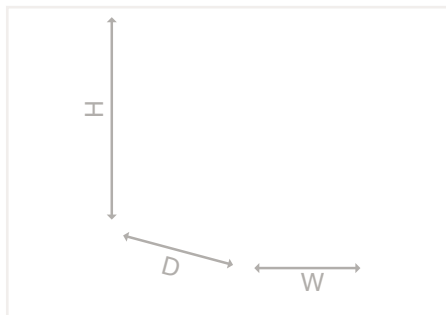
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; 61010-2-201; EN 61204-3; UL 60950-1; UL 508; DNV GL

Switched-Mode Power Supply; Compact; 1-Phase; 24 VDC / 4 A 787 Series



Switched-Mode Power Supply; Compact; 1-phase;
Output voltage: 24 VDC; Output current: 4 A

Item No.	Pack. Unit
787-1122	1



Features:

- Switched-mode power supply
- Stepped profile for installation in standard distribution boards
- Pluggable *picoMAX*[®] connection technology (tool-free)
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204
- Suitable for both parallel and series operation

Input

Nominal input voltage $U_{i, \text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 373 VDC
Input voltage derating	$I_o \leq 3.5 \text{ A}$ (< 100 VAC); $I_o \leq 3 \text{ A}$ (< 90 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	$\leq 0.9 \text{ A}$ (230 VAC); $\leq 1.6 \text{ A}$ (110 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 100 \text{ ms}$ (230 VAC); $> 15 \text{ ms}$ (110 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 2 \%$
Output voltage range	22.8 ... 26.4 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	4 A (24 VDC); 2.4 A (in any mounting position)
Nominal output power	96 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x Status indication LED (green)
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Efficiency/Power Losses

Power loss P_i	$\leq 0.8 \text{ W}$ (230 VAC; no load); $\leq 13.1 \text{ W}$ (230 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	14.8 W (264 VAC / 24 VDC; 4 A)
Efficiency (typ.)	88 %

Fuse Protection

Internal fuse	T 4 A / 250 VAC
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	$> 500.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-3 \text{ } \%/ \text{K}$ ($> +45 \text{ }^\circ\text{C}$)
Pollution degree	2

Connection Data

Connection technology	Push-in CAGE CLAMP [®]
Input/output (solid/fine-stranded/AWG)	0.2 ... 2.5 mm ² / 0.2 ... 2.5 mm ² / 24 ... 12 AWG

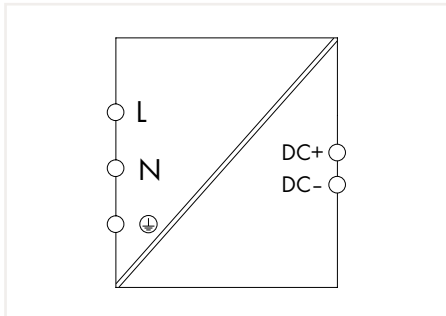
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	90 x 89 x 55; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	300 g

Standards and Specifications

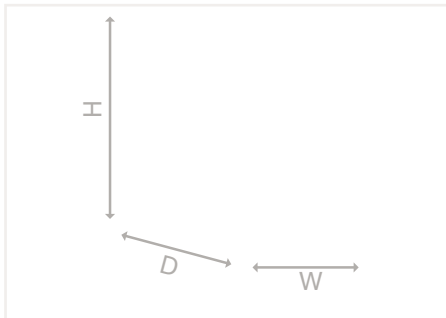
Approvals/standards/specifications	CE; EN 60950-1; EN 61204-3; UL 60950-1; UL 508; DNV GL
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Switched-Mode Power Supply; 1-Phase; IP67; 24 VDC / 4 A 787 Series



Switched-mode power supply; Compact; 1-phase; 24 VDC output voltage; 4 A output current; PowerBoost

Item No.	Pack. Unit
787-6716	1



Features:

- Switched-mode power supply with PowerBoost
- Low-profile, compact design
- Extremely robust, fully encapsulated housing (IP67)
- Active power factor correction
- High efficiency up to 92.3%
- Surrounding air temperature up to 85°C
- Suitable for both parallel and series operation

Input	
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC/DC
Input voltage range	90 ... 265 VAC/DC
Nominal mains frequency range	47 ... 63.6 Hz; 0 Hz
Input current I_i	≤ 0.5 A (250 VAC); ≤ 1.1 A (100 VAC)
Inrush current	≤ 9 A
Power factor	≥ 0.98
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 45 ms

Output	
Nominal output voltage $U_{o, nom}$	24 VDC
Output voltage range	± 2 %
Nominal output current $I_{o, nom}$	4 A
Nominal output power	96 W
Residual ripple	≤ 100 mV (peak-to-peak); ≤ 20 mV (rms)
Overload behavior	Constant current

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x Overload LED (red)

Efficiency/Power Losses	
Power loss P_i	≤ 1 W (no load); ≤ 7.9 W (nominal load)
Efficiency (typ.)	92.3 % (230 VAC)

Fuse Protection	
Internal fuse	T 6.3 A
Recommended backup fusing	Circuit breaker: 4 ... 20 A; Characteristic: C; T 20 A in building installations

Safety and Protection/Environmental Requirements	
Protection class/protection type	I / IP67
Short-circuit-protected	Yes
Parallel operation/series connection	Max. 3 devices/max. 2 devices
MTBF	> 960.000 h
Surrounding air temperature (operation)	$-40 \dots +85$ °C
Relative humidity	4 ... 100 %
Derating	-3.84 W/K ($> +60$ °C)

Connection Data	
Input	7/8"; 3-pole plug
Output	7/8"; 5-pole socket

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	111 x 141 x 54
Mounting type	Screw mount
Weight	1100 g

Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204; UL 508

Accessories for IP67 Power Power Supply Cable 787 Series

1



Features:

- 7/8" screw connection: Industry-proven connection technology for a large selection of different conductors
- High degree of protection for safe field applications
- Vibration- and shock-resistant via integrated locking mechanism
- PUR coating

Electrical Data

Operating voltage	600 VAC/VDC
Operating current	9 A

Safety and Protection/Environmental Requirements

Rated surge voltage	4 kV
Protection type	IP67
Surrounding air temperature (operation)	-25 ... +80 °C

Connection Data

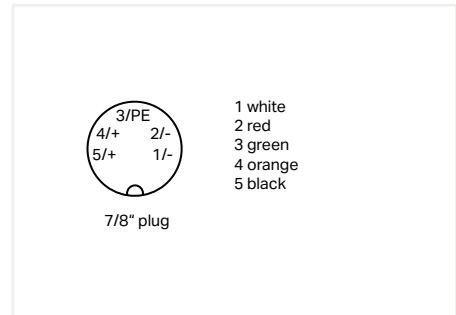
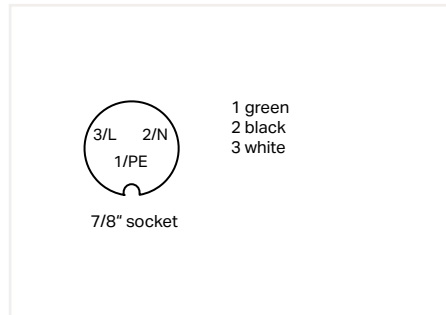
Sheathed cable diameter	7.4 mm
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Similar to picture

Power Supply Cable; pre-assembled; 7/8"; 3-pole; Straight socket; open-ended		
Length	Item No.	Pack. Unit
3 m	787-6716/9310-030	1
5 m	787-6716/9310-050	1
10 m	787-6716/9310-100	1

Power Supply Cable; pre-assembled; 7/8"; 5-pole; Straight plug; open-ended		
Length	Item No.	Pack. Unit
1.5 m	787-6716/9510-015	1
3 m	787-6716/9510-030	1
5 m	787-6716/9510-050	1



Accessories for IP67 Power Connector 787 Series



Features:

- 7/8" screw connection: Industry-proven connection technology for a large selection of different conductors
- High degree of protection for safe field applications
- Vibration- and shock-resistant via integrated locking mechanism
- PUR coating

Electrical Data	
Operating voltage	600 VAC/VDC
Operating current	9 A
Safety and Protection/Environmental Requirements	
Rated surge voltage	4 kV
Protection type	IP67
Surrounding air temperature (operation)	-25 ... +80 °C
Connection Data	
Sheathed cable diameter	7.4 mm

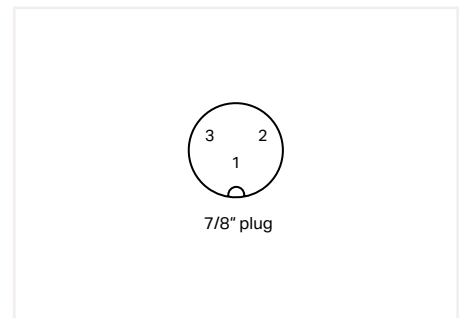
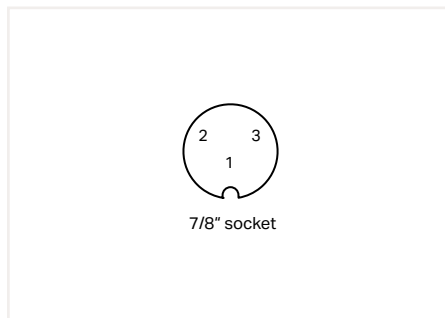
1



Similar to picture

Connector; 7/8"; 3-pole; Angled socket		
	Item No.	Pack. Unit
	787-6716/9400-000	1

Connector; 7/8"; 3-pole; Straight plug		
	Item No.	Pack. Unit
	787-6716/9100-000	1



Accessories for IP67 Power Connector 787 Series

1



Connector; 7/8"; 5-pole; Straight plug; Clamping range: 6 ... 8 mm

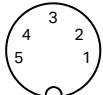
Item No.	Pack. Unit
787-6716/9500-000	1

Connector; 7/8"; 5-pole; Angled plug; Clamping range: 6 ... 8 mm

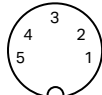
Item No.	Pack. Unit
787-6716/9600-000	1

Connector; 7/8"; 5-pole; Straight socket; Clamping range: 6 ... 8 mm

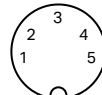
Item No.	Pack. Unit
787-6716/9700-000	1



7/8" plug



7/8" plug



7/8" socket



Connector; 7/8"; 5-pole; Angled socket; Clamping range: 6 ... 8 mm

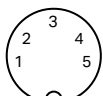
Item No.	Pack. Unit
787-6716/9800-000	1

Connector; 7/8"; 3-pole; T-connector

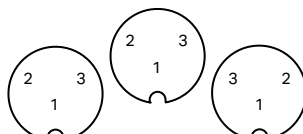
Item No.	Pack. Unit
787-6716/9000-1000	1

Connector; 7/8"; 3-pole; Straight socket

Item No.	Pack. Unit
787-6716/9300-000	1

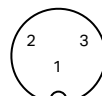


7/8" socket



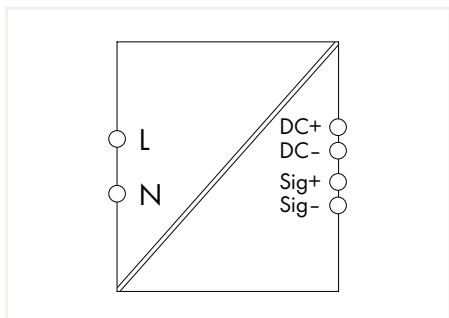
7/8" socket

7/8" plug



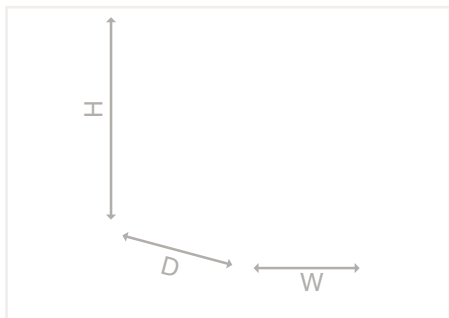
7/8" socket

Power Supply for Fan Control; 1-Phase; 22 VDC / 1 A 787 Series



Switched-Mode Power Supply; 1-phase; Output voltage: 22 VDC; Output current: 1 A

Item No.	Pack. Unit
787-914	1



Features:




- Power supply for small loads that operate at a variable input voltage
- The output voltage can be adjusted linearly by hand or via an analog voltage signal (0 ... 10 V) in the range from 12 ... 22 V, e.g., for automatically controlling fan speed in control cabinets
- Flat design allows installation in confined spaces
- Variable mounting options for space-saving installation, e.g., in recesses

Input	
Nominal input voltage $U_{i, \text{nom}}$	100 ... 240 VAC
Input voltage range	90 ... 264 VAC; 130 ... 373 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	≤ 0.6 A
Discharge current	≤ 1 mA
Inrush current	≤ 18 A
Power factor	≥ 0.45
Power factor correction (PFC)	Not required
Mains failure hold-up time	≥ 15 ms
Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	22 VDC / ≤ 1 %
Output voltage range	12 ... 22 VDC ± 2.5 % (adjustable by hand or via signal input)
Default setting	22 VDC
Nominal output current $I_{o, \text{nom}}$	0.8 A (< 110 VAC); 1 A (110 ... 240 VAC)
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.7 x $I_{o, \text{nom}}$); Hiccup in the event of a short circuit or permanent overload
Signaling and Communication	
Signaling	1 x Status indication LED (green); 1 x Signal input (10 VDC)
Operation status indicator	Green LED (U_o)
Input signal (voltage)	0 ... 10 V
Input impedance	≥ 10 k Ω
Efficiency/Power Losses	
Power loss P_i	≤ 0.8 W (no load)
Power loss (max.) $P_{i, \text{max}}$	≤ 4 W
Efficiency (typ.)	84 % (230 VAC); 80 % (110 VAC)
Fuse Protection	
Internal fuse	1 A / 250 VAC
Recommended backup fusing	Circuit breaker: B6, C4 or higher
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Reverse voltage protection	Yes (signal input)
Resistance to reverse feed	\leq DC 31 V
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Yes (signal input); ≤ 31 VDC (output; in the event of a fault)
Short-circuit-protected	Yes
Parallel operation/series connection	Yes/yes
MTBF	> 500.000 h (at $+25$ °C per IEC 61709)
Surrounding air temperature (operation)	-20 ... $+60$ °C
Surrounding air temperature (storage)	-25 ... $+75$ °C
Relative humidity	20 ... 90 % (no condensation permissible)
Derating	-2.47 %/K ($> +45$ °C)
Pollution degree	2
Climatic category	3K3 (per EN 60721; except for low air pressure)
Connection Data	
Connection technology	CAGE CLAMP®
WAGO Connector	WAGO 236 Series
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip length	5 ... 6 mm / 0.2 ... 0.24 inch
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	45 x 156 x 35; height including fastening clips
Mounting type	DIN-35 rail (EN 60715); Screw mounting
Weight	160 g
Standards and Specifications	
Approvals/standards/specifications	CE; UL 60950; EN 61204-3; EN 62368-1; EN 61000-6-3



WAGO Power Supplies; 3-Phase

WAGO Power Supplies; 3-Phase

		Page
	Pro / Pro 2 Power Supplies; Switched-Mode Power Supplies; 787 / 2787 Series	89
	Classic Switched-Mode Power Supplies; 787 Series	105
	Eco Switched-Mode Power Supplies; 787 Series	108

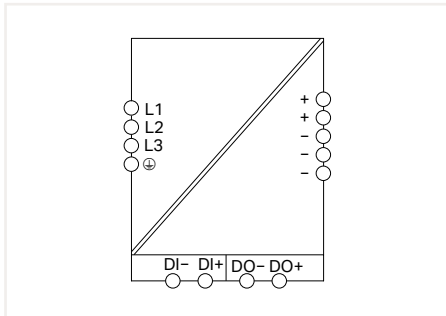
WAGO Power Supplies; 3-Phase Selection Guide

2

Nominal voltage (output)	Nominal current (output) [ADC]	Approvals							DC OK signal/contact	RS-232 interface	TopBoost ¹⁾	PowerBoost	Efficiency typ. [%]	Surrounding air temperature [°C] ⁴⁾	Item Number	Page
		EN 60335	cURus 60950	cULus 508	cULus 61010	DNVGL	ANSI/ISA 12.12.1	ATEX/IEC Ex								
24 VDC	6.25												87.0	-25 ... +70	787-738	96
	10.0												93.0	-25 ... +70	2787-2346	89
	10.0												95.0	-25 ... +70	2787-2357	92
	10.0												91.7	-25 ... +70	787-840	97
	10.0												91.7	-25 ... +70	787-850	100
	10.0												90.0	-25 ... +70	787-1640	105
	10.0												89.0	-25 ... +70	787-740	109
	20.0												94.8	-25 ... +70	2787-2347	90
	20.0												96.0	-25 ... +70	2787-2358	93
	20.0												92.9	-25 ... +70	787-842	98
	20.0												92.9	-25 ... +70	787-852	101
	20.0												92.0	-25 ... +70	787-1642	106
	20.0												90.0	-25 ... +70	787-742	110
	20.0												90.5	-20 ... +70	787-2742	111
	40.0												95.0	-25 ... +70	2787-2348	91
	40.0												93.6	-25 ... +55	787-844	99
	40.0												93.6	-25 ... +55	787-854	102
	40.0												92.0	-25 ... +70	787-1644	107
40.0												91.5	-20 ... +70	787-2744	112	
48 VDC	10.0												93.0	-25 ... +70	787-845	103
	20.0												94.4	-25 ... +70	787-847	104

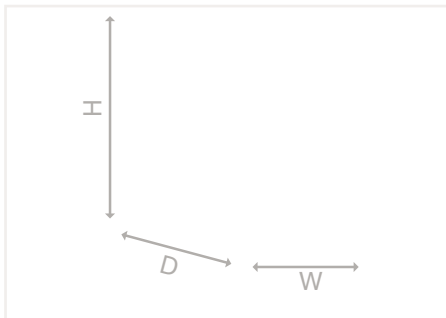
■ Yes

Power Supply; Pro 2; 3-Phase; 24 VDC / 10 A 2787 Series



Power supply; Pro 2; 3-phase; 24 VDC output voltage;
10 A output current; TopBoost + PowerBoost; commu-
nication capability

Item No.	Pack. Unit
2787-2346	1



Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot for WAGO Marker Cards (WMB) and WAGO Marking Strips

Input	
Nominal input voltage $U_{i, \text{nom}}$	(2/3) x 400 ... 500 VAC
Input voltage range	(2/3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 0.6 \text{ A}$ (400 VAC; 10 ADC)
Inrush current	$\leq 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1 \%$
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)

Signaling and Communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communication	Communication interface, can be used with WAGO USB Communication Cable (750-923) or IO-Link Communication Module (2789-9080) or Modbus RTU Communication Module (2789-9015)

Efficiency/Power Losses	
Power loss P_i	$\leq 3 \text{ W}$ (standby); $\leq 3 \text{ W}$ (no load); $\leq 18 \text{ W}$ (nominal load)
Efficiency (typ.)	93 % (400 VAC; 10 A; 25 °C)

Fuse Protection	
Internal fuse	3 x T 2.5 A / 500 VAC
Recommended backup fusing	3 x 16 A (for USA/Canada: 3 x 15 A)

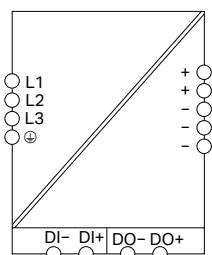
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec./pri.-GND/sec.-GND/sec.-signal)	3.51 kVAC / 2.2 kVAC / 0.5 kVDC / 0.5 kVDC
Protection class/type	I / IP20 (per EN 60529)
Oversoltage category	III ($\leq 2000 \text{ m a. s.l.}$); II ($> 2000 \text{ m a. s.l.}$)
Short-circuit-protected	Yes
Parallel/series operation	Yes/Yes
MTBF	$> 1.000.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70 \text{ °C}$ (device starts at -40 °C , type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG

Physical Data/Mechanical Data/Material Data	
Width x Height x Depth (mm)	50 x 130 x 130; Depth from upper-edge of DIN-rail; Height without connector; Height with connector: 169 mm
Mounting type	DIN-35 rail
Weight	1000 g

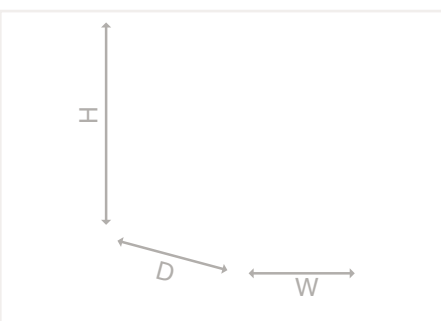
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201

Switched-Mode Power Supply; Pro 2; 3-Phase; 24 VDC / 20 A 2787 Series



Power supply; Pro 2; 3-phase; 24 VDC output voltage; 20 A output current; TopBoost + PowerBoost; communication capability

Item No.	Pack. Unit
2787-2347	1



Features:

- Power supply unit with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output; optical status indication, function buttons
- Communication interface for configuration and monitoring
- Optional connection to IO-Link
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input

Nominal input voltage $U_{i, \text{nom}}$	(2/3) x 400 ... 500 VAC
Input voltage range	(2/3) x 340 ... 550 VAC; 480 ... 780 VDC
Input voltage derating	See instruction leaflet
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 0.8 \text{ A}$ (400 VAC; 20 ADC)
Inrush current	$\leq 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1 \%$
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)

Signaling and Communication

Signaling	Optical status indication (DC-OK; load; warning and error states); digital signal input and output; (DI/DO)
Communication	Communication interface; can be used with WAGO USB communication cable (750-923) or communication module IO-Link (2789-9080)

Efficiency/Power Losses

Power loss P_i	$\leq 3.6 \text{ W}$ (stand-by); $\leq 4.4 \text{ W}$ (no load); $\leq 21 \text{ W}$ (400 VAC; nominal load)
Efficiency (typ.)	95.9 % (400 VAC; 20 A; 25 °C)

Fuse Protection

Internal fuse	3 x T 2.5 A / 500 VAC
Recommended backup fusing	3 x circuit breaker 6 A, 10 A, 16 A; tripping characteristic: B, C;

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-GND/sec.-GND/sec.-signal)	3.51 kVDC / 2.2 kVDC / 0.5 kVDC / 0.5 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	III ($\leq 2000 \text{ m a. s.l.}$); II ($> 2000 \text{ m a. s.l.}$)
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/Yes
MTBF	$> 800.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70 \text{ °C}$ (device starts at -40 °C , type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG

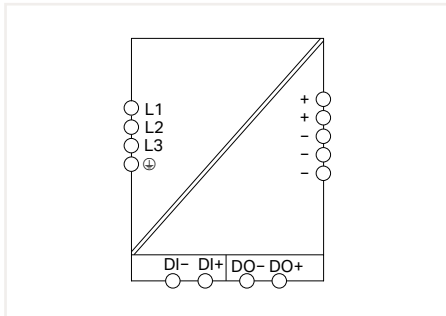
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	70 x 169 x 130; height with connector; depth from upper edge of DIN-35 rail
Mounting type	DIN-35 rail
Weight	1400 g

Standards and Specifications

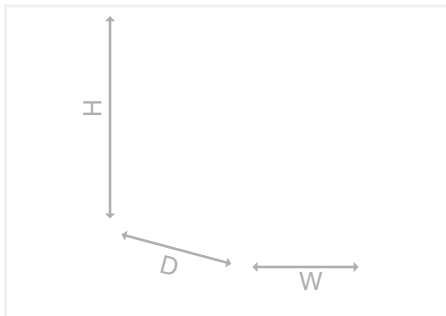
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201
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Switched-Mode Power Supply; Pro 2; 3-Phase; 24 VDC / 40 A 2787 Series



Power supply; Pro 2; 3-phase; 24 VDC output voltage; 40 A output current; TopBoost + PowerBoost; communication capability

Item No.	Pack. Unit
2787-2348	1



Features:

- Power supply unit with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output; optical status indication, function buttons
- Communication interface for configuration and monitoring
- Optional connection to IO-Link
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Nominal input voltage $U_{i, \text{nom}}$	(2/3) x 400 ... 500 VAC
Input voltage range	(2/3) x 340 ... 550 VAC; 480 ... 780 VDC
Input voltage derating	See instruction leaflet
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 1.7 \text{ A}$ (400 VAC; 40 ADC)
Inrush current	$\leq 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1 \%$
Output voltage range	24 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	40 A (24 VDC)
Nominal output power	960 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)

Signaling and Communication	
Signaling	Optical status indication (DC-OK; load; warning and error states); digital signal input and output; (DI/DO)
Communication	Communication interface, can be used with WAGO USB Communication Cable (750-923) or IO-Link Communication Module (2789-9080) or Modbus RTU Communication Module (2789-9015)

Efficiency/Power Losses	
Power loss P_i	See manual
Efficiency (typ.)	96.3 % (400 VAC; 40 A; 25 °C)

Fuse Protection	
Internal fuse	3 x T 3.2 A / 500 VAC
Recommended backup fusing	3 x 16 A (for USA/Canada: 3 x 15 A)

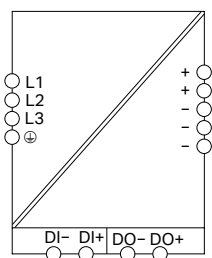
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec./pri.-GND/sec.-GND/sec.-signal)	3.51 kVDC / 2.2 kVDC / 0.5 kVDC / 0.5 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	III ($\leq 2000 \text{ m a. s.l.}$); II ($> 2000 \text{ m a. s.l.}$)
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/Yes
MTBF	$> 800.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70 \text{ °C}$ (device starts at -40 °C , type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	120 x 169 x 130; height with connector; depth from upper edge of DIN-35 rail
Mounting type	DIN-35 rail
Weight	2000 g

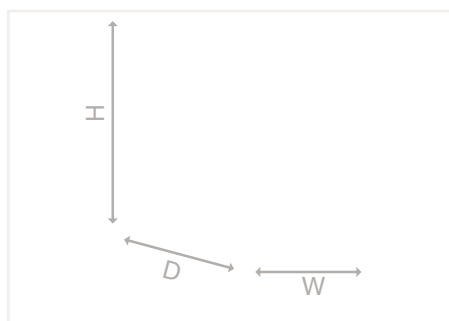
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201

Power Supply; Pro 2; 3-Phase; 48 VDC / 10 A 2787 Series



Power supply; Pro 2; 3-phase; 48 VDC output voltage; 10 A output current; TopBoost + PowerBoost; communication capability

Item No.	Pack. Unit
2787-2357	1



Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input

Nominal input voltage $U_{i,nom}$	(2/3) x 400 ... 500 VAC
Input voltage range	(2/3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 0.8 \text{ A}$ (400 VAC; 10 ADC)
Inrush current	$\leq 3 \times 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	48 VDC (SELV) / $\leq 1 \%$
Output voltage range	48 ... 56 VDC (adjustable)
Nominal output current $I_{o,nom}$	10 A (48 VDC)
Nominal output power	480 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)

Signaling and Communication

Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communication	Communication interface, can be used with WAGO USB Communication Cable (750-923) or IO-Link Communication Module (2789-9080) or Modbus RTU Communication Module (2789-9015)

Efficiency/Power Losses

Power loss P_i	$\leq 3.6 \text{ W}$ (standby); $\leq 4.4 \text{ W}$ (no load); $\leq 21 \text{ W}$ (nominal load)
Efficiency (typ.)	95 %

Fuse Protection

Internal fuse	2 x T 3.15 A / 500 VAC
Recommended backup fusing	3 x 16 A (for USA/Canada: 3 x 15 A)

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-GND/sec.-GND/sec.-signal)	3.51 kVAC / 2.2 kVAC / 0.5 kVDC / 0.5 kVDC
Protection class/type	I / IP20 (per EN 60529)
Overvoltage category	III ($\leq 2000 \text{ m a. s.I.}$); II ($> 2000 \text{ m a. s.I.}$)
Short-circuit-protected	Yes
Parallel/series operation	Yes/Yes
MTBF	$> 900.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG

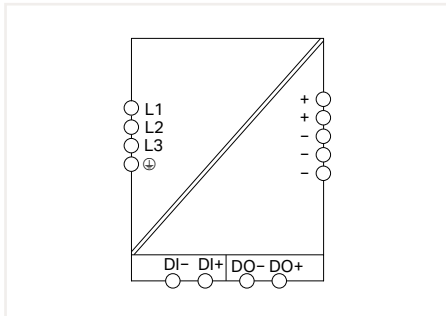
Physical Data/Mechanical Data/Material Data

Width x Height x Depth (mm)	70 x 130 x 130; Depth from upper-edge of DIN-rail; Height without connector; Height with connector: 169 mm
Mounting type	DIN-35 rail
Weight	1400 g

Standards and Specifications

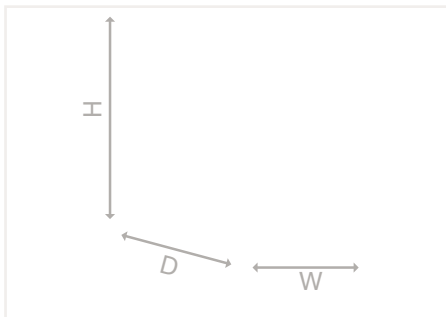
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201
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Power Supply; Pro 2; 3-Phase; 48 VDC / 20 A 2787 Series



Power supply; Pro 2; 3-phase; 48 VDC output voltage; 20 A output current; TopBoost + PowerBoost; communication capability

Item No.	Pack. Unit
2787-2358	1



Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Input	
Nominal input voltage $U_{i, \text{nom}}$	(2/3) x 400 ... 500 VAC
Input voltage range	(2/3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 1.6 \text{ A}$ (400 VAC; 20 ADC)
Inrush current	$\leq 3 \times 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	48 VDC (SELV) / $\leq 1 \%$
Output voltage range	48 ... 56 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	20 A (48 VDC)
Nominal output power	960 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)

Signaling and Communication	
Signaling	Optical status indication (DC OK; load; warning and error states); Digital signal input and output (DI/DO)
Communication	Communication interface, can be used with WAGO USB Communication Cable (750-923) or IO-Link Communication Module (2789-9080) or Modbus RTU Communication Module (2789-9015)

Efficiency/Power Losses	
Power loss P_i	$\leq 1.4 \text{ W}$ (standby); $\leq 2.4 \text{ W}$ (no load); $\leq 40 \text{ W}$ (nominal load)
Efficiency (typ.)	96 %

Fuse Protection	
Internal fuse	2 x T 5 A / 500 VAC
Recommended backup fusing	3 x 16 A (for USA/Canada: 3 x 15 A)

Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec./pri.-GND/sec.-GND/sec.-signal)	3.51 kVAC / 2.2 kVAC / 0.5 kVDC / 0.5 kVDC
Protection class/type	I / IP20 (per EN 60529)
Oversvoltage category	III ($\leq 2000 \text{ m a. s.I.}$); II ($> 2000 \text{ m a. s.I.}$)
Short-circuit-protected	Yes
Parallel/series operation	Yes/Yes
MTBF	$> 800.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	See instruction leaflet
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®/Push-in CAGE CLAMP®
Input/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG

Physical Data/Mechanical Data/Material Data	
Width x Height x Depth (mm)	120 x 130 x 130; Depth from upper-edge of DIN-rail; Height without connector; Height with connector: 169 mm
Mounting type	DIN-35 rail
Weight	2000 g

Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201

Accessories for Pro 2 Power Supplies

Modbus® Communication Module



Communication module; MODBUS TCP/UDP; RJ45; communication capability

Item No.	Pack. Unit
2789-9052	1

Features:

- This communication module snaps onto a Pro 2 Power Supply's communication interface.
- Modbus TCP/UDP
- Suitable for monitoring the subordinate power supply
- Function blocks for standard control systems available upon request
- Integrated ETHERNET switch for convenient wiring
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Signaling and Communication

Signaling	LED red (ERR); LED green (COM OK); ETHERNET ports: LED green (LNK/ACTx); LED orange (SPEEDx)
Communication	Modbus (TCP, UDP)
ETHERNET protocols	HTTP(S); BootP; DHCP; SNTP
Configuration options	Web-Based Management
Visualization	Web Visu
Transmission rate	ETHERNET: 10/100 Mbit/s

Safety and Protection

Isolation	Functional insulation 500 V
Protection class	III
Protection type	IP20 (per EN 60529)

Environmental Conditions

Surrounding air temperature (operation)	-25 ... +55 °C
Relative humidity	5 ... 96 % (no condensation permissible)

Connection Data

Connection technology	Modbus TCP/UDP: 2 x RJ-45
Transmission medium	ETHERNET: twisted pair, S/UTP; 100 Ω; cat. 5
Cable length	≤ 100 m

Physical Data

Width	35 mm
Height	80 mm
Depth	22 mm

Mechanical Data

Mounting type	Snaps onto a Pro 2 Power Supply's communication interface (X4)
Weight	45 g

Standards and Specifications

Conformity marking	CE
Standards/specifications	EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201

Accessories for Pro 2 Power Supplies

Modbus RTU Communication Module

2789 Series



Communication module; Modbus RTU; RJ45; communication capability

Item No.	Pack. Unit
2789-9015	1

Features:

- Communication module snaps onto Pro 2 Power Supplies' communication interface
- Modbus RTU (RS-485)
- Suitable for monitoring the subordinate power supply
- Function blocks for standard control systems available upon request
- Pluggable connection technology
- Marker slot for WAGO Marker Cards (WMB) and WAGO Marking Strips
- Requires RJ-45 terminating resistor (120 Ω) for long cables (2789-9915)



Input	
Nominal input voltage $U_{i, \text{nom}}$	5 VDC (SELV)
Input voltage range	4.5 ... 5.5 VDC (SELV)
Input current I_i	≤ 40 mA
Signaling and Communication	
Signaling	1 green LED (PWR); 1 yellow LED (Rx/D); 1 yellow LED (Tx/D)
Communication	Modbus RTU via RS-485
Baud rate	4.8 ... 115.2 kBd
Number of devices (max.)	247
Safety and Protection/Environmental Requirements	
Test voltage (input/output)	2 kVAC; 50 Hz; 1 min
Test voltage (input/output/shield)	1 kVAC; 50 Hz; 1 min
Overtoltage category	III
Pollution degree	2
Protection class	III
Insulation type	Functional insulation
Protection class	IP20
Surrounding air temperature (operation)	-25 ... +70 °C
Surrounding air temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 95 % (non-condensing)
Operating altitude (max.)	5000 m
Connection Data	
Connection technology	2 x RJ-45
Transmission medium	Shielded copper cable
Physical Data/Mechanical Data/Material Data	
Width x Height x Depth (mm)	35 x 80 x 22
Mounting type	Snaps onto a Pro 2 Power Supply's communication interface (X4)
Weight	35 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201

Accessories for Pro 2 Power Supplies

Communication module IO-Link



Communication module; IO-Link; communication capability

Item No.	Pack. Unit
2789-9080	1

Features:

- Communication module to snap onto communication interface of Pro 2 power supply
- IO-Link device; supports IO-Link specification 1.1
- Suitable for configuring and monitoring the subordinate power supply
- Function block for current control systems available on request
- Pluggable connection technology
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips



Operating Data

Supply voltage	DC 24 V (SELV; via IO-Link Master)
Current consumption	≤ 15 mA

Signaling and Communication

Signaling	LED red (ERR); LED green (COM)
Communication	IO-Link
IO-Link version	1.1
Baud rate	230.4 kbit/s (COM 3)
Data width	5 bytes
Data update rate	25 ms

Safety and Protection/Environmental Requirements

Isolation	0.63 kVDC
Protection class	IP20 (per EN 60529)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)

Connection Data

Connection technology	CAGE CLAMP®
Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Cable length	≤ 20 m

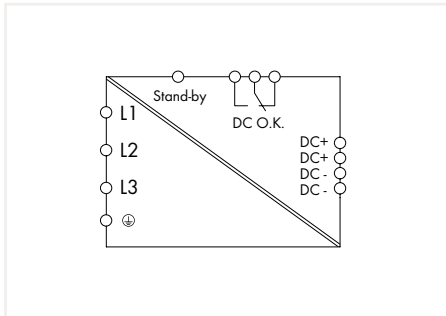
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	35 x 95 x 22; height including connector; depth in mounted position
Mounting type	Snap onto communication interface (X4) of Pro 2 power supply
Weight	35 g

Standards and Specifications

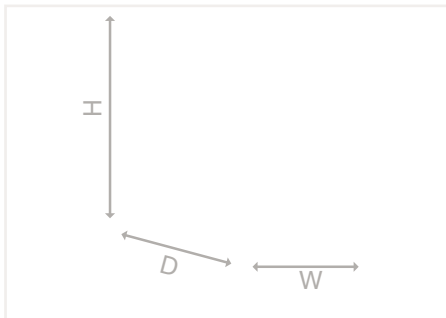
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201
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Switched-Mode Power Supply; Pro; 3-Phase; 24 VDC / 10 A 787 Series



Switched-mode power supply; Pro; 3-phase; 24 VDC output voltage; 10 A output current; TopBoost + PowerBoost; DC OK contact

Item No.	Pack. Unit
787-840	1



Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i, \text{nom}}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 0.6 \text{ A}$ (340 VAC; 10 ADC)
Inrush current	$\leq 30 \text{ A}$
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 22 \text{ ms}$ (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1 \%$
Output voltage range	22.8 ... 28.8 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Constant current mode

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)

Efficiency/Power Losses	
Power loss P_i	$\leq 7.8 \text{ W}$ (no load); $\leq 19.9 \text{ W}$ (nominal load)
Efficiency (typ.)	91.7 %

Fuse Protection	
Internal fuse	3 x T 2.5 A / 440 VAC
Recommended backup fusing	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C; Alternative: motor circuit breaker; Setpoint: 1.6 A; Setting range: 1.6 ... 2.5 A

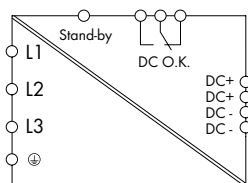
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec./pri.-GND/sec.-GND)	4.242 kVDC / 2.2 kVDC / 0.7 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	$> 500.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-3 \%/K$ ($> +50 \text{ }^\circ\text{C}$)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
LED indication (solid/fine-stranded/AWG)	0.08 ... 0.5 mm ² / 0.08 ... 0.5 mm ² / 28 ... 20 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	57 x 163 x 179; height including connector; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1000 g

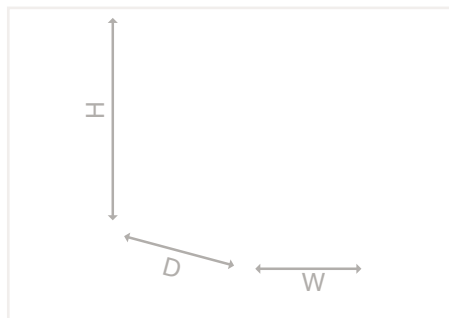
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Switched-Mode Power Supply; Pro; 3-Phase; 24 VDC / 20 A 787 Series



Switched-mode power supply; Pro; 3-phase; 24 VDC output voltage; 10 A output current; TopBoost + PowerBoost; DC OK contact

Item No.	Pack. Unit
787-842	1



Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

Input

Nominal input voltage $U_{i, \text{nom}}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 1.1 \text{ A}$ (340 VAC; 20 ADC)
Inrush current	$\leq 30 \text{ A}$
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 13 \text{ ms}$ (3 x 400 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1 \%$
Output voltage range	22.8 ... 28.8 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Constant current mode

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)
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Efficiency/Power Losses

Power loss P_i	$\leq 8.3 \text{ W}$ (no load); $\leq 34.1 \text{ W}$ (nominal load)
Efficiency (typ.)	92.9 %

Fuse Protection

Internal fuse	3 x T 2.5 A / 440 VAC
Recommended backup fusing	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C; Alternative: motor circuit breaker; Setpoint: 2.5 A; Setting range: 2.5 ... 4 A

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-GND/sec.-GND)	4.242 kVDC / 2.2 kVDC / 0.7 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> +50 °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
LED indication (solid/fine-stranded/AWG)	0.08 ... 0.5 mm ² / 0.08 ... 0.5 mm ² / 28 ... 20 AWG

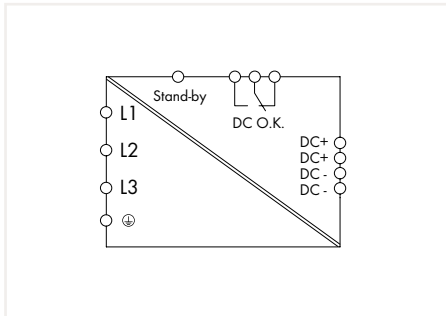
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	77 x 171 x 179; height including connector; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1300 g

Standards and Specifications

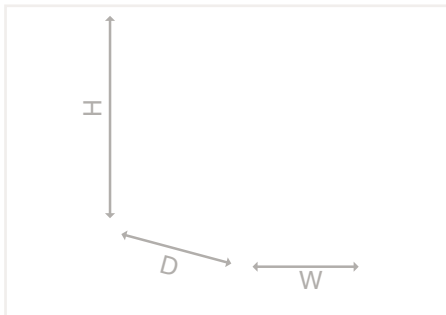
Approvals/standards/specifications	CE; EN 60950; EN 61204-3; EN 61558-2-16; UL 60950; UL 508
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Switched-Mode Power Supply; Pro; 3-Phase; 24 VDC / 40 A 787 Series



Switched-mode power supply; Pro; 3-phase; 24 VDC output voltage; 40 A output current; TopBoost + PowerBoost; DC OK contact

	Item No.	Pack. Unit
	787-844	1
with lateral DIN-rail support	787-844/000-002	



Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i, \text{nom}}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 2 \text{ A}$ (340 VAC; 40 ADC)
Inrush current	$\leq 30 \text{ A}$
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 15 \text{ ms}$ (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1 \%$
Output voltage range	22.8 ... 28.8 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	40 A (24 VDC)
Nominal output power	960 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Constant current mode

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)

Efficiency/Power Losses	
Power loss P_i	$\leq 7 \text{ W}$ (no load); $\leq 61.5 \text{ W}$ (nominal load)
Efficiency (typ.)	93.6 %

Fuse Protection	
Internal fuse	3 x T 3.2 A / 440 VAC
Recommended backup fusing	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C; Alternative: motor circuit breaker; Setpoint: 3.2 A; Setting range: 2.5 ... 4 A

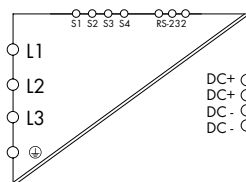
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec./pri.-GND/sec.-GND)	4.242 kVDC / 2.2 kVDC / 0.7 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +55 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K (> +45 °C)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
LED indication (solid/fine-stranded/AWG)	0.08 ... 0.5 mm ² / 0.08 ... 0.5 mm ² / 28 ... 20 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	128 x 171 x 205; height including connector; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	2500 g

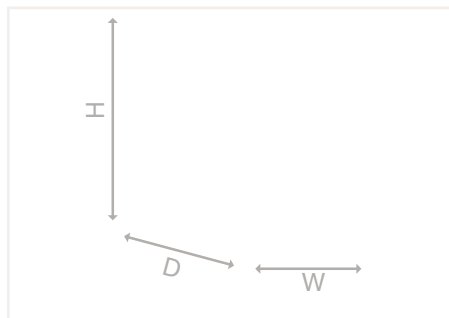
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Switched-Mode Power Supply; Pro; 3-Phase; 24 VDC / 10 A 787 Series



Switched-mode power supply; Pro; 3-phase; 24 VDC output voltage; 10 A output current; TopBoost + PowerBoost; LineMonitor; DC OK signal

Item No.	Pack. Unit
787-850	1



Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204
- LineMonitor for parameter setting and monitoring
- RS-232 interface
- Four signal outputs

Input

Nominal input voltage $U_{i,nom}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 0.6$ A (340 VAC; 10 ADC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive (adjustable via software/display)
Mains failure hold-up time	≥ 22 ms (3 x 400 VAC)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	22.8 ... 28.8 VDC (adjustable)
Nominal output current $I_{o,nom}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	≤ 70 mV (peak-to-peak)
Overload behavior	Adjustable (constant current/fuse mode)

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x Warning LED (yellow); 1 x Error LED (red); LCD; 4 x Signal output (24 VDC; max. 25 mA); 1 x RS-232 interface
Communication	RS-232 interface

Efficiency/Power Losses

Power loss P_i	≤ 7.8 W (no load); ≤ 19.9 W (nominal load)
Efficiency (typ.)	91.7 %

Fuse Protection

Internal fuse	3 x T 2.5 A / 440 VAC
Recommended backup fusing	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C; Alternative: motor circuit breaker; Setpoint: 1.6 A; Setting range: 1.6 ... 2.5 A

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-GND/sec.-GND)	4.242 kVDC / 2.2 kVDC / 0.7 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> +50 °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
LED indication (solid/fine-stranded/AWG)	0.08 ... 0.5 mm ² / 0.08 ... 0.5 mm ² / 28 ... 20 AWG

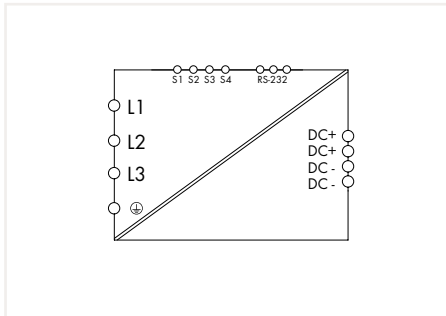
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	57 x 163 x 179; height including connector; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1000 g

Standards and Specifications

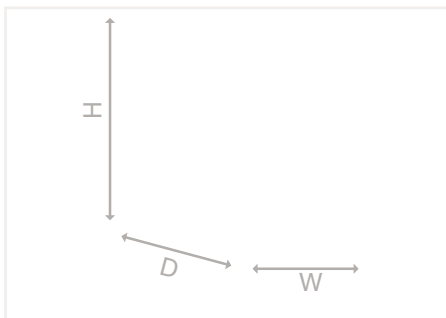
Approvals/standards/specifications	CE; EN 60950; EN 61204-3; EN 61558-2-16; UL 60950; UL 508
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Switched-Mode Power Supply; Pro; 3-Phase; 24 VDC / 20 A 787 Series



Primär getaktete Stromversorgung; Pro; 3-phasig;
Ausgangsspannung DC 24 V; Ausgangsstrom 20 A;
TopBoost + PowerBoost; LineMonitor; DC-OK-Signal

Item No.	Pack. Unit
787-852	1

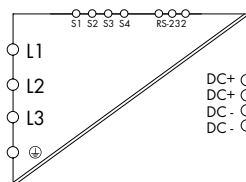


Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204
- LineMonitor for parameter setting and monitoring
- RS-232 interface
- Four signal outputs

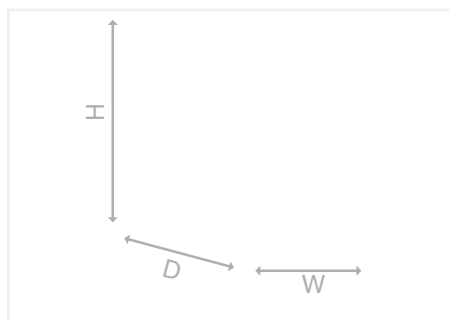
Input	
Nominal input voltage $U_{i, \text{nom}}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 1.1 \text{ A}$ (340 VAC; 20 ADC)
Inrush current	$\leq 30 \text{ A}$
Power factor correction (PFC)	Passive (adjustable via software/display)
Mains failure hold-up time	$\geq 13 \text{ ms}$ (3 x 400 VAC)
Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1 \%$
Output voltage range	22.8 ... 28.8 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Overload behavior	Adjustable (constant current/fuse mode)
Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x Warning LED (yellow); 1 x Error LED (red); LCD; 4 x Signal output (24 VDC; max. 25 mA); 1 x RS-232 interface
Communication	RS-232 interface
Efficiency/Power Losses	
Power loss P_i	$\leq 8.3 \text{ W}$ (no load); $\leq 34.1 \text{ W}$ (nominal load)
Efficiency (typ.)	92.9 %
Fuse Protection	
Internal fuse	3 x T 2.5 A / 440 VAC
Recommended backup fusing	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C; Alternative: motor circuit breaker; Setpoint: 2.5 A; Setting range: 2.5 ... 4 A
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec./pri.-GND/sec.-GND)	4.242 kVDC / 2.2 kVDC / 0.7 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> +50 °C)
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
LED indication (solid/fine-stranded/AWG)	0.08 ... 0.5 mm ² / 0.08 ... 0.5 mm ² / 28 ... 20 AWG
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	77 x 171 x 179; height including connector; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1300 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Switched-Mode Power Supply; Pro; 3-Phase; 24 VDC / 40 A 787 Series



Switched-mode power supply; Pro; 3-phase; 24 VDC output voltage; 40 A output current; TopBoost + PowerBoost; LineMonitor; DC OK signal

Item No.	Pack. Unit
787-854	1



Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204
- LineMonitor for parameter setting and monitoring
- RS-232 interface
- Four signal outputs

Input

Nominal input voltage $U_{i, \text{nom}}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 2 \text{ A}$ (340 VAC)
Inrush current	$\leq 30 \text{ A}$
Power factor correction (PFC)	Passive (adjustable via software/display)
Mains failure hold-up time	$\geq 15 \text{ ms}$ (3 x 400 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1 \%$
Output voltage range	22.8 ... 28.8 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	40 A (24 VDC)
Nominal output power	960 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Overload behavior	Adjustable (constant current/fuse mode)

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x Warning LED (yellow); 1 x Error LED (red); LCD; 4 x Signal output (24 VDC; max. 25 mA); 1 x RS-232 interface
Communication	RS-232 interface

Efficiency/Power Losses

Power loss P_i	$\leq 7 \text{ W}$ (no load); $\leq 61.5 \text{ W}$ (nominal load)
Efficiency (typ.)	93.6 %

Fuse Protection

Internal fuse	3 x T 3.2 A / 440 VAC
Recommended backup fusing	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C; Alternative: motor circuit breaker; Setpoint: 3.2 A; Setting range: 2.5 ... 4 A

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-GND/sec.-GND)	4.242 kVDC / 2.2 kVDC / 0.7 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +55 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K (> +45 °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
LED indication (solid/fine-stranded/AWG)	0.08 ... 0.5 mm ² / 0.08 ... 0.5 mm ² / 28 ... 20 AWG

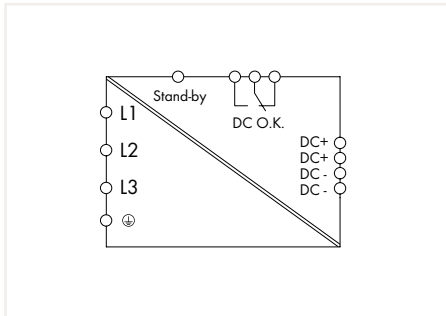
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	128 x 171 x 205; height including connector; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	2300 g

Standards and Specifications

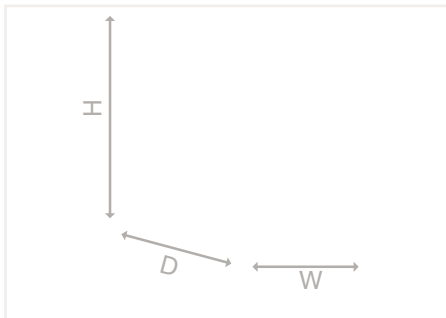
Approvals/standards/specifications	CE; EN 60950; EN 61204-3; EN 61558-2-16; UL 60950; UL 508
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Switched-Mode Power Supply; Pro; 3-Phase; 48 VDC / 10 A 787 Series



Switched-Mode Power Supply; Pro; 3-phase; Output voltage: 48 VDC; Output current: 10 A; TopBoost + PowerBoost; DC OK contact

Item No.	Pack. Unit
787-845	1



Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i, \text{nom}}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 1.1 \text{ A}$ (340 VAC; 10 ADC)
Inrush current	$\leq 30 \text{ A}$ (peak)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 12 \text{ ms}$ (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	48 VDC (SELV) / $\leq 1 \%$
Output voltage range	39 ... 53 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	10 A (48 VDC)
Nominal output power	480 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Constant current mode

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)

Efficiency/Power Losses	
Power loss P_i	$\leq 0.8 \text{ W}$ (stand-by); $\leq 8.2 \text{ W}$ (no load); $\leq 38 \text{ W}$ (nominal load)
Efficiency (typ.)	93 %

Fuse Protection	
Internal fuse	3 x T 2.5 A / 440 VAC
Recommended backup fusing	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C; Alternative: motor circuit breaker; Setpoint: 2.5 A; Setting range: 2.5 ... 4 A

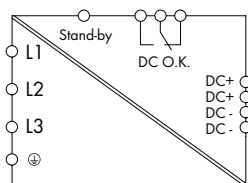
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec./pri.-GND/sec.-GND)	4.242 kVDC / 2.2 kVDC / 0.7 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	$> 500.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3% /K ($> +50 \text{ }^\circ\text{C}$)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
LED indication (solid/fine-stranded/AWG)	0.08 ... 0.5 mm ² / 0.08 ... 0.5 mm ² / 28 ... 20 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	77 x 171 x 179; height including connector; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1883.3 g

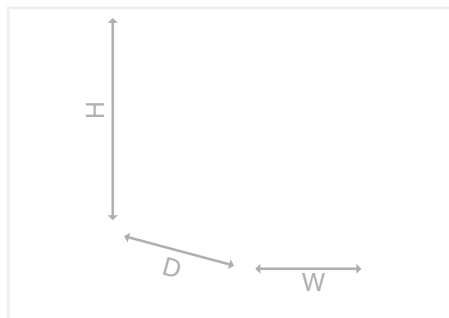
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61204-3; EN 61558-2-16; UL 60950; UL 508

Switched-Mode Power Supply; Pro; 3-Phase; 48 VDC / 20 A 787 Series



Switched-Mode Power Supply; Pro; 3-phase; Output voltage: 48 VDC; Output current: 20 A; TopBoost + PowerBoost; DC OK contact

Item No.	Pack. Unit
787-847	1



Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

Input

Nominal input voltage $U_{i, \text{nom}}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 340 ... 550 VAC; 480 ... 780 VDC
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 2 \text{ A}$ (340 VAC; 20 ADC)
Inrush current	$\leq 30 \text{ A}$ (peak)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 15 \text{ ms}$ (3 x 400 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	48 VDC (SELV) / $\leq 1 \%$
Output voltage range	39 ... 53 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	20 A (48 VDC)
Nominal output power	960 W
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Overload behavior	TopBoost/PowerBoost/Constant current mode

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x Error LED (red); 1 x Stand-by input; 1 x DC OK relay contact (changeover contact)
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Efficiency/Power Losses

Power loss P_i	$\leq 0.8 \text{ W}$ (stand-by); $\leq 5.2 \text{ W}$ (no load); $\leq 59.2 \text{ W}$ (nominal load)
Efficiency (typ.)	94.4 %

Fuse Protection

Internal fuse	3 x T 3.2 A / 440 VAC
Recommended backup fusing	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C; Alternative: motor circuit breaker; Setpoint: 3.2 A; Setting range: 2.5 ... 4 A

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-GND/sec.-GND)	4.242 kVDC / 2.2 kVDC / 0.7 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	$> 500.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-5 \%/K$ ($> +45 \text{ }^\circ\text{C}$)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
LED indication (solid/fine-stranded/AWG)	0.08 ... 0.5 mm ² / 0.08 ... 0.5 mm ² / 28 ... 20 AWG

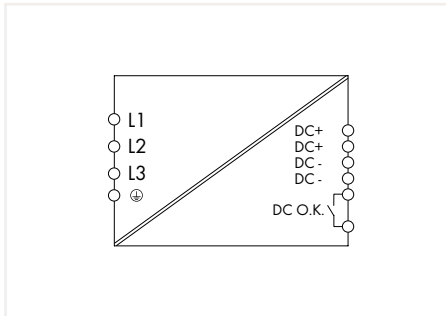
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	128 x 171 x 205; height including connector; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	3270 g

Standards and Specifications

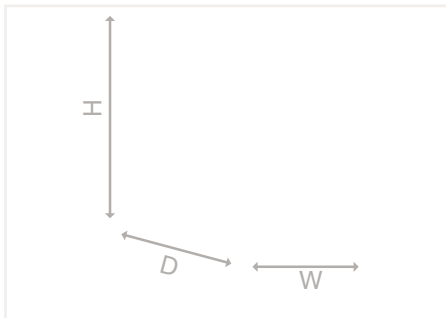
Approvals/standards/specifications	CE; EN 60950; EN 61204-3; EN 61558-2-16; UL 60950; UL 508
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Switched-Mode Power Supply; Classic; 3-Phase; 24 VDC / 10 A 787 Series



Switched-Mode Power Supply; Classic; 3-phase; Output voltage: 24 VDC; Output current: 10 A; TopBoost; DC OK signal

Item No.	Pack. Unit
787-1640	1



Features:

- Switched-mode power supply with TopBoost, enabling secondary-side protection via circuit breakers
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Contact (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i, \text{nom}}$	(2/3) x 400 ... 500 VAC
Input voltage range	(2/3) x 320 ... 575 VAC; 450 ... 800 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 0.73 \text{ A}$ (400 VAC); $\leq 3 \times 0.66 \text{ A}$ (500 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 50 \text{ ms}$ (500 VAC); $> 21 \text{ ms}$ (400 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1 \%$
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	$\leq 50 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)

Efficiency/Power Losses	
Power loss P_i	$\leq 2.1 \text{ W}$ (no load); $\leq 27.9 \text{ W}$ (400 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	28.3 W (500 VAC / 24 VDC; 10 A)
Efficiency (typ.)	90 %

Fuse Protection	
Internal fuse	No
Required backup fusing	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B, C, max. 20 A; Alternative: motor circuit breaker; External DC fuse required for DC input voltage

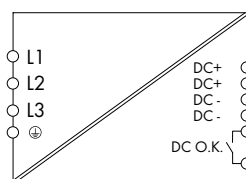
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	$> 500.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-2.5 \%/K$ ($> +55 \text{ }^\circ\text{C}$)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	55 x 127 x 171; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1000 g

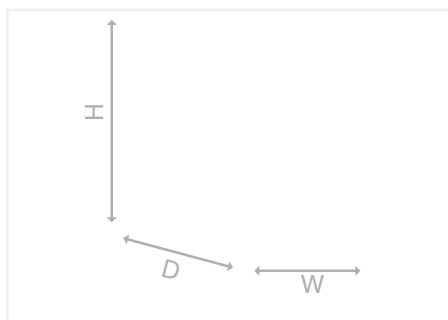
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950-1; EN 61204-3; UL 60950-1; UL 508; DNV GL

Switched-Mode Power Supply; Classic; 3-Phase; 24 VDC / 20 A 787 Series



Switched-Mode Power Supply; Classic; 3-phase; Output voltage: 24 VDC; Output current: 20 A; TopBoost; DC OK signal

Item No.	Pack. Unit
787-1642	1



Features:

- Switched-mode power supply with TopBoost, enabling secondary-side protection via circuit breakers
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Contact (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

Input

Nominal input voltage $U_{i, \text{nom}}$	(2/3) x 400 ... 500 VAC
Input voltage range	(2/3) x 320 ... 575 VAC; 450 ... 800 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 1.21 \text{ A}$ (400 VAC); $\leq 3 \times 1.03 \text{ A}$ (500 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 25 \text{ ms}$ (500 VAC); $> 15 \text{ ms}$ (400 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1 \%$
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	$\leq 15 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)
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Efficiency/Power Losses

Power loss P_1	$\leq 5.8 \text{ W}$ (no load); $\leq 42.8 \text{ W}$ (400 VAC; nominal load)
Power loss (max.) $P_{1, \text{max}}$	47.6 W (500 VAC / 24 VDC; 20 A)
Efficiency (typ.)	92 %

Fuse Protection

Internal fuse	No
Required backup fusing	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B, C, max. 20 A; Alternative: motor circuit breaker; External DC fuse required for DC input voltage

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	$> 500.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-2.5 \text{ } \%/ \text{K}$ ($> +55 \text{ }^\circ\text{C}$)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG

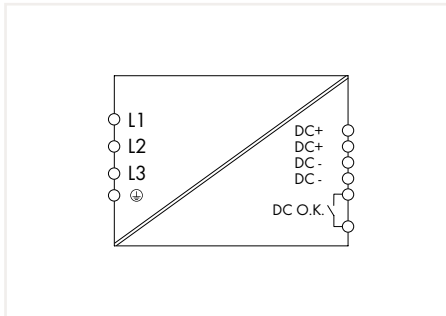
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	80 x 127 x 180; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1623 g

Standards and Specifications

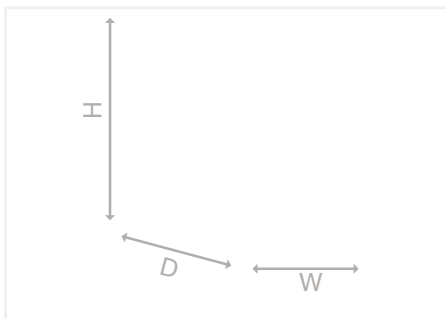
Approvals/standards/specifications	CE; EN 60950-1; EN 61204-3; UL 60950-1; UL 508; DNV GL
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Switched-Mode Power Supply; Classic; 3-Phase; 24 VDC / 40 A 787 Series



Switched-Mode Power Supply; Classic; 3-phase; Output voltage: 24 VDC; Output current: 40 A; TopBoost; DC OK signal

Item No.	Pack. Unit
787-1644	1



Features:

- Switched-mode power supply with TopBoost, enabling secondary-side protection via circuit breakers
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Contact (DC O K)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i, \text{nom}}$	(2/3) x 400 ... 500 VAC
Input voltage range	(2/3) x 320 ... 575 VAC; 450 ... 800 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 2.15 \text{ A}$ (400 VAC); $\leq 3 \times 1.82 \text{ A}$ (500 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 25 \text{ ms}$ (500 VAC); $> 15 \text{ ms}$ (400 VAC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1 \%$
Output voltage range	23 ... 28.5 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	40 A (24 VDC)
Nominal output power	960 W
Residual ripple	$\leq 30 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)

Efficiency/Power Losses	
Power loss P_i	$\leq 4.2 \text{ W}$ (no load); $\leq 83.9 \text{ W}$ (400 VAC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	83.9 W (500 VAC / 24 VDC; 40 A)
Efficiency (typ.)	92 %

Fuse Protection	
Internal fuse	No
Required backup fusing	3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B, C, max. 20 A; Alternative: motor circuit breaker; External DC fuse required for DC input voltage

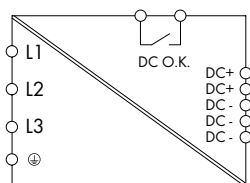
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	$> 500.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70 \text{ }^\circ\text{C}$ (device starts at $-40 \text{ }^\circ\text{C}$, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-2.5 \%/K$ ($> +55 \text{ }^\circ\text{C}$)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	126 x 127 x 198; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	2800 g

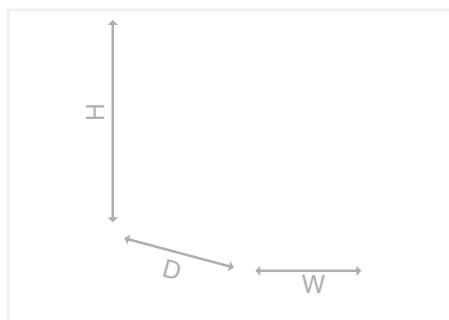
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950-1; EN 61204-3; UL 60950-1; UL 508; DNV GL

Switched-Mode Power Supply; Eco; 3-Phase; 24 VDC / 6.25 A 787 Series



Switched-Mode Power Supply; Eco; 3-phase; Output voltage: 24 VDC; Output current: 6.25 A; DC OK signal

Item No.	Pack. Unit
787-738	1



Features:

- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Fast and tool-free termination via lever-actuated PCB terminal blocks
- Bounce-free switching signal (DC OK) via optocoupler
- Parallel operation
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

Input

Nominal input voltage $U_{i, \text{nom}}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 360 ... 575 VAC; 500 ... 800 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 0.6 \text{ A}$ (400 VAC; 6.25 ADC)
Inrush current	$\leq 25 \text{ A}$
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 17 \text{ ms}$ (3 x 400 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1 \%$
Output voltage range	22 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	6.25 A (24 VDC)
Nominal output power	150 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.15 ... 1.4 x $I_{o, \text{nom}}$); Shutdown and automatic restart in the event of a short circuit

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x Overload LED (red); 1 x DC OK signal output (optocoupler as make contact; max. 31.2 V; 20 mA)
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Efficiency/Power Losses

Power loss P_1	$\leq 18.5 \text{ W}$
Power loss (max.) $P_{1, \text{max}}$	20 W
Efficiency (typ.)	87 %

Fuse Protection

Internal fuse	3 x T 2 A / 250 VAC
Recommended backup fusing	3 x Circuit breaker $\geq 6 \text{ A}$; Tripping characteristic: B or C; Alternative: motor circuit breaker

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-GND/sec.-GND/sec.-signal/ pri.-sec.)	2.2 kVDC / 0.7 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	$> 250.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70 \text{ }^\circ\text{C}$
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	$-2.5 \text{ \%}/\text{K}$ ($> +50 \text{ }^\circ\text{C}$; 230 VAC)
Pollution degree	2

Connection Data

Connection technology	Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.5 ... 0 mm ² / 0.5 ... 0 mm ² / 20 ... 10 AWG
LED indication (solid/fine-stranded/AWG)	0.2 ... 1.5 mm ² / 0.2 ... 1.5 mm ² / 24 ... 14 AWG

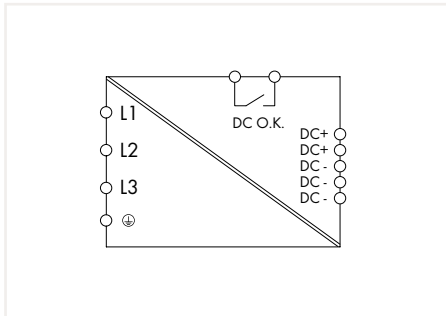
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	50 130 x 92; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	844 g

Standards and Specifications

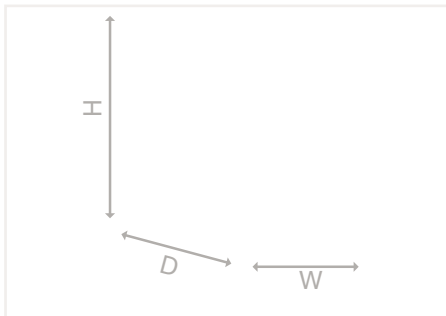
Approvals/standards/specifications	CE; EN 62368-1; EN 61204-3 (Class A); UL 60950-1; UL 508
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Switched-Mode Power Supply; Eco; 3-Phase; 4 VDC / 10 A 787 Series



Switched-Mode Power Supply; Eco; 3-phase; Output voltage: 24 VDC; Output current: 10 A; DC OK signal

Item No.	Pack. Unit
787-740	1



Features:

- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Fast and tool-free termination via lever-actuated PCB terminal blocks
- Bounce-free switching signal (DC OK) via optocoupler
- Parallel operation
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i, nom}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 360 ... 575 VAC; 500 ... 650 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 1.2$ A (400 VAC; 10 ADC)
Inrush current	≤ 25 A
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 17 ms (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, nom}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	22 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	10 A (24 VDC)
Nominal output power	240 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.15 ... 1.4 x $I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x Overload LED (red); 1 x DC OK signal output (optocoupler as make contact; max. 31.2 V; 20 mA)

Efficiency/Power Losses	
Power loss P_i	≤ 32.5 W
Power loss (max.) $P_{i, max}$	36 W
Efficiency (typ.)	89 %

Fuse Protection	
Internal fuse	3 x T 2 A / 250 VAC
Recommended backup fusing	3 x Circuit breaker ≥ 6 A; Tripping characteristic: B or C; Alternative: motor circuit breaker

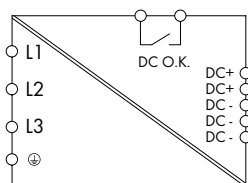
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-GND/sec.-GND/sec.-signal/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 250.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-1.25 %/K ($> +50$ °C; 230 VAC)
Pollution degree	2

Connection Data	
Connection technology	Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.5 ... 0 mm ² / 0.5 ... 0 mm ² / 20 ... 10 AWG
LED indication (solid/fine-stranded/AWG)	0.2 ... 1.5 mm ² / 0.2 ... 1.5 mm ² / 24 ... 14 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	65 x 130 x 130; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1265 g

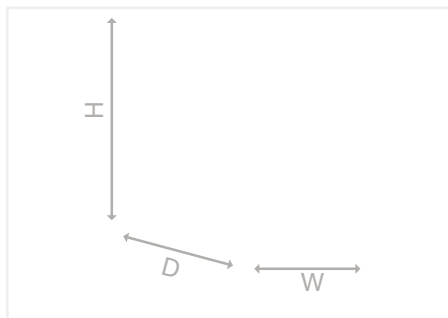
Standards and Specifications	
Approvals/standards/specifications	CE; EN 62368-1; EN 61204-3 (Class A); UL 60950-1; UL 508

Switched-Mode Power Supply; Eco; 3-Phase; 24 VDC / 20 A 787 Series



Switched-Mode Power Supply; Eco; 3-phase; Output voltage: 24 VDC; Output current: 20 A; DC OK signal

Item No.	Pack. Unit
787-742	1



Features:

- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Fast and tool-free termination via lever-actuated PCB terminal blocks
- Bounce-free switching signal (DC OK) via optocoupler
- Parallel operation
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

Input

Nominal input voltage $U_{i, \text{nom}}$	(2 / 3) x 400 ... 500 VAC
Input voltage range	(2 / 3) x 360 ... 575 VAC; 500 ... 800 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 2 \text{ A}$ (400 VAC; 20 ADC)
Inrush current	$\leq 30 \text{ A}$
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 17 \text{ ms}$ (3 x 400 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1 \%$
Output voltage range	22 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	$\leq 100 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.15 ... 1.4 x $I_{o, \text{nom}}$); Shutdown and automatic restart in the event of a short circuit

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x Overload LED (red); 1 x DC OK signal output (optocoupler as make contact; max. 31.2 V; 20 mA)
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Efficiency/Power Losses

Power loss P_1	$\leq 50 \text{ W}$
Power loss (max.) $P_{1, \text{max}}$	55 W
Efficiency (typ.)	90 %

Fuse Protection

Internal fuse	3 x T 5 A / 250 VAC
Recommended backup fusing	3 x Circuit breaker $\geq 6 \text{ A}$; Tripping characteristic: B or C; Alternative: motor circuit breaker

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-GND/sec.-GND/sec.-signal/ pri.-sec.)	2.2 kVDC / 0.7 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Oversvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	$> 250.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-2 %/K ($> +50 \text{ °C}$; 230 VAC)
Pollution degree	2

Connection Data

Connection technology	Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.5 ... 0 mm ² / 0.5 ... 0 mm ² / 20 ... 10 AWG
LED indication (solid/fine-stranded/AWG)	0.2 ... 1.5 mm ² / 0.2 ... 1.5 mm ² / 24 ... 14 AWG

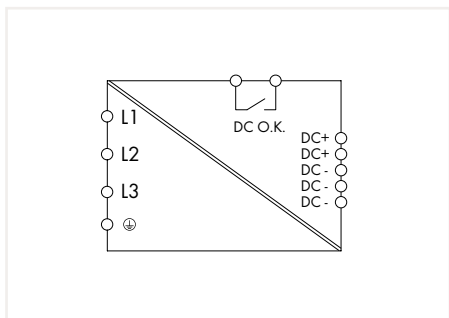
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	110 x 130 x 151; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1930 g

Standards and Specifications

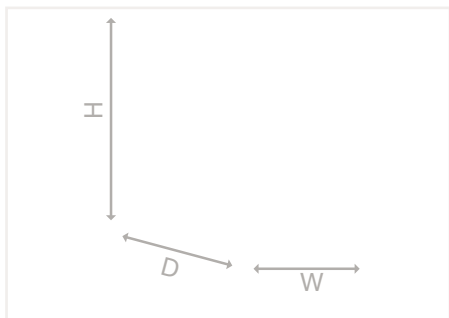
Approvals/standards/specifications	CE; EN 62368-1; EN 61204-3 (Class A); UL 60950-1; UL 508
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Switched-Mode Power Supply; Eco; 3-Phase; 24 VDC / 20 A 787 Series



Power supply unit; Eco; 3-phase; 24 VDC output voltage; 20 A output current; DC OK contact

Item No.	Pack. Unit
787-2742	1



Features:

- Economical power supply for standard applications
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Fast and tool-free termination via lever-actuated terminals with push-in connection technology
- DC OK signal output
- Parallel operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input	
Nominal input voltage $U_{i, nom}$	(2 / 3) x 400 ... 480 VAC
Input voltage range	(2 / 3) x 325 ... 575 VAC; 560 ... 700 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 1.2 \text{ A}$ (AC 400 V)
Inrush current	$\leq 30 \text{ A}$ (AC 400 V)
Power factor	≥ 0.7 (AC 400 V)
Power factor correction (PFC)	passiv
Mains failure hold-up time	$\geq 10 \text{ ms}$ (3 x AC 400 V)

Output	
Nominal output voltage $U_{o, nom}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1 \%$
Output voltage range	22 ... 28 VDC (adjustable)
Nominal output current $I_{o, nom}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	$\leq 150 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.4 x $I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x Overload LED (red); 1 x DC OK signal output (PhotoMOS as make contact; max. 31.2 V / 100 mA)

Efficiency/Power Losses	
Power loss P_i	$\leq 50 \text{ W}$ (400 VAC; nominal load)
Efficiency (typ.)	92 %

Fuse Protection	
Internal fuse	3 x T 3.5 A / 500 VAC
Recommended backup fusing	3 x Circuit breaker $\geq 10 \text{ A}$; Tripping characteristic: B or C

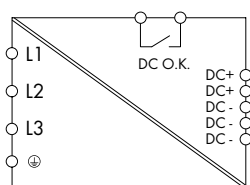
Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec./pri.-GND/sec.-GND/sec.-signal)	4.242 kVDC / 2.2 kVDC / 0.7 kVDC / 0.7 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes; max. 2 power supplies
MTBF	$> 1.800.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70 \text{ }^\circ\text{C}$
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-2 %/K ($> 45 \text{ }^\circ\text{C}$)
Pollution degree	2

Connection Data	
Connection technology	Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.5 ... 6 mm ² / 0.5 ... 6 mm ² / 20 ... 10 AWG
Signaling (solid/fine-stranded/AWG)	0.2 ... 1.5 mm ² / 0.2 ... 1.5 mm ² / 24 ... 14 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	80 x 130 x 170; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1710 g

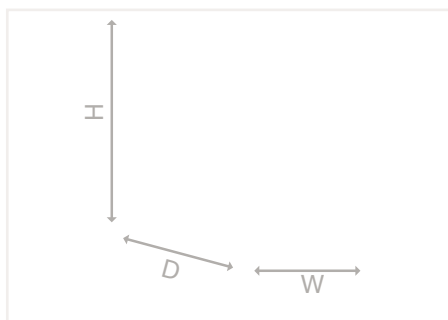
Standards and Specifications	
Approvals/standards/specifications	CE; EAC; EN 61204-3; EN 62368-1; cURus 60950-1; cURus 62368-1; cULus 508; CSA C22.2

Switched-Mode Power Supply; Eco; 3-Phase; 24 VDC / 40 A 787 Series



Switched-Mode Power Supply; Eco; 3-phase; Output voltage: 24 VDC; Output current: 40 A; DC OK signal

Item No.	Pack. Unit
787-2744	1



Features:

- Economical power supply for standard applications
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Fast and tool-free termination via lever-actuated terminals with push-in connection technology
- DC OK signal output
- Parallel operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Input

Nominal input voltage $U_{i, \text{nom}}$	(2 / 3) x 400 ... 480 VAC
Input voltage range	(2 / 3) x 325 ... 575 VAC; 560 ... 700 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current I_i	$\leq 3 \times 2.5 \text{ A}$ (AC 400 V)
Inrush current	$\leq 30 \text{ A}$ (AC 400 V)
Power factor	≥ 0.7 (AC 400 V)
Power factor correction (PFC)	passiv
Mains failure hold-up time	$\geq 10 \text{ ms}$ (3 x AC 400 V)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1 \%$
Output voltage range	22 ... 28 VDC (adjustable)
Nominal output current $I_{o, \text{nom}}$	40 A (24 VDC)
Nominal output power	960 W
Residual ripple	$\leq 150 \text{ mV}$ (peak-to-peak)
Overload behavior	Constant power (in overload range: 1.05 ... 1.4 x $I_{o, \text{nom}}$); Shutdown and automatic restart in the event of a short circuit

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x Overload LED (red); 1 x DC OK signal output (PhotoMOS as make contact; max. 31.2 V / 100 mA)
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Efficiency/Power Losses

Power loss P_i	$\leq 89 \text{ W}$ (400 VAC; nominal load)
Efficiency (typ.)	92.3 %

Fuse Protection

Internal fuse	3 x T 6.3 A / 500 VAC
Recommended backup fusing	3 x Circuit breaker $\geq 10 \text{ A}$; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec./pri.-GND/sec.-GND/sec.-signal)	4.242 kVDC / 2.2 kVDC / 0.7 kVDC / 0.7 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes; max. 2 power supplies
MTBF	$> 1.300.000 \text{ h}$ (per IEC 61709)
Surrounding air temperature (operation)	$-20 \dots +70 \text{ }^\circ\text{C}$
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	-2 %/K ($> 45 \text{ }^\circ\text{C}$)
Pollution degree	2

Connection Data

Connection technology	Push-in CAGE CLAMP®
Input (solid/fine-stranded/AWG)	0.5 ... 6 mm ² / 0.5 ... 6 mm ² / 20 ... 10 AWG
Output (solid/fine-stranded/AWG)	0.75 ... 16 mm ² / 0.75 ... 25 mm ² / 18 ... 4 AWG
Signaling (solid/fine-stranded/AWG)	0.2 ... 1.5 mm ² / 0.2 ... 1.5 mm ² / 24 ... 14 AWG

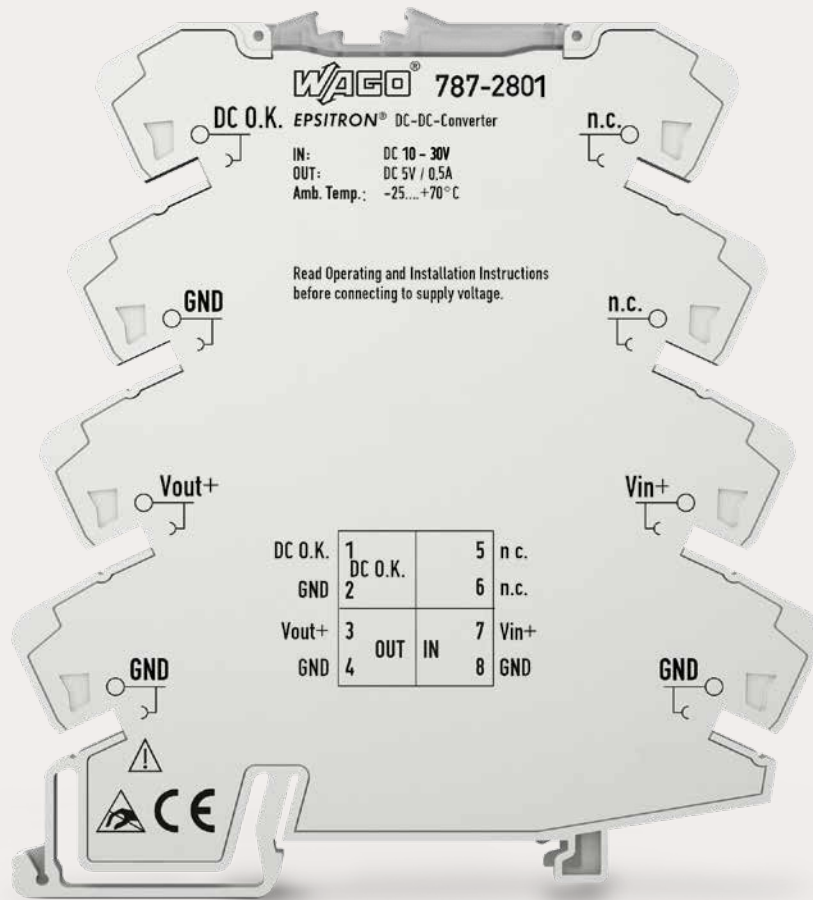
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	140 x 130 x 170; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	2630 g

Standards and Specifications



Approvals/standards/specifications	CE; EAC; EN 61204-3; EN 62368-1; cURus 60950-1; cURus 62368-1; cULus 508; CSA C22.2
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2



WAGO DC/DC Converters

WAGO DC/DC Converters

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 DC/DC Converters; 787 Series	120

WAGO DC/DC Converters

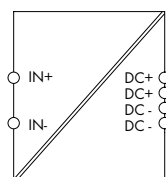
Selection Guide

3

Nominal voltage (input) [VDC]	Nominal voltage (output) [VDC]	Nominal current (output) [A]	Approvals						DC OK signal/ contact	Efficiency typ. [%]	Surrounding air temperature [°C]	Item Number	Page
			EN 50155	EN 60335	UL 61010-2-201	DNVGL	ANSI/ISA 12.12.1	ATEX/IEC Ex					
24.0	5.0	0.5	■		■				■	82.5	-25 ... +70	787-2801	121
24.0	10.0	0.5			■				■	89.0	-25 ... +70	787-2802	122
48.0	24.0	0.5			■				■	91.0	-25 ... +70	787-2803	124
24.0	12.0	0.5			■				■	90.0	-25 ... +70	787-2805	123
24.0	5/10/12	0.5			■				■	82.5	-25 ... +70	787-2810	125
24.0	12.0	0.4			■				■	84.0	-25 ... +70	787-1650	120
110.0	24.0	2.0	■		■					85.0	-40 ... +70	787-1014	117
72.0	24.0	2.0	■		■					86.0	-40 ... +70	787-1014/072-000	118
72.0	12.0	4.0	■		■	■				86.0	-40 ... +70	787-1015/072-000	119

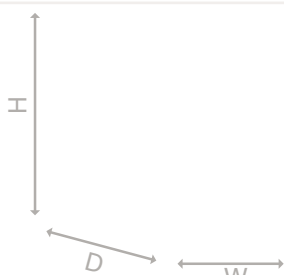
■ Yes □ Pending

DC/DC Converter; Compact; 24 VDC / 2 A 787 Series



DC/DC Converter; EPSITRON® COMPACT Power; 110 VDC input voltage; 24 VDC output voltage; 2 A output current

Item No.	Pack. Unit
787-1014	1



Input

Nominal input voltage $U_{i, \text{nom}}$	110 VDC
Input voltage range	77 ... 140 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.77 A (77 VDC); ≤ 0.42 A (140 VDC)
Inrush current	≤ 30 A (NTC)
Mains failure hold-up time	≥ 8 ms (77 VDC); > 25 ms (140 VDC)

Output

Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	24 VDC (SELV) / $\leq 1\%$
Nominal output current $I_{o, \text{nom}}$	2 A (24 VDC); 1.6 A (in any mounting position)
Nominal output power	48 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x Status indication LED (green)
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Efficiency/Power Losses

Power loss (max.) $P_{I(\text{max})}$	10.5 W (40 VDC / 24 VDC; 2 A)
Efficiency (typ.)	84 %

Fuse Protection

Internal fuse	T 4 A / 125 VDC
Recommended backup fusing	Circuit breaker: 6 A, 10 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	$-40 \dots +70$ °C
Relative humidity	5 ... 96 % (coated PCB)
Derating	$-1.5\%/K$ ($> +55$ °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	72 x 89 x 55; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	250 g

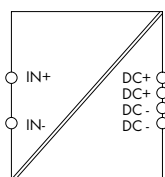
Standards and Specifications

Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; EN 50121-3-2
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DC/DC Converter; Compact; 24 VDC / 2 A 787 Series

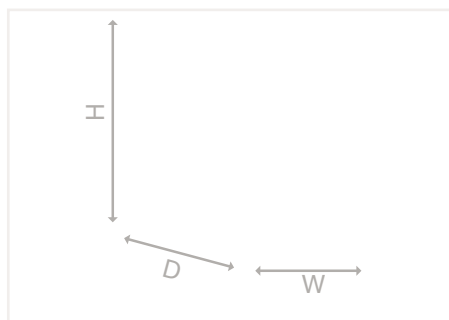


Similar to picture



DC/DC Converter; Compact; Input voltage: 72 VDC;
Output voltage: 24 VDC; Output current: 2 A; electrically
isolated

	Item No.	Pack. Unit
	787-1014/072-000	1



Input

Nominal input voltage $U_{i,nom}$	72 VDC
Input voltage range	40 ... 90 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.79 A (72 VDC)
Inrush current	≤ 30 A (NTC)
Mains failure hold-up time	≥ 8 ms (72 VDC)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Nominal output current $I_{o,nom}$	2 A (24 VDC); 1.6 A (in any mounting position)
Nominal output power	48 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication

Signaling	1 x Status indication LED (green)
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Efficiency/Power Losses

Power loss (max.) $P_{I(max)}$	10.5 W (40 VDC / 24 VDC; 2 A)
Efficiency (typ.)	84 %

Fuse Protection

Internal fuse	T 4 A / 125 VDC
Recommended backup fusing	Circuit breaker: 6 A, 10 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	No/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-40 ... +70 °C
Relative humidity	5 ... 96 % (coated PCB)
Derating	-1.5 %/K (> +55 °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

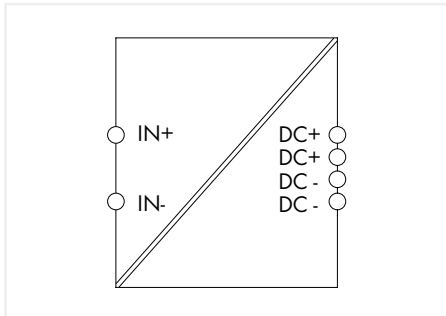
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	72 x 89 x 55; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	250 g

Standards and Specifications

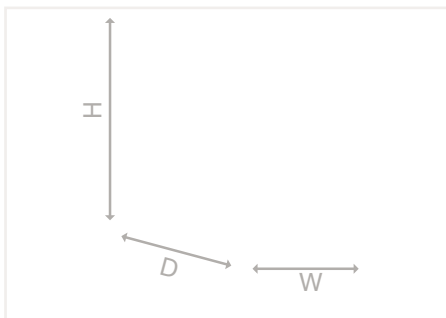
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; EN 50121-3-2
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DC/DC Converter; Compact; 12 VDC / 4 A 787 Series



DC/DC Converter; Compact; 72 VDC input voltage; 12 VDC output voltage; 4 A output current; galvanically isolated

Item No.	Pack. Unit
787-1015/072-000	1



Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards or distribution boxes
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1; EN 61010-2-201
- Control deviation: $\pm 1\%$ ($\pm 10\%$ within the application range of EN 50121-3-2)
- Suitable for railway applications

Input	
Nominal input voltage $U_{i, \text{nom}}$	72 VDC
Input voltage range	40 ... 90 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.79 A (72 VDC)
Inrush current	≤ 30 A (NTC)
Mains failure hold-up time	≥ 8 ms (72 VDC)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	12 VDC (SELV) / 1 %
Nominal output current $I_{o, \text{nom}}$	4 A (24 VDC); 3.1 A (in any mounting position)
Nominal output power	48 W
Residual ripple	≤ 100 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and Communication	
Signaling	1 x Status indication LED (green)

Efficiency/Power Losses	
Power loss P_i	≤ 1.2 W (72 VDC; no load); ≤ 8.6 W (72 VDC; nominal load)
Power loss (max.) $P_{i, \text{max}}$	9.7 W (40 VDC / 12 VDC; 4 A)
Efficiency (typ.)	85 %

Fuse Protection	
Internal fuse	T 4 A / 125 VDC
Recommended backup fusing	Circuit breaker: 6 A, 10 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements	
Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class/protection type	II / IP20 (per EN 60529)
Overvoltage category	II
Short-circuit-protected	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	$-40 \dots +70$ °C
Relative humidity	5 ... 96 % (coated PCB)
Derating	-1.5 %/K ($> +55$ °C)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

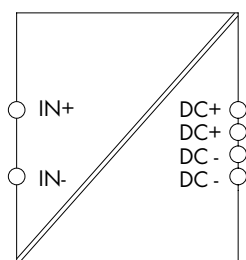
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	72 x 89 x 55; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	235 g

Standards and Specifications	
Approvals/standards/specifications	CE; EN 61010-1; EN 61010-2-201; EN 61204-3; EN 50121-3-2; EN 50125; DNV GL

DC/DC Converter; 12 VDC / 4 A 787 Series

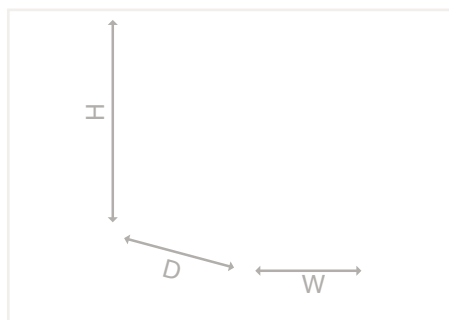


Similar to picture



DC/DC Converter; 24 VDC input voltage; 12 VDC output voltage; 4 A output current; galvanically isolated

	Item No.	Pack. Unit
	787-1650	1



Features:

- Primary switch mode power supply unit
- Natural convection cooling when horizontally mounted
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-1; EN 61010-2-201
- Adjustment accuracy: $\pm 1\%$

Input

Nominal input voltage $U_{i,nom}$	24 VDC
Input voltage range	18 ... 60 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 2.56 A (24 VDC); ≤ 0.96 A (60 VDC); ≤ 3.39 A (18 VDC)
Inrush current	≤ 60 A (NTC)
Mains failure hold-up time	≥ 5 ms (24 VDC)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	12 VDC (SELV) / $\leq 1\%$
Output voltage range	11.5 ... 14.5 VDC (adjustable)
Nominal output current $I_{o,nom}$	4 A
Nominal output power	48 W
Residual ripple	≤ 50 mV (peak-to-peak)
Overload behavior	Constant current

Signaling and communication

Signaling	1 x LED operation status indicator (green)
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Efficiency/Power losses:

Power loss P_v	≤ 1 W (No load); ≤ 11.7 W (DCin 24 V / 4 A); ≤ 1.28 W (48 VDC; 40 A)
Power loss (max.) $P_{I,max}$	15 W (DCin 18 V / 4 A)
Efficiency (typ.)	84 %

Fuse protection:

Internal fuse	T 4 A / 250 VDC
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Safety and Protection/Environmental Requirements:

Insulation voltage (pri.-sec.)	2.2 kV DC
Protection class/protection type	III / IP20 (per EN 60529)
Overvoltage category	II
Short circuit protection	Yes
Parallel operation/series operation	Yes/yes
MTBF	> 500.000 h (per IEC 61709)
Surrounding air (operating) temperature	$-25 \dots 70$ °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$-2\%/K$ (> 55 °C)
Pollution degree	2

Connection data

Connection technology	CAGE CLAMP®
Input/output/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	45 x 90 x 107.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	240 g

Standards and specifications

Approvals/standards/specifications	CE; EN 61000-6-2; EN 61000-6-3; EN 61010-1; EN 61010-2-201; UL 61010-2-201
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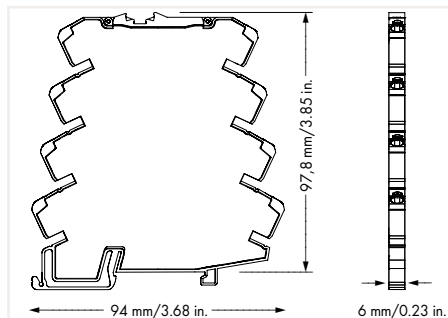
DC/DC Converter; 5 VDC / 0.5 A 787 Series



DC O.K.	1	DC O.K.	5	n.c.
GND	2		6	n.c.
Vout+	3	OUT	7	Vin+
GND	4	IN	8	GND

DC/DC Converter; 24 VDC input voltage; 5 VDC output voltage; 0.5 A output current; DC OK contact

	Item No.	Pack. Unit
	787-2801	1



Features:

- DC/DC converter in a compact 6 mm housing
- DC/DC converters (787-28xx) supply devices with 5, 10, 12 or 24 VDC from a 24 or 48 VDC power supply with an output power up to 12 W
- Output voltage monitoring via DC OK contact
- Can be commoned with 857 and 2857 Series devices
- Comprehensive range of approvals for multiple applications

Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	10 ... 30 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.34 A
Inrush current	≤ 0.5 A (at nominal input voltage)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	5 VDC / ≤ 3 %
Output voltage range	± 3 %
Nominal output current $I_{o, \text{nom}}$	0.5 A
Nominal output power	2.5 W
Mains/load regulation	≤ 1 %
Residual ripple	≤ 20 mV (peak-to-peak)

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x Short circuit LED (red); 1 x Active signal output (U_r , max. 4 mA)

Efficiency/Power Losses	
Power loss P_i	≤ 0.13 W (no load); ≤ 0.6 W (nominal load)
Efficiency (typ.)	82.5 % (at nominal input voltage and nominal output)

Fuse Protection	
Internal fuse	No

Safety and Protection/Environmental Requirements	
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	Yes
Short-circuit-protected	Yes
Parallel operation/series operation	No/no
MTBF	$> 1.800.000$ h
Surrounding air temperature (operation)	$-25 \dots +70$ °C
Relative humidity	95 % (no condensation permissible)
Derating	No derating
Pollution degree	2

Connection Data	
Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	6 x 97.8 x 94; height from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	49.5 g

Standards and Specifications	
Approvals/standards/specifications	CE; EN 61000-6-2; EN 61000-6-3; EN 60950-1; UL 61010-2-201

DC/DC Converter; 10 VDC / 0.5 A 787 Series

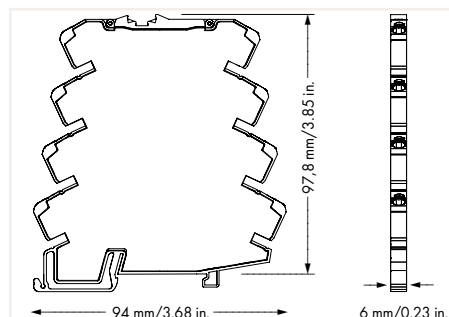


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DC O.K.	1	DC O.K.	5	n.c.
GND	2		6	n.c.
Vout+	3	OUT	7	Vin+
GND	4	IN	8	GND

DC/DC Converter; 24 VDC input voltage; 10 VDC output voltage; 0.5 A output current; DC OK contact

	Item No.	Pack. Unit
	787-2802	1



Features:

- DC/DC converter in a compact 6 mm housing
- DC/DC converters (787-28xx) supply devices with 5, 10, 12 or 24 VDC from a 24 or 48 VDC power supply with an output power up to 12 W
- Output voltage monitoring via DC OK contact
- Can be commoned with 857 and 2857 Series devices
- Comprehensive range of approvals for multiple applications

Input

Nominal input voltage $U_{i,nom}$	24 VDC
Input voltage range	15 ... 30 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.42 A
Inrush current	≤ 0.5 A (at nominal input voltage)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	10 VDC / ≤ 2 %
Output voltage range	± 3 %
Nominal output current $I_{o,nom}$	0.5 A
Nominal output power	5 W
Mains/load regulation	≤ 1 %
Residual ripple	≤ 20 mV (peak-to-peak)

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x Short circuit LED (red); 1 x Active signal output (U_i , max. 4 mA)
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Efficiency/Power Losses

Power loss P_i	≤ 0.19 W (no load); ≤ 0.7 W (nominal load)
Efficiency (typ.)	89 % (at nominal input voltage and nominal output)

Fuse Protection

Internal fuse	No
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Safety and Protection/Environmental Requirements

Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	Yes
Short-circuit-protected	Yes
Parallel operation/series operation	No/no
MTBF	> 1.800.000 h
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	95 % (no condensation permissible)
Derating	No derating
Pollution degree	2

Connection Data

Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	6 x 97.8 x 94; height from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	35.9 g

Standards and Specifications

Approvals/standards/specifications	CE; EN 61000-6-2; EN 61000-6-3; EN 60950-1; UL 61010-2-201
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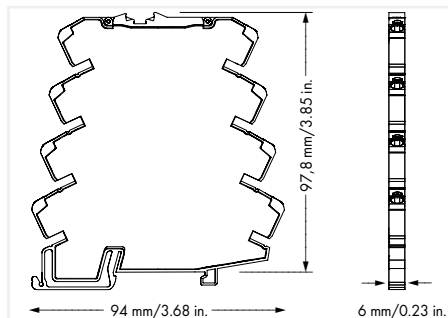
DC/DC Converter; 12 VDC / 0.5 A 787 Series



DC O.K.	1	DC O.K.	5	n.c.
GND	2		6	n.c.
Vout+	3	OUT	7	Vin+
GND	4	IN	8	GND

DC/DC Converter; 24 VDC input voltage; 12 VDC output voltage; 0.5 A output current; DC OK contact

	Item No.	Pack. Unit
	787-2805	1



Features:

- DC/DC converter in a compact 6 mm housing
- DC/DC converters (787-28xx) supply devices with 5, 10, 12 or 24 VDC from a 24 or 48 VDC power supply with an output power up to 12 W
- Output voltage monitoring via DC OK contact
- Can be commoned with 857 and 2857 Series devices
- Comprehensive range of approvals for multiple applications

Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	15 ... 30 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.5 A
Inrush current	≤ 0.5 A (at nominal input voltage)
Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	5 VDC / ≤ 2 %
Output voltage range	± 2 %
Nominal output current $I_{o, \text{nom}}$	0.5 A
Nominal output power	6 W
Mains/load regulation	≤ 1 %
Residual ripple	≤ 20 mV (peak-to-peak)
Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x Short circuit LED (red); 1 x Active signal output (U_r , max. 4 mA)
Efficiency/Power Losses	
Power loss P_i	≤ 0.21 W (no load); ≤ 0.7 W (nominal load)
Efficiency (typ.)	90 % (at nominal input voltage and nominal output)
Fuse Protection	
Internal fuse	No
Safety and Protection/Environmental Requirements	
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	Yes
Short-circuit-protected	Yes
Parallel operation/series operation	No/no
MTBF	> 1.800.000 h
Surrounding air temperature (operation)	$-25 \dots +70$ °C
Relative humidity	95 % (no condensation permissible)
Derating	No derating
Pollution degree	2
Connection Data	
Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	6 x 97.8 x 94; height from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	49.5 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61000-6-2; EN 61000-6-3; EN 60950-1; UL 61010-2-201

DC/DC Converter; 24 VDC / 0.5 A 787 Series

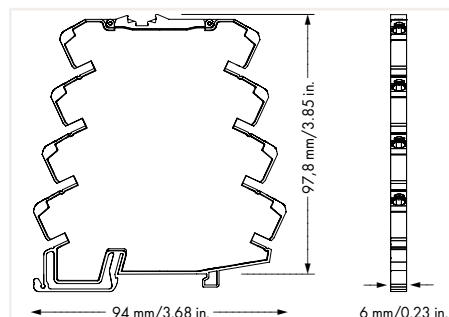


3

DC O.K.	1	DC O.K.	5	n.c.
GND	2		6	n.c.
Vin+	3	IN	7	Vout+
GND	4	OUT	8	GND

DC/DC Converter; 48 VDC input voltage; 24 VDC output voltage; 0.5 A output current; DC OK contact

Item No.	Pack. Unit
787-2803	1



Features:

- DC/DC converter in a compact 6 mm housing
- DC/DC converters (787-28xx) supply devices with 5, 10, 12 or 24 VDC from a 24 or 48 VDC power supply with an output power up to 12 W
- Output voltage monitoring via DC OK contact
- Can be commoned with 857 and 2857 Series devices
- Comprehensive range of approvals for multiple applications

Input

Nominal input voltage $U_{i,nom}$	48 VDC
Input voltage range	40 ... 55 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.34 A
Inrush current	≤ 0.5 A (at nominal input voltage)

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	24 VDC / ≤ 3 %
Output voltage range	± 3 %
Nominal output current $I_{o,nom}$	0.5 A
Nominal output power	12 W
Mains/load regulation	≤ 1 %
Residual ripple	≤ 20 mV (peak-to-peak)

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x Short circuit LED (red); 1 x Active signal output (U_i , max. 4 mA)
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Efficiency/Power Losses

Power loss P_i	≤ 0.29 W (no load); ≤ 1.2 W (nominal load)
Efficiency (typ.)	91 % (at nominal input voltage and nominal output)

Fuse Protection

Internal fuse	No
---------------	----

Safety and Protection/Environmental Requirements

Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	Yes
Short-circuit-protected	Yes
Parallel operation/series operation	No/no
MTBF	$> 1.800.000$ h
Surrounding air temperature (operation)	$-25 \dots +70$ °C
Relative humidity	95 % (no condensation permissible)
Derating	No derating
Pollution degree	2

Connection Data

Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	6 x 97.8 x 94; height from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	32.57 g

Standards and Specifications

Approvals/standards/specifications	CE; EN 61000-6-2; EN 61000-6-3; EN 60950-1; UL 61010-2-201
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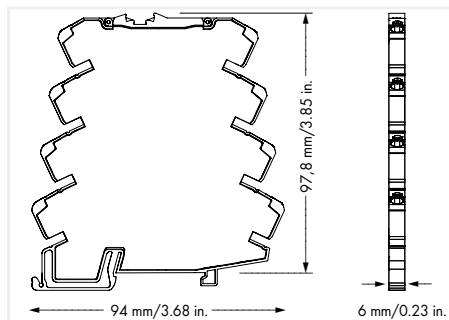
DC/DC Converter; 5 ... 12 VDC / 0.5 A 787 Series



DC O.K.	1	DC O.K.	5	n.c.
GND	2		6	n.c.
Vout+	3	OUT	7	Vin+
GND	4	IN	8	GND

DC/DC Converter; 24 VDC input voltage; 5/10/12 VDC adjustable output voltage; 0.5 A output current; DC OK contact

Item No.	Pack. Unit
787-2810	1



Features:

- DC/DC converter in a compact 6 mm housing
- DC/DC converters (787-28xx) supply devices with 5, 10, 12 or 24 VDC from a 24 or 48 VDC power supply with an output power up to 12 W
- Output voltage monitoring via DC OK contact
- Can be commoned with 857 and 2857 Series devices
- Comprehensive range of approvals for multiple applications

Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	15 ... 30 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.5 A
Inrush current	≤ 0.5 A (at nominal input voltage)

Output	
Nominal output voltage $U_{o, \text{nom}}$ /adjustment accuracy	5/10/12 VDC (adjustable via DIP switches) / ≤ 3 %
Output voltage range	± 3 %
Nominal output current $I_{o, \text{nom}}$	0.5 A
Nominal output power	6 W
Mains/load regulation	≤ 1 %
Residual ripple	≤ 20 mV (peak-to-peak)

Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x Short circuit LED (red); 1 x Active signal output (U_r , max. 4 mA)

Efficiency/Power Losses	
Power loss P_i	≤ 0.21 W (no load); ≤ 0.7 W (nominal load)
Efficiency (typ.)	≥ 82.5 % (at nominal input voltage and nominal output)

Fuse Protection	
Internal fuse	No

Safety and Protection/Environmental Requirements	
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	Yes
Short-circuit-protected	Yes
Parallel operation/series operation	No/no
MTBF	$> 1.800.000$ h
Surrounding air temperature (operation)	$-25 \dots +70$ °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	No derating
Pollution degree	2

Connection Data	
Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG




Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	6 x 97.8 x 94; height from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	51.5 g

Standards and Specifications	
Approvals/standards/specifications	CE; EN 61000-6-2; EN 61000-6-3; EN 60950-1; UL 61010-2-201



WAGO Circuit Protection

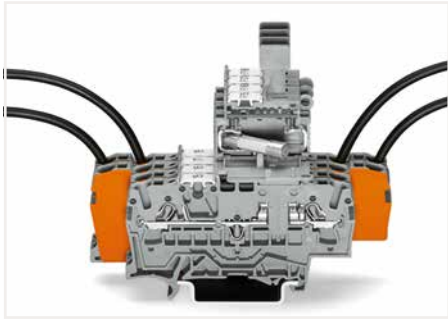
WAGO Circuit Protection

		Page
	TOPJOB® S Fused Disconnect Terminal Blocks; 2002 / 2006 Series	129
	Classic Fuse Terminal Blocks and Fuse Plugs; 281 / 282 / 811 Series	131
	Electronic Circuit Breakers 787 Series	134

Fuse Terminal Blocks; TOPJOB® S

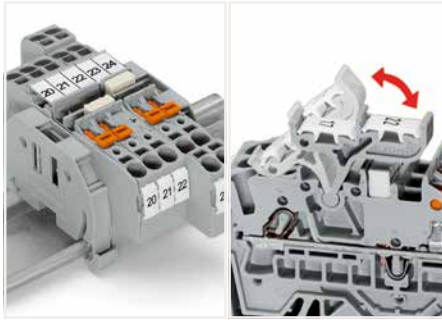
Description and Installation

Fuse terminal blocks



Fuse plug with blown fuse indication on a 2-conductor carrier terminal block

Commoning and marking



Dual jumper slots, in the same position as the 2002 Series terminal blocks. Commoning options in front of or behind the knife disconnect, depending on the power supply direction; additional marking option via pivoting marker carriers.

Fuse replacement 1



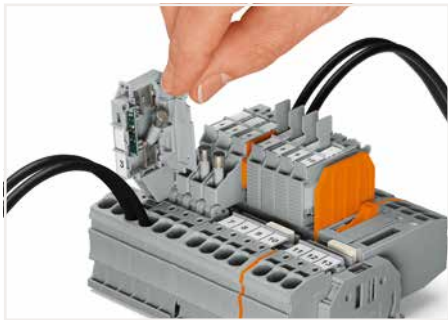
Before replacing the fuse, pivot the fuse holder into the locked open position.

Commoning



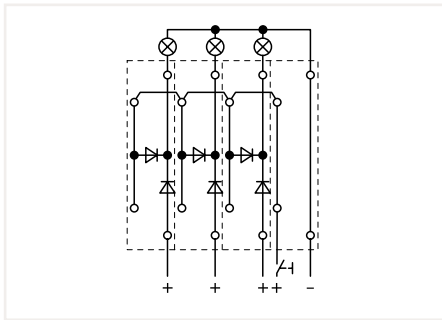
Custom circuit design via push-in type jumper bars. Example shows "lamp test circuit."

Fuse replacement 2



One end of the fuse is automatically ejected from the holder when opening the cover.

Application



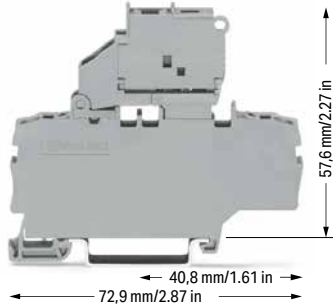
Lamp test circuit

4

Fused Disconnect Terminal Block with Pivoting Fuse Holder TOPJOB® S; for 5 x 20 mm, 5 x 30 mm and 1/4" x 1/4" Miniature Metric Fuse

TOPJOB® S; 2.5 (4) mm²; 2002 Series; 6 (10) mm²; 2006 Series

Technical Data	
0.25 ... 2.5 (4) mm ² ①	22 ... 12 AWG
250 V/6 kV/3 ③	30 V, 6.3 A ④
I _N 6.3 A	
Terminal block width: 6.2 mm / 0.244 inch	
10 ... 12 mm / 0.39 ... 0.47 inch	



2-conductor fused disconnect terminal block with a pivoting fuse holder; with additional jumper slot; for (5 x 20) mm miniature metric fuse; without blown fuse indication
Electrical ratings are given by the fuse

Color	Item No.	Pack. Unit
gray ⑤	2002-1911 ⑥	50

2-conductor fused disconnect terminal block with a pivoting fuse holder; with additional jumper slot; for (5 x 20) mm miniature metric fuse; with blown fuse indication by LED; gray
Electrical ratings are given by the fuse and blown fuse indication. Leakage current in case of a blown fuse: LED 2 mA

	Item No.	Pack. Unit
12 ... 30 V ⑤	2002-1911/1000-541 ⑥	50
30 ... 65 V ⑤	2002-1911/1000-542 ⑥	50
120 V ⑤	2002-1911/1000-867 ⑥	50
230 V ⑤	2002-1911/1000-836 ⑥	50

Accessories; item-specific

End plate for fuse terminal blocks; 2 mm thick

	orange	2002-992	100 (25)
	gray	2002-991	100 (25)

Staggered jumper; insulated; I_N 25 A; light gray

	2-way	2002-472	25
	12-way	2002-482	25

Adjacent jumper for continuous commoning; insulated; I_N 25 A, light gray

	2-way	2002-400	25
	1 to 3	2002-423	25

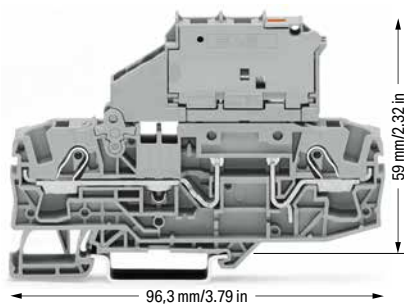
Push-in type jumper bar; insulated; I_N 25 A; light gray

	2-way	2002-402	25
	10-way	2002-410	25

Marking strip; plain; 11 mm wide; 50 m reel

	white	2009-110	1
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Technical Data	
0.5 ... 6 (10) mm ² ②	20 ... 8 AWG
800 V/8 kV/3 ④	30 V, 15 A ④
I _N 10 A	30 V, 15 A ④
Terminal block width: 7.5 mm / 0.295 inch	
13 ... 15 mm / 0.51 ... 0.59 inch	



2-conductor fused disconnect terminal block with a pivoting fuse holder; gray; with blown fuse indication by LED Electrical ratings are given by the fuse and blown fuse indication. Leakage current in case of a blown fuse: LED 2 mA

	Item No.	Pack. Unit
12 ... 30 V	2006-1611/1000-541	25
30 ... 65 V	2006-1611/1000-542	25
120 V	2006-1611/1000-867	25
230 V	2006-1611/1000-836	25

for (5 x 30) mm miniature metric fuse

12 ... 30 V	2006-1621/1000-541	25
30 ... 65 V	2006-1621/1000-542	25
120 V	2006-1621/1000-867	25
230 V	2006-1621/1000-836	25
380 ... 500 V	2006-1621/1000-859	25

for 1/4" x 1/4" miniature metric fuse

12 ... 30 V	2006-1631/1000-541	25
30 ... 65 V	2006-1631/1000-542	25
120 V	2006-1631/1000-867	25
230 V	2006-1631/1000-836	25
380 ... 500 V	2006-1631/1000-859	25

Accessories; item-specific

End plate for fuse terminal blocks; 2 mm thick

	orange	2006-992	100 (25)
	gray	2006-991	100 (25)

Push-in type jumper bar; insulated; I_N 41 A; light gray

	2-way	2006-402	25
	3-way	2006-403	25
	4-way	2006-404	25
	5-way	2006-405	25

Push-in type jumper bar; insulated; I_N 41 A; light gray

	1 to 3	2006-433	25
	1 to 4	2006-434	25
	1 to 5	2006-435	25

Star point jumper; insulated; I_N = I_N terminal block; light gray

	1-3-5	2006-405/011-000	25
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WMB marking card; white; 10 strips with 10 markers/card; 5 ... 5.2 mm stretchable

	plain	793-5501	5
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① Conductor range: 0.25 ... 4 mm² "s+f-st"; Push-in termination: 1 ... 4 mm² "s" and 1 ... 2.5 mm² "insulated ferrules, 12 mm" Depending on the conductor characteristic, a conductor with a smaller cross section can also be inserted via push-in termination.

② Conductor range: 0.5 ... 10 mm² "s+f-st"; Push-in termination: 2.5 ... 10 mm² "s" and 2.5 ... 6 mm² "insulated ferrules; 12 mm" Depending on the conductor characteristic, a conductor with a smaller cross section can also be inserted via push-in termination.

③ 250 V = rated voltage
6 kV = rated impulse voltage
3 = pollution degree

④ 800 V = rated voltage
8 kV = rated impulse voltage
3 = pollution degree

⑤ Terminal blocks with an Ex mark are suitable for Ex ec IIc applications.

Approvals and corresponding ratings, visit www.wago.com

Glass cartridge fuses 5 x 20

Series Item No.	Overload and short circuit protection		Short circuit protection only	
	Individual argmt.	Group argmt.	Individual argmt.	Group argmt.
Fuse terminal blocks				
2002-1911	1.6 W	1.6 W	2.5 W	2.5 W
2002-1911/.....	1.6 W	1.6 W	2.5 W	2.5 W

Glass cartridge fuses

Series Item No.	Overload and short circuit protection		Short circuit protection only	
	Individual argmt.	Group argmt.	Individual argmt.	Group argmt.
Fused disconnect terminal blocks				
2006-1611	7.5	1.6 W	1.6 W	2.5 W
2006-1621	7.5	1.6 W	1.6 W	2.5 W
2006-1631	7.5	1.6 W	1.6 W	2.5 W
2006-1631 /099-...	10.4	2.5 W	2.5 W	2.5 W
2006-1631 /1099-...	10.4	2.5 W	2.5 W	2.5 W

When selecting miniature metric fuses, make sure that the maximum power loss listed below is not exceeded. The power loss is determined according to IEC or EN 60947-7-3/VDE 0611-6 at 23°C. The temperature rise of the terminal blocks must be checked according to their application and mounting. Higher ambient temperatures represent an additional impact on miniature fuses. Therefore, in such applications, the rated current must be reduced if necessary. More details are available from the manufacturers.

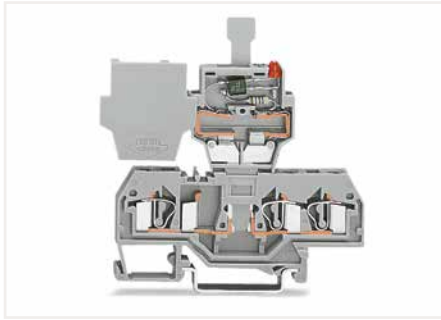
Fuse Terminal Blocks and Fuse Plugs; Classic Description and Installation

Fuse terminal blocks



Blown fuse indication by LED or neon lamp

Fuse plug



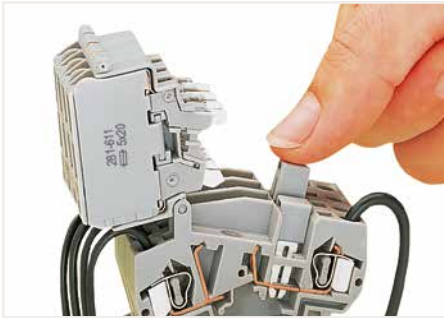
Fuse plug with blown fuse indication on a 3-conductor carrier terminal block.



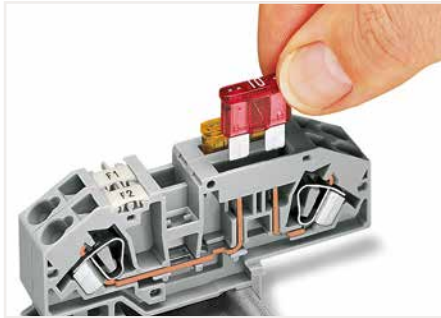
Conductor termination: Open the clamping unit via integrated lever.

4

Commoning



Distributing current to several fuse-protected circuits via insulated touch-proof jumpers.



Inserting a fuse.

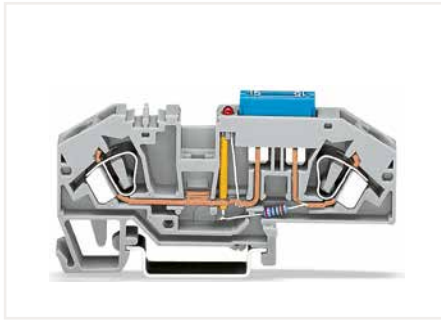


Open and close lever via screwdriver.

Fuse replacement 1



Before replacing the fuse, pivot the fuse holder into the locked open position.



2-conductor fuse terminal block with mini-automotive blade-style fuse



Jumper bar for quick and convenient commoning

Fuse replacement 2



One end of the fuse is automatically ejected from the holder when opening the cover.



Blown fuse indication by LED



Inserting a fuse.

Fuse Terminal Blocks and Fuse Plugs

Classic; 281 / 282 / 811 Series

Image	Description	Miniature Fuse	Nominal Current	Nominal Voltage	Blown Fuse Indication	Color	Item No.	Pack. Unit	
	Fuse disconnect terminal block with pivoting fuse holder; without blown fuse indication 800 V / 10 A (6.3 A) 0.08 ... 4 mm ² / 28 ... 12 AWG	5 x 20 mm				○ gray	281-611	50	
		5 x 20 mm				● orange	281-616	50	
		5 x 25 mm					○ gray	281-612	50
		5 x 30 mm					○ gray	281-622	50
		1/4" x 1"					○ gray	281-613	50
		1/4" x 1 1/4"					○ gray	281-623	50
	Fuse disconnect terminal block with pivoting fuse holder; with blown fuse indication by LED 800 V / 10 A (6.3 A) 0.08 ... 4 mm ² / 28 ... 12 AWG	5 x 20 mm			15 ... 30 V	○ gray	281-611/281-541	50	
		5 x 20 mm			30 ... 65 V	○ gray	281-611/281-542	50	
		5 x 25 mm			15 ... 30 V	○ gray	281-612/281-541	50	
		5 x 25 mm			30 ... 65 V	○ gray	281-612/281-542	50	
		5 x 30 mm			15 ... 30 V	○ gray	281-622/281-541	50	
		5 x 30 mm			30 ... 65 V	○ gray	281-622/281-542	50	
		1/4" x 1"			15 ... 30 V	○ gray	281-613/281-541	50	
		1/4" x 1"			30 ... 65 V	○ gray	281-613/281-542	50	
	Fuse disconnect terminal block with pivoting fuse holder; with blown fuse indication by neon lamp 800 V / 10 A (6.3 A) 0.08 ... 4 mm ² / 28 ... 12 AWG	5 x 20 mm			230 V	○ gray	281-611/281-417	50	
		5 x 20 mm			120 V	○ gray	281-611/281-418	50	
		5 x 25 mm			230 V	○ gray	281-612/281-417	50	
		5 x 25 mm			120 V	○ gray	281-612/281-418	50	
		5 x 30 mm			230 V	○ gray	281-622/281-417	50	
		5 x 30 mm			120 V	○ gray	281-622/281-418	50	
		1/4" x 1"			230 V	○ gray	281-613/281-417	50	
		1/4" x 1"			120 V	○ gray	281-613/281-418	50	
	Adjacent jumper, insulated, I _N = I _N terminal block					○ gray	281-402	200	
	End and intermediate plate, 2.5 mm thick					● orange	281-309	100	
					○ gray	281-311	100		
	Fuse plugs on carrier terminal blocks	for 5 x 20 mm and 5 x 25 mm miniature metric fuses	6.3 A	250 V		○ gray	281-511	50	
					LED, 48 VDC	○ gray	281-512/281-414	50	
					LED, 24 V AC/DC	○ gray	281-512/281-501	50	
					Neon lamp, 120 V AC/DC	○ gray	281-512/281-418	50	
					Neon lamp, 230 V AC/DC	○ gray	281-512/281-417	50	
	Fuse terminal blocks for mini-automotive, blade-style fuses 0.2 ... 6 mm ² / 24 ... 10 AWG		25 A	400 V	12 V; LED; circuit I	○ gray	282-698/281-429	25	
					12 V; LED; circuit II	○ gray	282-698/281-449	25	
					24 V; LED; circuit I	○ gray	282-698/281-413	25	
					24 V; LED; circuit II	○ gray	282-698/281-434	25	
					Without blown fuse indication	○ gray	282-696	25	
						○ gray	282-402	100	
	Adjacent jumper, insulated, I _N 41 A					○ gray	282-402	100	
	3-conductor through terminal block		41 A	800 V		○ gray	282-699	25	
					● blue	282-694	25		
	End and intermediate plate, 2 mm thick					● orange	282-333	100	
						○ gray	282-334	100	
	Fuse terminal block for cylindrical fuses	10 x 38 mm	32 A	DC 1000 V	Without blown fuse indication, 1-pole	○ light gray	811-316	12	
					Blown fuse indication, 1-pole	○ light gray	811-317	12	
	Fuse terminal block for cylindrical fuses 2.5 ... 16 mm ² / 16 ... 6 AWG	10 x 38 mm	32 A	AC 690 V; DC 1000 V	Without blown fuse indication, 1-pole	○ light gray	811-310	12	
					Without blown fuse indication, 2-pole	○ light gray	811-320	6	
					Without blown fuse indication, 3-pole	○ light gray	811-330	4	
					Blown fuse indication, 1-pole	○ light gray	811-311	12	
					Blown fuse indication, 2-pole	○ light gray	811-321	6	
					Blown fuse indication, 3-pole	○ light gray	811-331	4	
	Blown fuse indication, 24 V, 1-pole	○ light gray	811-314	12					
	Fuse terminal block for class CC fuses 2.5 ... 16 mm ² / 16 ... 6 AWG				Without blown fuse indication, 1-pole	○ light gray	811-410	12	
					Without blown fuse indication, 2-pole	○ light gray	811-420	6	
					Without blown fuse indication, 3-pole	○ light gray	811-430	4	
					Blown fuse indication, 1-pole	○ light gray	811-411	12	
					Blown fuse indication, 2-pole	○ light gray	811-421	6	
					Blown fuse indication, 3-pole	○ light gray	811-431	4	
	Blown fuse indication, 24 V, 1-pole	○ light gray	811-414	12					
	Push-in type jumper bar, I _N 63 A, 1000 V	2-way				○ light gray	811-472	50	
		12-way				○ light gray	811-482	20	

WAGO Electronic Circuit Breakers Selection Guide

Nominal input/output voltage	Input/Output				Approvals				Dimensions and Environmental Conditions				Item Number	Page
	Channels (output)	Nominal current (output) [ADC]	Communication	Active current limitation	UL 61010-2-201	UR 2367	cULus 508	GL	Width [mm]	Height [mm]	Length [mm]	Surrounding air temperature [°C]		
12 VDC	4	2 ... 10	M						45	115.5	90	-25 ... +70	787-1664/000-100	147
24 VDC	1	0.5	S		■			■	6	97.8	94	-25 ... +70	787-2861/050-000	134
	1	1	S					■	6	97.8	94	-25 ... +70	787-2861/100-000	135
	1	2	S					■	6	97.8	94	-25 ... +70	787-2861/200-000	136
	1	4	S					■	6	97.8	94	-25 ... +70	787-2861/400-000	137
	1	6	S					■	6	97.8	94	-25 ... +70	787-2861/600-000	138
	1	8	S					■	6	97.8	94	-25 ... +70	787-2861/800-000	139
	1	1 ... 8	S					■	6	97.8	94	-25 ... +70	787-2861/108-020	140
24 VDC	2	2 ... 10	M					■	45	115.5	90	-25 ... +70	787-1662	143
	2	2 ... 10	P					■	45	115.5	90	-25 ... +70	787-1662/000-054	145
	2	3.8 LPS	M	■				■	45	115.5	90	-25 ... +70	787-1662/004-1000 ¹⁾	142
	2	0.5 ... 6	M	■				■	45	115.5	90	-25 ... +70	787-1662/006-1000	141
	2	1 ... 6	M					■	45	115.5	90	-25 ... +70	787-1662/106-000	144
24 VDC	4	2 ... 10	M					■	45	115.5	90	-25 ... +70	787-1664	153
	4	2 ... 10	M					■	45	115.5	90	-25 ... +70	787-1664/000-004	155
	4	2 ... 10	P					■	45	115.5	90	-25 ... +70	787-1664/000-054	156
	4	2 ... 10	N					■	45	115.5	90	-25 ... +70	787-1664/000-011	159
	4	1 ... 10	I					■	45	115.5	90	-25 ... +70	787-1664/000-080	152
	4	3.8 LPS	M	■				■	45	115.5	90	-25 ... +70	787-1664/004-1000 ¹⁾	149
	4	0.5 ... 6	M	■				■	45	115.5	90	-25 ... +70	787-1664/006-1000	148
	4	1 ... 6	M					■	45	115.5	90	-25 ... +70	787-1664/106-000	154
	4	1 ... 6	N					■	45	115.5	90	-25 ... +70	787-1664/106-011	160
	4	2 ... 12	M	■				■	45	115.5	90	-25 ... +70	787-1664/212-1000	150
	4	0.5 ... 6	P	■	□			■	45	115.5	90	-25 ... +70	787-1664/006-1054	151
48 VDC	8	2 ... 10	M					■	42	142.5	127	-25 ... +70	787-1668	164
	8	2 ... 10	M					■	42	142.5	127	-25 ... +70	787-1668/000-004	165
	8	2 ... 10	P					■	42	142.5	127	-25 ... +70	787-1668/000-054	166
	8	1 ... 10	I					■	42	142.5	127	-25 ... +70	787-1668/000-080	170
	8	0.5 ... 6	M	■				■	42	142.5	127	-25 ... +70	787-1668/006-1000	161
	8	1 ... 6	M					■	42	142.5	127	-25 ... +70	787-1668/106-000	163
	8	1 ... 6	M					■	42	142.5	127	-25 ... +70	787-1668/106-054	167
	8	1 ... 6	P	■	□			■	42	142.5	127	-25 ... +70	787-1668/006-1054	162
48 VDC	2	2 ... 10	P					■	45	115.5	90	-25 ... +70	787-1662/000-250	146
48 VDC	4	2 ... 10	M					■	45	115.5	90	-25 ... +70	787-1664/000-200	157
	4	2 ... 10	P					■	45	115.5	90	-25 ... +70	787-1664/000-250	158
48 VDC	8	2 ... 10	M					■	42	142.5	127	-25 ... +70	787-1668/000-200	168
	8	2 ... 10	P					■	42	142.5	127	-25 ... +70	787-1668/000-250	169

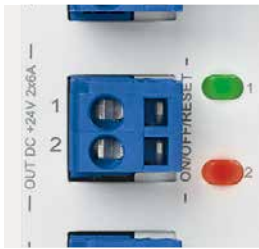
- Yes □ Pending
- ¹⁾ NEC Class 2
- S = Signal
- N = Signal, low-side switching
- P = Potential-free signal
- I = IO-Link protocol
- M = Manchester protocol



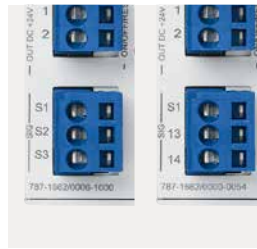
- Pluggable CAGE CLAMP® Connection Technology**
- Fast, vibration-proof, maintenance-free
 - For solid, fine-stranded and ferruled conductors
 - 100% protected against mismatching
 - With marking



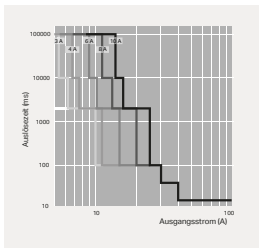
- Rotary Switch**
- Nominal current can be individually adjusted for each channel
 - The setting is visible, even when no voltage is applied
 - Transparent cover can be sealed and marked



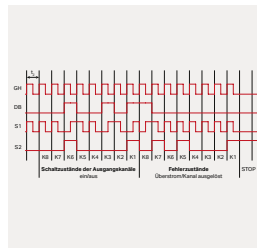
- Intuitive Status Indication**
- Each output channel has backlit buttons for switching on/off, as well as acknowledgement
 - Integrated, multi-color LEDs indicate the operating status of each channel



- Communication 1.0**
- Remote digital input S1 resets all tripped channels
 - Digital output S3 transmits a simple group message indicating whether one of the channels was triggered by an overcurrent.
 - Optional isolated signal contact 13/14 as group signal



- Trip Characteristics**
- Reliable and precise disconnection in case of overcurrent or short circuit
 - Nominal currents can be set separately for each channel in 1 A increments
 - Tripping time can be configured in defined increments
 - Optional, active short circuit current limitation to 1.5 times the nominal current prevents a voltage drop in other current paths



- Communication 2.0**
- Remote digital input (S1) switches certain channels on and off via pulse sequence.
 - Digital output (S2) transmits the current status (on/off/tripped/overcurrent) of each individual channel
 - Optional transmission of input voltage and output/nominal current value for each channel

*Only for 787-166x/xxxx-1xxx



- Marking**
- Device identification via WMB Markers or TOP-JOB® S Marking Strips
 - Label individual channels via marking strips that can be inserted into the rotary switch cover from the outside

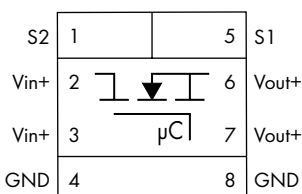


- Communication 3.0**
- IO-Link interface
 - Read the status, the set nominal current, current voltage values and current values per channel
 - Set the rated current as well as switch on/off and reset individual channels

Electronic Circuit Breaker; 24 VDC / 0.5 A 787 Series

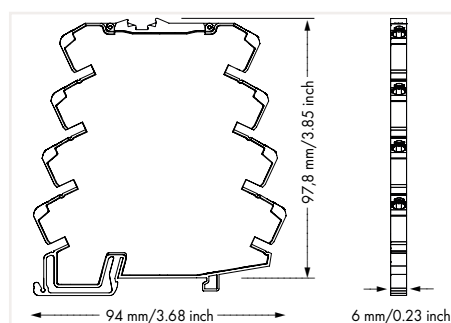


Similar to illustration



Electronic circuit breaker; 1-channel; 24 VDC input voltage; 0.5 A; Signal contact

Item No.	Pack. Unit
787-2861/050-000	1



Features:

- Space-saving WAGO ECB with one channel
- Reliably and safely trips in the event of an overload and short circuit on the secondary side
- Switch-on capacity > 50.000 µF
- Enables the use of an economical, standard power supply
- Minimizes wiring via two voltage outputs and maximizes commoning options on both input and output sides (e.g., commoning of the output voltage on WAGO 857 and 2857 Series devices)
- Status signal – as single or group message
- Reset, switch on/off via remote input or local switch
- Prevents power supply overload due to total inrush current thanks to time-delayed switching on during inter-connected operation

Input

Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC

Output

Total number of channels (module)	1
Nominal output voltage $U_{o, \text{nom}}$	1 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i – Voltage drop)
Voltage drop	≤ 50 mV
Nominal output current $I_{o, \text{nom}}$	1 x 0.5 A (fixed setting)
Trip time	4 ms ... 100 s
Switch-on capacity	> 50000 µF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 170 ms/max. 500 ms)
Active current limitation	No

Signaling and Communication

Signaling	1 x Status LED (green/yellow/red/blue); 1 x Control input; 1 x Active signal output (U_i , max. 4 mA)
Remote input	18 ... 30 VDC signal, switches on/off and resets the channel

Efficiency/Power Losses

Power loss P_1	≤ 0.36 W (no load)
Efficiency (typ.)	99 %

Fuse Protection

Internal fuse	T 15 A
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Safety and Protection/Environmental Requirements

Isolation voltage (connectors – housing)	500 VDC
Protection class/type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	1.263.074 h (per MIL-HDBK-217F2)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	No derating
Pollution degree	2

Connection Data

Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG

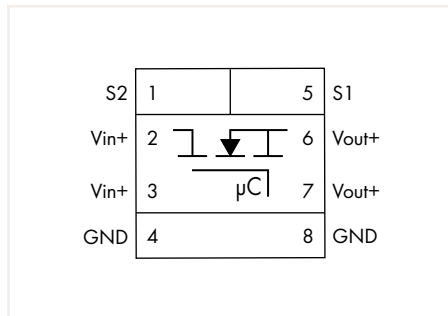
Physical Data/Mechanical Data/Material Data

Width x Height x Depth (mm)	6 x 97.8 x 94; height from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	53.6 g

Standards and Specifications

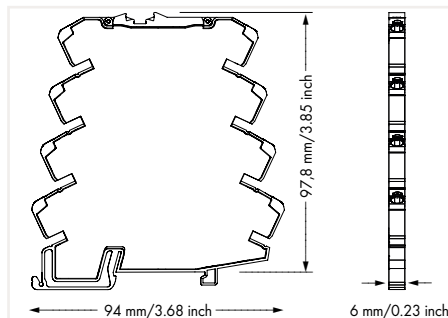
Approvals/standards/specifications	CE; EN 61000-6-2; EN 61000-6-3; UL 61010-2-201 DNV GL
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Electronic Circuit Breaker; 24 VDC / 1 A 787 Series



Electronic circuit breaker; 1-channel; 24 VDC input voltage; 1 A; Signal contact

	Item No.	Pack. Unit
	787-2861/100-000	1

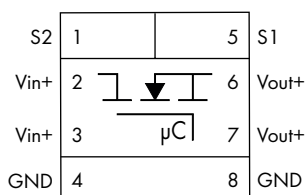


Features:

- Space-saving ECB with one channel
- Reliably and safely trips in the event of an overload and short circuit on the secondary side
- Switch-on capacity > 50.000 µF
- Enables the use of an economical, standard power supply
- Minimizes wiring via two voltage outputs and maximizes commoning options on both input and output sides (e.g., commoning of the output voltage on 857 and 2857 Series devices)
- Status signal – as single or group message
- Reset, switch on/off via remote input or local switch
- Prevents power supply overload due to total inrush current thanks to time-delayed switching on during inter-connected operation

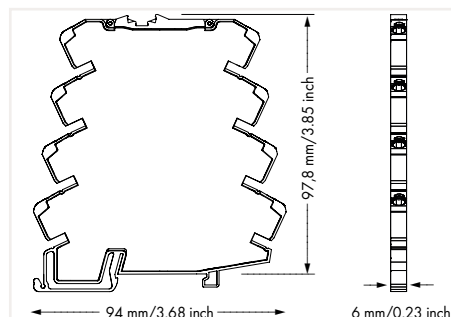
Input	
Nominal input voltage $U_{i, nom}$	24 VDC
Input voltage range	18 ... 30 VDC
Output	
Total number of channels (module)	1
Nominal output voltage $U_{o, nom}$	1 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i – Voltage drop)
Voltage drop	≤ 25 mV
Nominal output current $I_{o, nom}$	1 x 1 A (fixed setting)
Trip time	4 ms ... 100 s
Switch-on capacity	> 50.000 µF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 170 ms/max. 500 ms)
Active current limitation	No
Signaling and Communication	
Signaling	1 x Status LED (green/yellow/red/blue); 1 x Control input; 1 x Active signal output (U_i , max. 4 mA)
Remote input	18 ... 30 VDC signal, switches on/off and resets the channel
Efficiency/Power Losses	
Power loss P_i	≤ 0.3 W (no load)
Efficiency (typ.)	99 %
Fuse Protection	
Internal fuse	T 15 A
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	1.263.074 h (per MIL-HDBK-217F2)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	No derating
Pollution degree	2
Connection Data	
Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	6 x 97.8 x 94; height from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	53.6 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61000-6-2; EN 61000-6-3; UL 61010-2-201; DNV GL* (*pending)

Electronic Circuit Breaker; 24 VDC / 2 A 787 Series



Electronic circuit breaker; 1-channel; 24 VDC input voltage; 2 A; Signal contact

	Item No.	Pack. Unit
	787-2861/200-000	1



Features:

- Space-saving ECB with one channel
- Reliably and safely trips in the event of an overload and short circuit on the secondary side
- Switch-on capacity > 50.000 µF
- Enables the use of an economical, standard power supply
- Minimizes wiring via two voltage outputs and maximizes commoning options on both input and output sides (e.g., commoning of the output voltage on 857 and 2857 Series devices)
- Status signal – as single or group message
- Reset, switch on/off via remote input or local switch
- Prevents power supply overload due to total inrush current thanks to time-delayed switching on during inter-connected operation

Input

Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC

Output

Total number of channels (module)	1
Nominal output voltage $U_{o, \text{nom}}$	1 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i – Voltage drop)
Voltage drop	≤ 25 mV
Nominal output current $I_{o, \text{nom}}$	1 x 2 A (fixed setting)
Trip time	4 ms ... 100 s
Switch-on capacity	> 50.000 µF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 170 ms/max. 500 ms)
Active current limitation	No

Signaling and Communication

Signaling	1 x Status LED (green/yellow/red/blue); 1 x Control input; 1 x Active signal output (U_i , max. 4 mA)
Remote input	18 ... 30 VDC signal, switches on/off and resets the channel

Efficiency/Power Losses

Power loss P_1	≤ 0.3 W (no load)
Efficiency (typ.)	96 %

Fuse Protection

Internal fuse	T 15 A
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Safety and Protection/Environmental Requirements

Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	1.262.142 h (per MIL-HDBK-217F2)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	No derating
Pollution degree	2

Connection Data

Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG

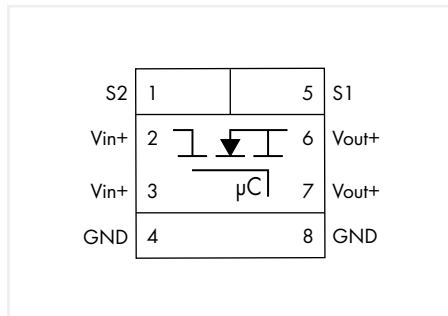
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	6 x 97.8 x 94; height from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	53.6 g

Standards and Specifications

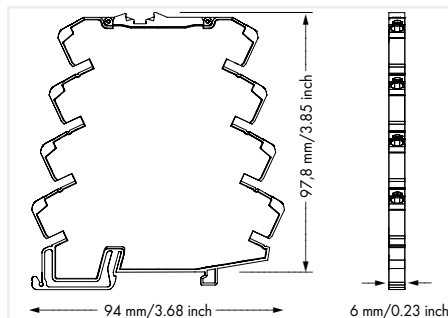
Approvals/standards/specifications	CE; EN 61000-6-2; EN 61000-6-3; EN 60950-1; UL 61010-2-201* (*pending)
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Electronic Circuit Breaker; 24 VDC / 4 A 787 Series



Electronic circuit breaker; 1-channel; 24 VDC input voltage; 4 A; Signal contact

	Item No.	Pack. Unit
	787-2861/400-000	1

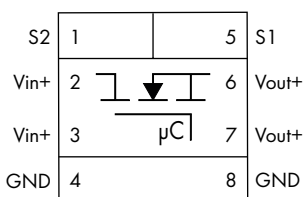


Features:

- Space-saving ECB with one channel
- Reliably and safely trips in the event of an overload and short circuit on the secondary side
- Switch-on capacity > 50.000 µF
- Enables the use of an economical, standard power supply
- Minimizes wiring via two voltage outputs and maximizes commoning options on both input and output sides (e.g., commoning of the output voltage on 857 and 2857 Series devices)
- Status signal – as single or group message
- Reset, switch on/off via remote input or local switch
- Prevents power supply overload due to total inrush current thanks to time-delayed switching on during inter-connected operation

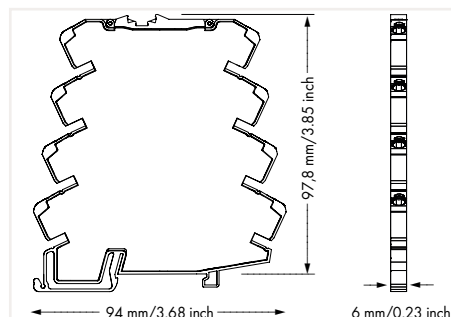
Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC
Output	
Total number of channels (module)	1
Nominal output voltage $U_{o, \text{nom}}$	1 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i – Voltage drop)
Voltage drop	≤ 25 mV
Nominal output current $I_{o, \text{nom}}$	1 x 4 A (fixed setting)
Trip time	4 ms ... 100 s
Switch-on capacity	> 50.000 µF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 170 ms/max. 500 ms)
Active current limitation	No
Signaling and Communication	
Signaling	1 x Status LED (green/yellow/red/blue); 1 x Control input; 1 x Active signal output (U_i , max. 4 mA)
Remote input	18 ... 30 VDC signal, switches on/off and resets the channel
Efficiency/Power Losses	
Power loss P_i	≤ 0.3 W (no load)
Efficiency (typ.)	96 %
Fuse Protection	
Internal fuse	T 15 A
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	1.258.733 h (per MIL-HDBK-217F2)
Surrounding air temperature (operation)	–25 ... +70 °C
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	No derating
Pollution degree	2
Connection Data	
Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	6 x 97.8 x 94; height from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	37 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61000-6-2; EN 61000-6-3; UL 61010-2-201; DNV GL* (*pending)

Electronic Circuit Breaker; 24 VDC / 6 A 787 Series



Electronic circuit breaker; 1-channel; 24 VDC input voltage; 6 A; Signal contact

	Item No.	Pack. Unit
	787-2861/600-000	1



Features:

- Space-saving ECB with one channel
- Reliably and safely trips in the event of an overload and short circuit on the secondary side
- Switch-on capacity > 50.000 μ F
- Enables the use of an economical, standard power supply
- Minimizes wiring via two voltage outputs and maximizes commoning options on both input and output sides (e.g., commoning of the output voltage on 857 and 2857 Series devices)
- Status signal – as single or group message
- Reset, switch on/off via remote input or local switch
- Prevents power supply overload due to total inrush current thanks to time-delayed switching on during inter-connected operation

Input

Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC

Output

Total number of channels (module)	1
Nominal output voltage $U_{o, \text{nom}}$	1 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i – Voltage drop)
Voltage drop	\leq 25 mV
Nominal output current $I_{o, \text{nom}}$	1 x 6 A (fixed setting)
Trip time	4 ms ... 100 s
Switch-on capacity	> 50.000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 170 ms/max. 500 ms)
Active current limitation	No

Signaling and Communication

Signaling	1 x Status LED (green/yellow/red/blue); 1 x Control input; 1 x Active signal output (U_i , max. 4 mA)
Remote input	18 ... 30 VDC signal, switches on/off and resets the channel

Efficiency/Power Losses

Power loss P_1	\leq 0.3 W (no load)
Efficiency (typ.)	96 %

Fuse Protection

Internal fuse	T 15 A
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Safety and Protection/Environmental Requirements

Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	1.253.313 h (per MIL-HDBK-217F2)
Surrounding air temperature (operation)	-25 ... +70 °C (derating must be observed)
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	See instruction manual
Pollution degree	2

Connection Data

Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG

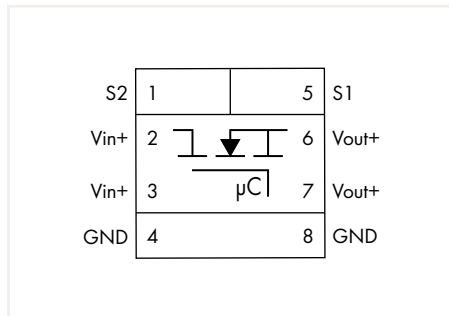
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	6 x 97.8 x 94; height from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	53.6 g

Standards and Specifications

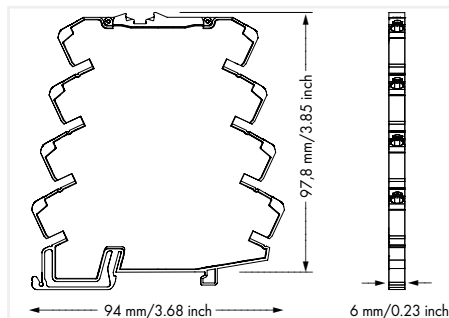
Approvals/standards/specifications	CE; EN 61000-6-2; EN 61000-6-3; UL 61010-2-201; DNV GL* (*pending)
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Electronic Circuit Breaker; 24 VDC / 8 A 787 Series



Electronic circuit breaker; 1-channel; 24 VDC input voltage; 8 A; Signal contact

	Item No.	Pack. Unit
	787-2861/800-000	1

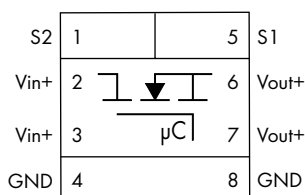


Features:

- Space-saving ECB with one channel
- Reliably and safely trips in the event of an overload and short circuit on the secondary side
- Switch-on capacity > 50.000 µF
- Enables the use of an economical, standard power supply
- Minimizes wiring via two voltage outputs and maximizes commoning options on both input and output sides (e.g., commoning of the output voltage on 857 and 2857 Series devices)
- Status signal – as single or group message
- Reset, switch on/off via remote input or local switch
- Prevents power supply overload due to total inrush current thanks to time-delayed switching on during inter-connected operation

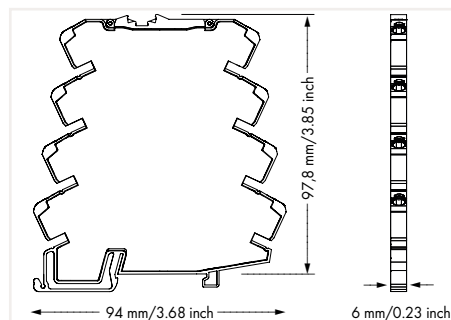
Input	
Nominal input voltage $U_{i, nom}$	24 VDC
Input voltage range	18 ... 30 VDC
Output	
Total number of channels (module)	1
Nominal output voltage $U_{o, nom}$	1 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i – Voltage drop)
Voltage drop	≤ 25 mV
Nominal output current $I_{o, nom}$	1 x 8 A (fixed setting)
Trip time	4 ms ... 100 s
Switch-on capacity	> 50.000 µF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 170 ms/max. 500 ms)
Active current limitation	No
Signaling and Communication	
Signaling	1 x Status LED (green/yellow/red/blue); 1 x Control input; 1 x Active signal output (U_i , max. 4 mA)
Remote input	18 ... 30 VDC signal, switches on/off and resets the channel
Efficiency/Power Losses	
Power loss P_i	≤ 0.36 W (no load)
Efficiency (typ.)	96 %
Fuse Protection	
Internal fuse	T 15 A
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	1.245.816 h (per MIL-HDBK-217F2)
Surrounding air temperature (operation)	-25 ... +65 °C (derating must be observed)
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	See instruction manual
Pollution degree	2
Connection Data	
Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	6 x 97.8 x 94; height from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	53.6 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61000-6-2; EN 61000-6-3; UL 61010-2-201; DNV GL* (*pending)

Electronic Circuit Breaker; 24 VDC / 1 ... 8 A 787 Series



Electronic circuit breaker; 1-channel; 24 VDC input voltage; adjustable 1 ... 8 A; Signal contact

	Item No.	Pack. Unit
	787-2861/108-020	1



Features:

- Space-saving ECB with one channel
- Reliably and safely trips in the event of an overload and short circuit on the secondary side
- Switch-on capacity > 50.000 µF
- Enables the use of an economical, standard power supply
- Minimizes wiring via two voltage outputs and maximizes commoning options on both input and output sides (e.g., commoning of the output voltage on 857 and 2857 Series devices)
- Status signal – adjustable as single or group message
- Reset, switch on/off via remote input or local switch
- Prevents power supply overload due to total inrush current thanks to time-delayed switching on during inter-connected operation

Input

Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC

Output

Total number of channels (module)	1
Nominal output voltage $U_{o, \text{nom}}$	1 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i – Voltage drop)
Voltage drop	≤ 25 mV
Nominal output current $I_{o, \text{nom}}$	1 x 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 A (adjustable)
Trip time	4 ms ... 100 s
Switch-on capacity	> 50.000 µF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 170 ms/max. 500 ms)
Active current limitation	No

Signaling and Communication

Signaling	1 x Status LED (green/yellow/red/blue/violet); 1 x Control input; 1 x Active signal output (U_i , max. 4 mA)
Remote input	18 ... 30 VDC signal, switches on/off and resets the channel

Efficiency/Power Losses

Power loss P_1	≤ 0.36 W (no load)
Efficiency (typ.)	96 %

Fuse Protection

Internal fuse	T 15 A
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Safety and Protection/Environmental Requirements

Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	1.262.142 h (per MIL-HDBK-217F2)
Surrounding air temperature (operation)	-25 ... +70 °C (derating must be observed)
Relative humidity	10 ... 95 % (no condensation permissible)
Derating	See instruction manual
Pollution degree	2

Connection Data

Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG

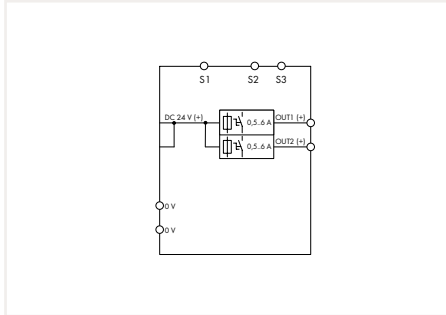
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	6 x 97.8 x 94; height from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	38.4 g

Standards and Specifications

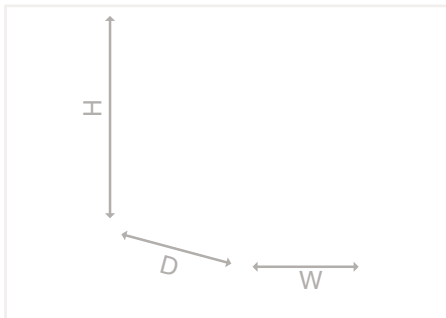
Approvals/standards/specifications	CE; EN 61000-6-2; EN 61000-6-3; UL 61010-2-201; DNV GL* (*pending)
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Electronic Circuit Breaker; with Active Current Limitation; 24 VDC / 0.5 ... 6 A 787 Series



Electronic circuit breaker; 2-channel; 24 VDC input voltage; adjustable 0.5 ... 6 A; active current limitation; communication capability

Item No.	Pack. Unit
787-1662/006-1000	1



Features:

- Space-saving ECB with two channels
- Nominal current: 0.5 ... 6 A (adjustable for each channel via sealable selector switch)
- Active current limitation
- Switch-on capacity > 65.000 μ F per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Status message for each signal via pulse sequence
- Remote input resets tripped channels or switches on/off any number of channels via pulse sequence

Input	
Nominal input voltage $U_{i, nom}$	24 VDC
Input voltage range	18 ... 30 VDC
Output	
Total number of channels (module)	2
Nominal output voltage $U_{o, nom}$	2 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i - Voltage drop)
Voltage drop	≤ 145 mV (6 A)
Nominal output current $I_{o, nom}$	2 x 0.5 / 1 / 2 / 3 / 4 / 6 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 5 s (load-dependent)
Switch-on capacity	> 65.000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	Yes
Current limitation	$1.7 \times I_{o, nom}$ typ.
Signaling and Communication	
Signaling	2 x LED (green/red/orange); 1 x Remote control input (S1); 2 x active signal output (S2; S3)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence
Efficiency/Power Losses	
Power loss P_i	≤ 0.55 W (no load); ≤ 2.5 W (2 x 6 A)
Efficiency (typ.)	99 %
Fuse Protection	
Internal fuse	T 15 A per channel
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors - housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	No derating
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	45 x 90 x 115.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	170 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL

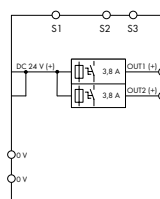
Electronic Circuit Breaker; with Active Current Limitation;

24 VDC / 3.8 A

787 Series

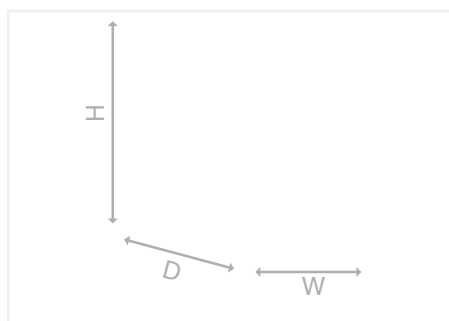


Similar to picture



Electronic circuit breaker; 2-channel; 24 VDC input voltage; 3.8 A; active current limitation; NEC Class 2; communication capability

Item No.	Pack. Unit
787-1662/004-1000	1



Features:

- Space-saving ECB with two channels
- Nominal current is fixed at 3.8 A for each channel
- Each output complies with NEC Class 2
- Active current limitation
- Switch-on capacity > 65.000 μ F per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Status message for each channel via pulse sequence
- Remote input resets tripped channels or switches on/off any number of channels via pulse sequence

Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	20 ... 28.8 VDC

Output	
Total number of channels (module)	2
Nominal output voltage $U_{o, \text{nom}}$	2 x 24 VDC
Output voltage range	20 ... 28.8 VDC (U_i - Voltage drop)
Voltage drop	\leq 125 mV (3.8 A)
Nominal output current $I_{o, \text{nom}}$	2 x 3.8 A (fixed setting; NEC Class 2 at 20 ... 24 VDC); 2 x 3.2 A (NEC Class 2 at 28 VDC)

Trip time	16 ms ... 4.7 s (load-dependent)
Switch-on capacity	> 65.000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	Yes
Current limitation	3.8 A (3.2 A at $U_o > 25$ VDC); LPS per NEC Class 2

Signaling and Communication	
Signaling	2 x LED (green/red/orange); 1 x Remote control input (S1); 2 x active signal output (S2; S3)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence

Efficiency/Power Losses	
Power loss P_I	\leq 0.65 W (no load); \leq 1.6 W (2 x 3.8 A)
Efficiency (typ.)	99 %

Fuse Protection	
Internal fuse	No

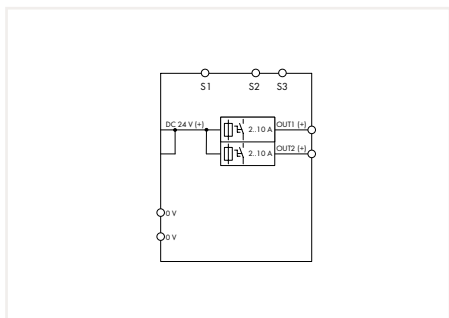
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors - housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	No derating
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	45 x 90 x 115.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	200 g

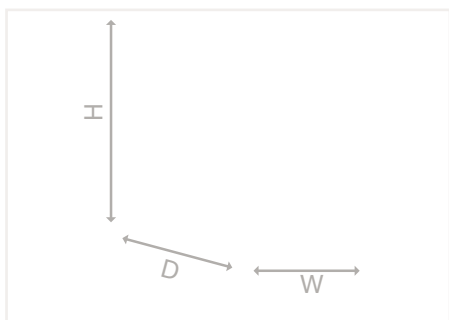
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367

Electronic Circuit Breaker; 24 VDC / 2 ... 10 A 787 Series



Electronic circuit breaker; 2-channel; 24 VDC input voltage; adjustable 2 ... 10 A; communication capability

	Item No.	Pack. Unit
	787-1662	1

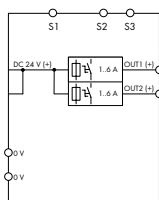


Features:

- Space-saving ECB with two channels
- Nominal current: 2 ... 10 A (adjustable for each channel via sealable selector switch)
- Switch-on capacity > 50.000 μ F per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Status message for each channel via pulse sequence
- Remote input for switching on/off any number of channels via pulse sequence

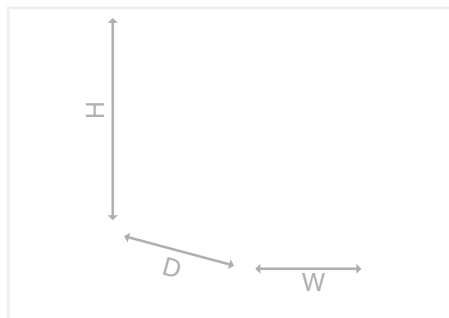
Input	
Nominal input voltage $U_{i, nom}$	24 VDC
Input voltage range	18 ... 30 VDC
Output	
Total number of channels (module)	2
Nominal output voltage $U_{o, nom}$	2 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i - Voltage drop)
Voltage drop	≤ 200 mV (Eingang (+))
Nominal output current $I_{o, nom}$	2 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 50.000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Signaling and Communication	
Signaling	2 x LED (green/red/orange); 1 x Remote control input (S1); 2 x active signal output (S2; S3)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence
Efficiency/Power Losses	
Power loss P_i	≤ 0.85 W (no load); ≤ 5.5 W (2 x 10 A)
Efficiency (typ.)	99 %
Fuse Protection	
Internal fuse	T 15 A per channel
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors - housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	No derating
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	45 x 90 x 115.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	200 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL

Electronic Circuit Breaker; 24 VDC / 1 ... 6 A 787 Series



Electronic circuit breaker; 2-channel; 24 VDC input voltage; adjustable 1 ... 6 A; communication capability

Item No.	Pack. Unit
787-1662/106-000	1



Features:

- Space-saving ECB with two channels
- Nominal current: 1 ... 6 A (adjustable for each channel via sealable selector switch)
- Switch-on capacity > 50.000 μ F per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Status message for each channel via pulse sequence
- Remote input for switching on/off any number of channels via pulse sequence

Input

Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC

Output

Total number of channels (module)	2
Nominal output voltage $U_{o, \text{nom}}$	2 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i - Voltage drop)
Voltage drop	≤ 120 mV (Input (+))
Nominal output current $I_{o, \text{nom}}$	2 x 1 / 2 / 3 / 4 / 5 / 6 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 50.000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No

Signaling and Communication

Signaling	2 x LED (green/red/orange); 1 x Remote control input (S1); 2 x active signal output (S2; S3)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence

Efficiency/Power Losses

Power loss P_1	≤ 0.85 W (no load); ≤ 5.5 W (2 x 6 A)
Efficiency (typ.)	99 %

Fuse Protection

Internal fuse	T 15 A per channel
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Safety and Protection/Environmental Requirements

Isolation voltage (connectors - housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	No derating
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	45 x 90 x 115.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	200 g

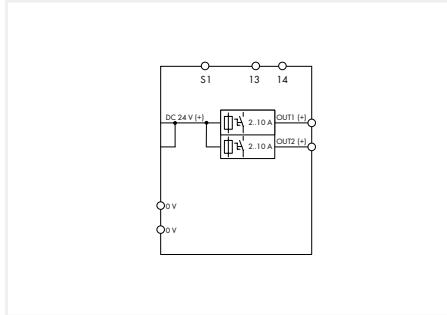
Standards and Specifications

Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL
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Electronic Circuit Breaker; 24 VDC / 2 ... 10 A 787 Series

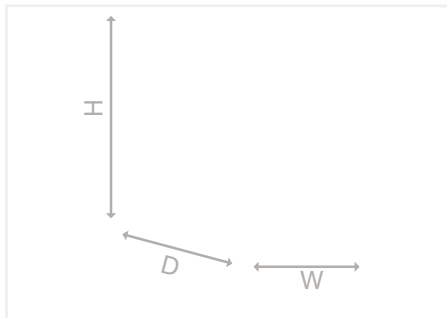


Similar to picture



Electronic circuit breaker; 2-channel; 24 VDC input voltage; adjustable 2 ... 10 A; Signal contact; Specialty configuration

Item No.	Pack. Unit
787-1662/000-054	1



Features:

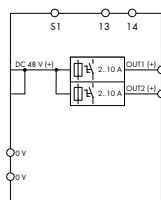
- Space-saving ECB with two channels
- Nominal current: 2 ... 10 A (adjustable for each channel via sealable selector switch)
- Switch-on capacity > 50.000 μ F per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Potential-free signal contact 13/14 reports "channel switched off" and "tripped channel" – does not support communication via pulse sequence

Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC
Output	
Total number of channels (module)	2
Nominal output voltage $U_{o, \text{nom}}$	2 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i – Voltage drop)
Voltage drop	\leq 200 mV (Input (+))
Nominal output current $I_{o, \text{nom}}$	2 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 50.000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Signaling and Communication	
Signaling	2 x LED (green/red/orange); 1 x Remote control input (S1); 1 x Group signal contact (13; 14)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms
Efficiency/Power Losses	
Power loss P_i	\leq 0.84 W (no load); \leq 5.5 W (2 x 10 A)
Efficiency (typ.)	99 %
Fuse Protection	
Internal fuse	T 15 A per channel
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	No derating
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	45 x 90 x 115.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	161 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL

Electronic Circuit Breaker; 48 VDC / 2 ... 10 A 787 Series

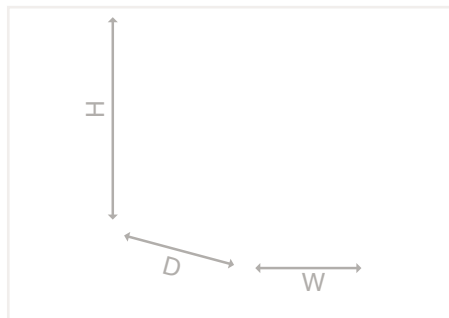


Similar to picture



Electronic Circuit Breaker; 2-channel; Input voltage: 48 VDC; adjustable 2 ... 10 A; Signal contact

Item No.	Pack. Unit
787-1662/000-250	1



Features:

- Space-saving ECB with two channels
- Nominal current: 2 ... 10 A (adjustable for each channel via sealable selector switch)
- Switch-on capacity > 23.000 μ F per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Remote input resets all tripped channels
- Potential-free signal contact 13/14 reports "channel switched off" and "tripped channel" – does not support communication via pulse sequence

Input

Nominal input voltage $U_{i, \text{nom}}$	48 VDC
Input voltage range	32 ... 58 VDC

Output

Total number of channels (module)	2
Nominal output voltage $U_{o, \text{nom}}$	2 x 48 VDC
Output voltage range	32 ... 58 VDC (U_i – Voltage drop)
Voltage drop	≤ 175 mV (Input (+))
Nominal output current $I_{o, \text{nom}}$	2 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 23.000 μ F per channel at 48 VDC, 2.5 mm ² cable cross section and 2.5 m cable length
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No

Signaling and Communication

Signaling	2 x LED (green/red/orange); 1 x Remote control input (S1); 1 x Group signal contact (13; 14)
Remote input	Reactivation of all tripped channels via 15 ... 58 VDC pulse for min. 500 ms

Efficiency/Power Losses

Power loss P_1	≤ 0.84 W (no load); ≤ 4.5 W (2 x 10 A)
Efficiency (typ.)	99 %

Fuse Protection

Internal fuse	T 15 A per channel
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Safety and Protection/Environmental Requirements

Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	No derating
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	45 x 90 x 115.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	170 g

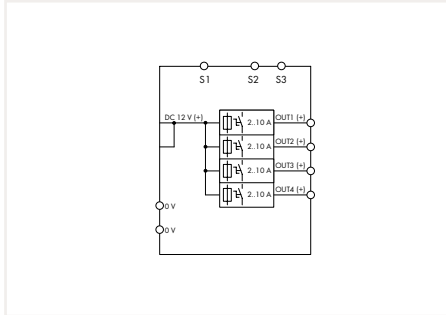
Standards and Specifications

Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL
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Electronic Circuit Breaker; 12 VDC / 2 ... 10 A 787 Series

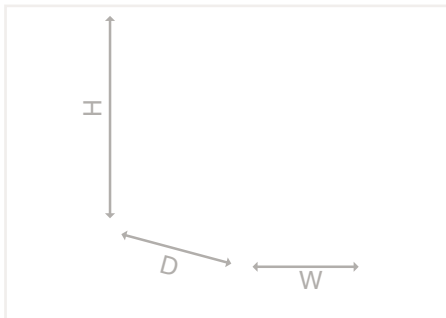


Similar to picture



Electronic circuit breaker; 4-channel; Nominal input voltage: 12 VDC; adjustable 2 ... 10 A; communication capability

Item No.	Pack. Unit
787-1664/000-100	1



Features:

- Space-saving ECB with four channels
- Nominal current: 2 ... 10 A (adjustable for each channel via sealable selector switch)
- Switch-on capacity > 50.000 μ F per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Status message for each channel via pulse sequence
- Remote input resets tripped channels or switches on/off any number of channels via pulse sequence

Input	
Nominal input voltage $U_{i, \text{nom}}$	12 VDC
Input voltage range	10 ... 16 VDC

Output	
Total number of channels (module)	4
Nominal output voltage $U_{o, \text{nom}}$	4 x 12 VDC
Output voltage range	10 ... 16 VDC (U_i - Voltage drop)
Voltage drop	\leq 200 mV (Input (+))
Nominal output current $I_{o, \text{nom}}$	4 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 50.000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No

Signaling and Communication	
Signaling	4 x LED (green/red/orange); 1 x Remote control input (S1); 2 x Active signal output (S2; S3)
Remote input	Reactivation of all tripped channels via 9 ... 30 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence

Efficiency/Power Losses	
Power loss P_i	\leq 0.53 W (no load); \leq 10 W (4 x 10 A)
Efficiency (typ.)	99 %

Fuse Protection	
Internal fuse	T 15 A per channel

Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	\geq +50 °C (see instruction manual)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

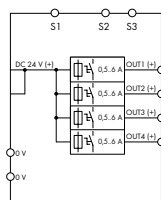
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	45 x 90 x 115.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	170 g

Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL

Electronic Circuit Breaker; with Active Current Limitation;

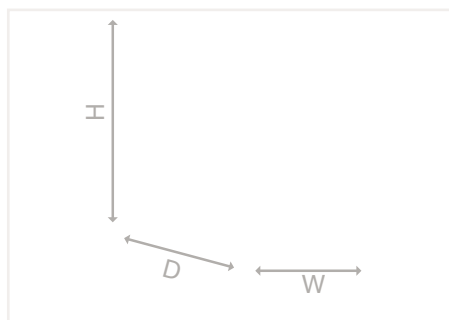
24 VDC / 0.5 ... 6 A

787 Series



Electronic circuit breaker; 4-channel; 24 VDC input voltage; adjustable 0.5 ... 6 A; active current limitation; communication capability

Item No.	Pack. Unit
787-1664/006-1000	1



Features:

- Space-saving ECB with four channels
- Nominal current: 0.5 ... 6 A (adjustable for each channel via sealable selector switch)
- Active current limitation
- High switch-on capacity per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Status message for each channel via pulse sequence
- Remote input resets all tripped channels
- Remote input for switching on/off any number of channels via pulse sequence

Input

Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC

Output

Total number of channels (module)	4
Nominal output voltage $U_{o, \text{nom}}$	4 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i - Voltage drop)
Voltage drop	≤ 145 mV (Input (+))
Nominal output current $I_{o, \text{nom}}$	4 x 0.5 / 1 / 2 / 3 / 4 / 6 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 5 s (load-dependent)
Switch-on capacity	> 65.000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	Yes
Current limitation	1.7 x $I_{o, \text{nom}}$ typ.

Signaling and Communication

Signaling	4 x LED (green/red/orange); 1 x Remote control input (S1); 2 x Active signal output (S2; S3)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence

Efficiency/Power Losses

Power loss P_I	≤ 0.77 W (no load); ≤ 4.3 W (4 x 6 A)
Efficiency (typ.)	99 %

Fuse Protection

Internal fuse	T 15 A per channel
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Safety and Protection/Environmental Requirements

Isolation voltage (connectors - housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	No derating
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	45 x 90 x 115.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	170 g

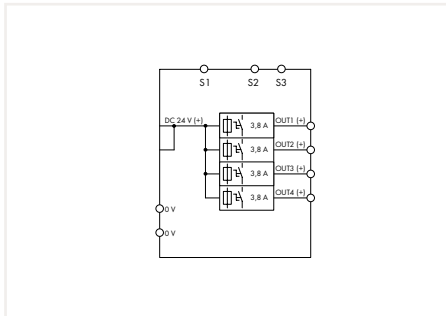
Standards and Specifications

Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL
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Electronic Circuit Breaker; with Active Current Limitation; 24 VDC / 3.8 A 787 Series

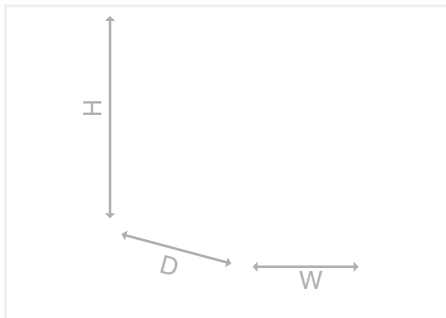


Similar to picture



Electronic circuit breaker; 4-channel; 24 VDC input voltage; 3.8 A; active current limitation; NEC Class 2; communication capability

Item No.	Pack. Unit
787-1664/004-1000	1



Features:

- Space-saving ECB with four channels
- Nominal current is fixed at 3.8 A for each channel
- Each output complies with NEC Class 2
- Active current limitation
- High switch-on capacity per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Status message for each signal via pulse sequence
- Remote input resets all tripped channels
- Remote input for switching on/off any number of channels via pulse sequence

Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	20 ... 28.8 VDC
Output	
Total number of channels (module)	4
Nominal output voltage $U_{o, \text{nom}}$	4 x 24 VDC
Output voltage range	20 ... 28.8 VDC (U_i - Voltage drop)
Voltage drop	≤ 150 mV (Input +)
Nominal output current $I_{o, \text{nom}}$	4 x 3.8 A (fixed setting; NEC Class 2 at 20 ... 24 VDC); 4 x 3.2 A (NEC Class 2 at 28 VDC)
Trip time	16 ms ... 4.7 s (load-dependent)
Switch-on capacity	> 65.000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	Yes
Current limitation	3.8 A (3.2 A at $U_o > 25$ VDC); LPS per NEC Class 2

Signaling and Communication	
Signaling	4 x LED (green/red/orange); 1 x Remote control input (S1); 2 x Active signal output (S2; S3)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence

Efficiency/Power Losses	
Power loss P_i	≤ 0.82 W (no load); ≤ 3.1 W (4 x 3.8 A)
Efficiency (typ.)	99 %

Fuse Protection	
Internal fuse	No

Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	No derating
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	45 x 90 x 115.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	205 g

Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367

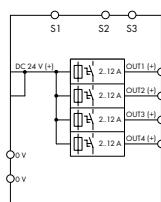
Electronic Circuit Breaker; with Active Current Limitation;

24 VDC / 2 ... 12 A

787 Series

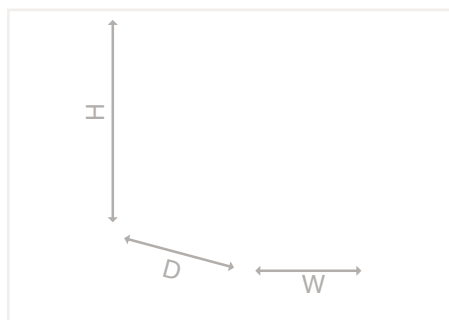


Similar to picture



Electronic circuit breaker; 4-channel; 24 VDC input voltage; adjustable 2 ... 12 A; active current limitation; communication capability

Item No.	Pack. Unit
787-1664/212-1000	1



Features:

- Space-saving ECB with four channels
- Nominal current: 2 ... 12 A (adjustable for each channel via sealable selector switch)
- Active current limitation
- High switch-on capacity per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Status message for each channel via pulse sequence
- Remote input resets all tripped channels
- Remote input for switching on/off any number of channels via pulse sequence

Input

Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC

Output

Total number of channels (module)	4
Nominal output voltage $U_{o, \text{nom}}$	4 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i - Voltage drop)
Voltage drop	≤ 240 mV (Input (+))
Nominal output current $I_{o, \text{nom}}$	4 x 2 / 4 / 6 / 8 / 10 / 12 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 5 s (load-dependent)
Switch-on capacity	> 65.000 μF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	Yes
Current limitation	$1.7 \times I_{o, \text{nom}}$ typ.

Signaling and Communication

Signaling	4 x LED (green/red/orange); 1 x Remote control input (S1); 2 x Active signal output (S2; S3)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence

Efficiency/Power Losses

Power loss P_I	≤ 0.77 W (no load); ≤ 12.3 W (4 x 12 A)
Efficiency (typ.)	99 %

Fuse Protection

Internal fuse	T 15 A per channel
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Safety and Protection/Environmental Requirements

Isolation voltage (connectors - housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	$-25 \dots +70$ °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	No derating
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	45 x 90 x 115.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	170 g

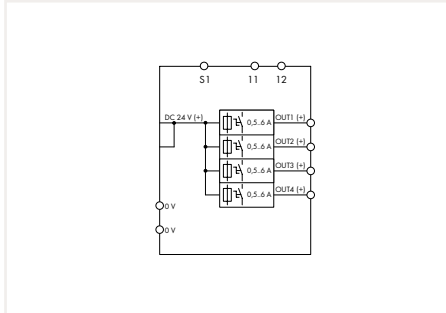
Standards and Specifications

Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL
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Electronic Circuit Breaker; with Active Current Limitation; 24 VDC / 0.5 ... 6 A 787 Series

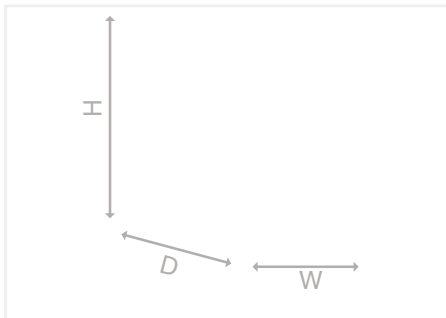


Similar to picture



Electronic circuit breaker; 4-channel; 24 VDC input voltage; adjustable 0.5 ... 6 A; active current limitation; Signal contact; Specialty configuration

Item No.	Pack. Unit
787-1664/006-1054	1



Features:

- Space-saving ECB with four channels
- Nominal current: 0.5 ... 6 A (adjustable for each channel via sealable selector switch)
- Active current limitation
- High switch-on capacity per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Remote input resets all tripped channels
- Potential-free signal contact 11/12 reports "channel switched off" and "tripped channel" – does not support communication via pulse sequence

Input	
Nominal input voltage $U_{i, nom}$	24 VDC
Input voltage range	18 ... 30 VDC
Output	
Total number of channels (module)	4
Nominal output voltage $U_{o, nom}$	4 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i – Voltage drop)
Voltage drop	≤ 145 mV (Input +)
Nominal output current $I_{o, nom}$	4 x 0.5 / 1 / 2 / 3 / 4 / 6 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 5 s (load-dependent)
Switch-on capacity	> 58.000 μF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	Yes
Current limitation	1.3 x $I_{o, nom}$ typ.

Signaling and Communication	
Signaling	4 x LED (green/red/orange); 1 x Remote control input (S1); 1 x Group signal contact (11; 12)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms

Efficiency/Power Losses	
Power loss P_i	≤ 0.77 W (no load); ≤ 4.3 W (4 x 6 A)
Efficiency (typ.)	99 %

Fuse Protection	
Internal fuse	T 15 A per channel

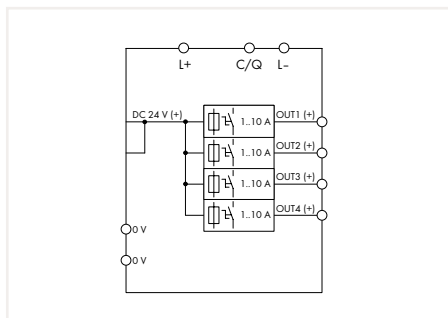
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	No derating
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	45 x 90 x 115.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	170 g

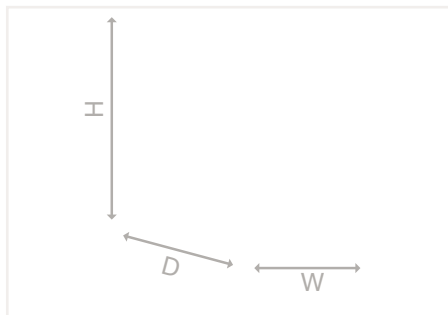
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL

Electronic Circuit Breaker; 24 VDC / 1 ... 10 A 787 Series



Electronic circuit breaker; 4-channel; 24 VDC input voltage; adjustable 1 ... 10 A; IO-Link

Item No.	Pack. Unit
787-1664/000-080	1



Features:

- Space-saving ECB with four channels
- Nominal current: 1 ... 10 A (adjustable for each channel via sealable selector switch or IO-Link interface)
- Switch-on capacity > 50.000 µF per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Status message and current measurement of each individual channel via IO-Link interface
- Switch on/off each channel separately via IO-Link interface

Input

Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC

Output

Total number of channels (module)	4
Nominal output voltage $U_{o, \text{nom}}$	4 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i - Voltage drop)
Voltage drop	≤ 200 mV (Input +)
Nominal output current $I_{o, \text{nom}}$	4 x 1 / 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via IO-Link interface; 1, 2, 4, 6, 10 A (adjustable for each channel via selector switch))
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 50.000 µF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No

Signaling and Communication

Signaling	4 x LED (green/red/orange); 1 x IO-Link interface
Remote input	Switching on/off any number of channels via IO-Link interface

Efficiency/Power Losses

Power loss P_i	≤ 0.84 W (no load); ≤ 10 W (4 x 10 A)
Efficiency (typ.)	99 %

Fuse Protection

Internal fuse	T 15 A per channel
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Safety and Protection/Environmental Requirements

Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	≥ +50 °C (see instruction manual)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

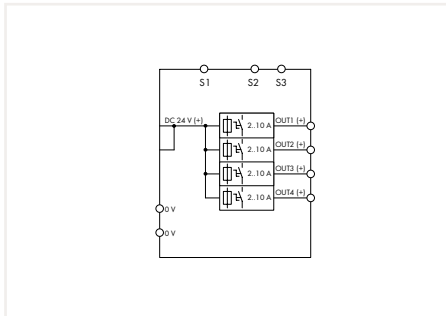
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	45 x 90 x 115.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	170 g

Standards and Specifications

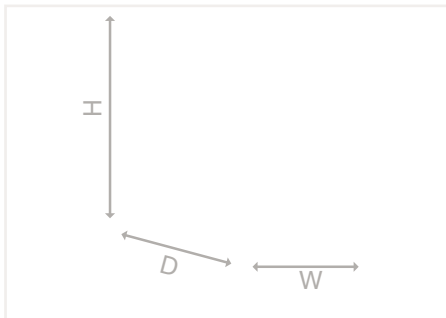
Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL
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Electronic Circuit Breaker; 24 VDC / 2 ... 10 A 787 Series



Electronic circuit breaker; 4-channel; 24 VDC input voltage; adjustable 2 ... 10 A; communication capability

Item No.	Pack. Unit
787-1664	1

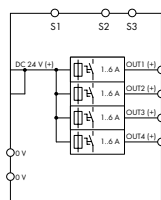


Features:

- ECB with four channels, parametrizable
- Time-delayed switching of channels
- Tripped message (group signal)
- Remote input resets all tripped channels
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Status message for each channel via pulse sequence
- Remote input for switching on/off any number of channels via pulse sequence

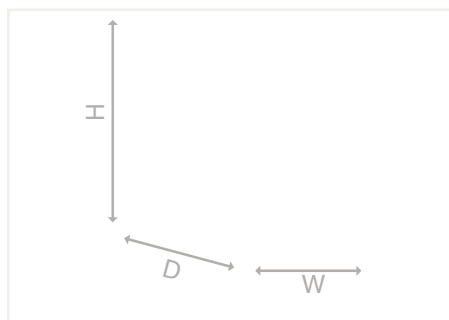
Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC
Output	
Total number of channels (module)	4
Nominal output voltage $U_{o, \text{nom}}$	4 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i - Voltage drop)
Voltage drop	≤ 200 mV (Input (+))
Nominal output current $I_{o, \text{nom}}$	4 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 50.000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Signaling and Communication	
Signaling	4 x LED (green/red/orange); 1 x Remote control input (S1); 2 x Active signal output (S2; S3)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence
Efficiency/Power Losses	
Power loss P_i	≤ 0.84 W (no load); ≤ 10 W (4 x 10 A)
Efficiency (typ.)	99 %
Fuse Protection	
Internal fuse	T 15 A per channel
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors - housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$\geq +50$ °C (see instruction manual)
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	45 x 90 x 115.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	170 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL

Electronic Circuit Breaker; 24 VDC / 1 ... 6 A 787 Series



Electronic circuit breaker; 4-channel; 24 VDC input voltage; adjustable 1 ... 6 A; communication capability

Item No.	Pack. Unit
787-1664/106-000	1



Features:

- ECB with four channels, parametrizable
- Time-delayed switching of channels
- Tripped message (group signal)
- Remote input resets all tripped channels
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Status message for each channel via pulse sequence
- Remote input for switching on/off any number of channels via pulse sequence

Input

Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC

Output

Total number of channels (module)	4
Nominal output voltage $U_{o, \text{nom}}$	4 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i - Voltage drop)
Voltage drop	≤ 120 mV (Input (+))
Nominal output current $I_{o, \text{nom}}$	4 x 1 / 2 / 3 / 4 / 5 / 6 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 50.000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No

Signaling and Communication

Signaling	4 x LED (green/red/orange); 1 x Remote control input (S1); 2 x Active signal output (S2; S3)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence

Efficiency/Power Losses

Power loss P_1	≤ 0.84 W (no load); ≤ 4.2 W (4 x 6 A)
Efficiency (typ.)	99 %

Fuse Protection

Internal fuse	T 15 A per channel
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Safety and Protection/Environmental Requirements

Isolation voltage (connectors - housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	No derating
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	45 x 90 x 115.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	210 g

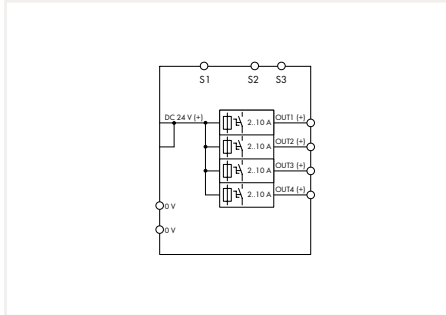
Standards and Specifications

Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL
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Electronic Circuit Breaker; 24 VDC / 2 ... 10 A 787 Series

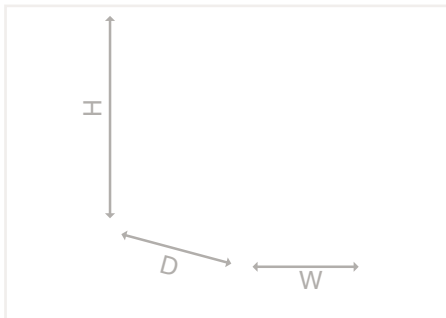


Similar to picture



Electronic circuit breaker; 4-channel; 24 VDC input voltage; adjustable 2 ... 10 A; communication capability; Specialty configuration

Item No.	Pack. Unit
787-1664/000-004	1



Features:

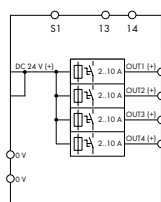
- ECB with four channels, parametrizable
- Time-delayed switching of channels
- Tripped message (group signal)
- Remote input resets all tripped channels
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Status message for each channel via pulse sequence
- Remote input for switching on/off any number of channels via pulse sequence
- Group signal S3 reports "channel switched off" and "tripped channel"

Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC
Output	
Total number of channels (module)	4
Nominal output voltage $U_{o, \text{nom}}$	4 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i - Voltage drop)
Voltage drop	≤ 200 mV (Input +)
Nominal output current $I_{o, \text{nom}}$	4 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 50.000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Signaling and Communication	
Signaling	4 x LED (green/red/orange); 1 x Remote control input (S1); 2 x Active signal output (S2; S3)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence
Efficiency/Power Losses	
Power loss P_i	≤ 0.84 W (no load); ≤ 10 W (4 x 10 A)
Efficiency (typ.)	99 %
Fuse Protection	
Internal fuse	T 15 A per channel
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors - housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$\geq +50$ °C (see instruction manual)
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	45 x 90 x 115.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	161 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL

Electronic Circuit Breaker; 24 VDC / 2 ... 10 A 787 Series

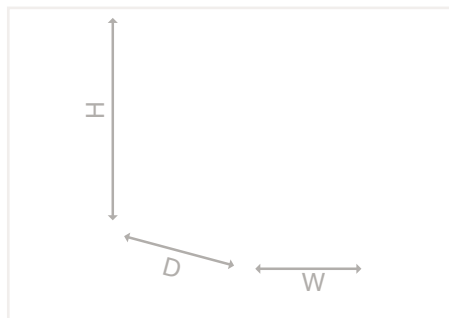


Similar to picture



Electronic circuit breaker; 4-channel; 24 VDC input voltage; adjustable 2 ... 10 A; Signal contact; Specialty configuration

Item No.	Pack. Unit
787-1664/000-054	1



Features:

- ECB with four channels, parametrizable
- Time-delayed switching of channels
- Potential-free signal contact 13 / 14 reports "channel switched off" and "tripped channel" – does not support communication via pulse sequence
- Tripped message (group signal)
- Remote input resets all tripped channels
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics

Input

Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC

Output

Total number of channels (module)	4
Nominal output voltage $U_{o, \text{nom}}$	4 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i – Voltage drop)
Voltage drop	≤ 200 mV (Input (+))
Nominal output current $I_{o, \text{nom}}$	4 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 50.000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No

Signaling and Communication

Signaling	4 x LED (green/red/orange); 1 x Remote control input (S1); 1 x Group signal contact (13; 14)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms

Efficiency/Power Losses

Power loss P_i	≤ 0.84 W (no load); ≤ 10 W (4 x 10 A)
Efficiency (typ.)	99 %

Fuse Protection

Internal fuse	T 15 A per channel
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Safety and Protection/Environmental Requirements

Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$\geq +50$ °C (see instruction manual)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	45 x 90 x 115.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	170 g

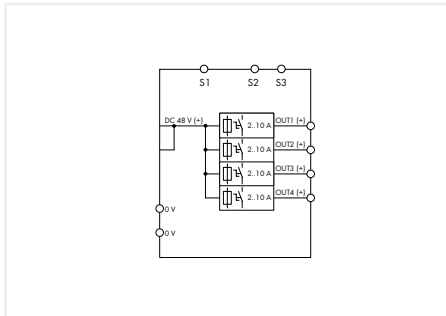
Standards and Specifications

Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL
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Electronic Circuit Breaker; 48 VDC / 2 ... 10 A 787 Series

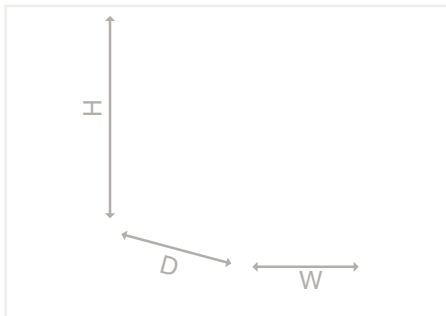


Similar to picture



Electronic circuit breaker; 4-channel; 48 VDC input voltage; adjustable 2 ... 10 A; communication capability

Item No.	Pack. Unit
787-1664/000-200	1



Features:

- Space-saving ECB with four channels
- Nominal current: 2 ... 10 A (adjustable for each channel via sealable selector switch)
- Switch-on capacity > 23.000 µF per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Status message for each channel via pulse sequence
- Remote input resets all tripped channels
- Remote input for switching on/off any number of channels via pulse sequence

Input	
Nominal input voltage $U_{i, \text{nom}}$	48 VDC
Input voltage range	32 ... 58 VDC
Output	
Total number of channels (module)	4
Nominal output voltage $U_{o, \text{nom}}$	4 x 48 VDC
Output voltage range	32 ... 58 VDC (U_i - Voltage drop)
Voltage drop	≤ 175 mV (Input +)
Nominal output current $I_{o, \text{nom}}$	4 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 23.000 µF per channel at 48 VDC, 2.5 mm ² cable cross section and 2.5 m cable length
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No

Signaling and Communication	
Signaling	4 x LED (green/red/orange); 1 x Remote control input (S1); 2 x Active signal output (S2; S3)
Remote input	Reactivation of all tripped channels via 15 ... 58 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence

Efficiency/Power Losses	
Power loss P_i	≤ 0.84 W (no load); ≤ 8 W (4 x 10 A)
Efficiency (typ.)	99 %

Fuse Protection	
Internal fuse	T 15 A per channel

Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	≥ +50 °C (see instruction manual)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

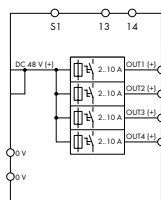
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	45 x 90 x 115.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	170 g

Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL

Electronic Circuit Breaker; 48 VDC / 2 ... 10 A 787 Series

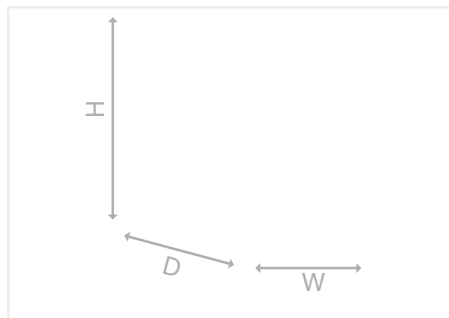


Similar to picture



Electronic circuit breaker; 4-channel; 48 VDC input voltage; adjustable 2 ... 10 A; Signal contact

Item No.	Pack. Unit
787-1664/000-250	1



Features:

- Space-saving ECB with four channels
- Nominal current: 2 ... 10 A (adjustable for each channel via sealable selector switch)
- Switch-on capacity > 23.000 μ F per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Remote input resets all tripped channels
- Potential-free signal contact 13 / 14 reports "channel switched off" and "tripped channel" – does not support communication via pulse sequence

Input

Nominal input voltage $U_{i, \text{nom}}$	48 VDC
Input voltage range	32 ... 58 VDC

Output

Total number of channels (module)	4
Nominal output voltage $U_{o, \text{nom}}$	4 x 48 VDC
Output voltage range	32 ... 58 VDC (U_i – Voltage drop)
Voltage drop	≤ 175 mV (Input (+))
Nominal output current $I_{o, \text{nom}}$	4 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 23.000 μ F per channel at 48 VDC, 2.5 mm ² cable cross section and 2.5 m cable length
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No

Signaling and Communication

Signaling	4 x LED (green/red/orange); 1 x Remote control input (S1); 1 x Group signal contact (13; 14)
Remote input	Reactivation of all tripped channels via 15 ... 58 VDC pulse for min. 500 ms

Efficiency/Power Losses

Power loss P_1	≤ 0.84 W (no load); ≤ 8 W (4 x 10 A)
Efficiency (typ.)	99 %

Fuse Protection

Internal fuse	T 15 A per channel
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Safety and Protection/Environmental Requirements

Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$\geq +50$ °C (see instruction manual)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

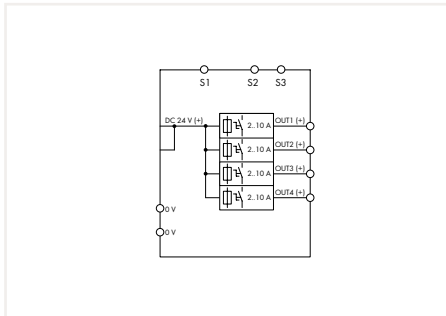
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	45 x 90 x 115.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	170 g

Standards and Specifications

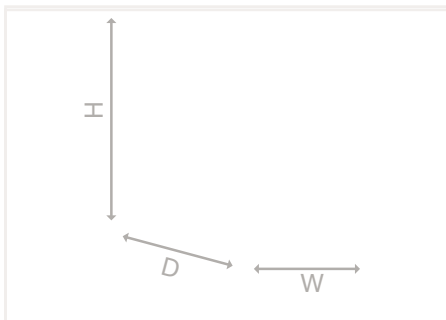
Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL
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Electronic Circuit Breaker; 24 VDC / 2 ... 10 A; NPN Signaling 787 Series



Electronic circuit breaker; 4-channel; 24 VDC input voltage; adjustable 2 ... 10 A; communication capability; NPN signaling

Item No.	Pack. Unit
787-1664/000-011	1

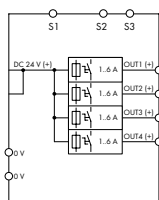


Features:

- WAGO ECB with four channels, parametrizable
- Signal and control contacts with inverted logic (low-side switching signal outputs)
- Time-delayed switching of channels
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Message reports status for each channel via pulse sequence
- Group signal reports "channel switched off" and "tripped channel"
- Remote control input for switching on/off any number of channels via pulse sequence
- Remote control input for resetting all tripped channels

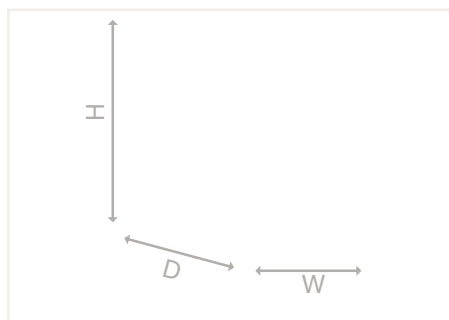
Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC
Output	
Total number of channels (module)	4
Nominal output voltage $U_{o, \text{nom}}$	4 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i - Voltage drop)
Voltage drop	≤ 200 mV (Input +)
Nominal output current $I_{o, \text{nom}}$	4 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 50000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Signaling and Communication	
Signaling	4 x LED (green/red/orange); 1 x remote control input with inverted logic (S1); 2 x active signal output, low-side switching (S2; S3)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence
Efficiency/Power Losses	
Power loss P_i	≤ 0.84 W (no load); ≤ 10 W (4 x 10 A)
Efficiency (typ.)	99 %
Fuse Protection	
Internal fuse	T 15 A per channel
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors - housing)	500 VDC
Protection class/type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	≥ 50 °C (see instruction manual)
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Physical Data/Mechanical Data/Material Data	
Width x Height x Depth (mm)	45 x 90 x 115.5; Depth from upper-edge of DIN-35 rail
Mounting type	DIN-35 rail
Weight	170 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL

Electronic Circuit Breaker; 24 VDC / 1 ... 6 A; NPN Signaling 787 Series



Electronic circuit breaker; 4-channel; 24 VDC input voltage; adjustable 1 ... 6 A; communication capability; NPN signaling

Item No.	Pack. Unit
787-1664/106-011	1



Features:

- WAGO ECB with four channels, parametrizable
- Signal and control contacts with inverted logic (low-side switching signal outputs)
- Time-delayed switching of channels
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Message reports status for each channel via pulse sequence
- Group signal reports "channel switched off" and "tripped channel"
- Remote control input for switching on/off any number of channels via pulse sequence
- Remote control input for resetting all tripped channels

Input

Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC

Output

Total number of channels (module)	4
Nominal output voltage $U_{o, \text{nom}}$	4 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i - Voltage drop)
Voltage drop	≤ 120 mV (Input (+))
Nominal output current $I_{o, \text{nom}}$	4 x 1 / 2 / 3 / 4 / 5 / 6 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 50000 μF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No

Signaling and Communication

Signaling	4 x LED (green/red/orange); 1 x remote control input with inverted logic (S1); 2 x active signal output, low-side switching (S2; S3)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence

Efficiency/Power Losses

Power loss P_i	≤ 0.84 W (no load); ≤ 4.2 W (4 x 6 A)
Efficiency (typ.)	99 %

Fuse Protection

Internal fuse	T 15 A per channel
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Safety and Protection/Environmental Requirements

Isolation voltage (connectors - housing)	500 VDC
Protection class/type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	No derating
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Physical Data/Mechanical Data/Material Data

Width x Height x Depth (mm)	45 x 90 x 115.5; Depth from upper-edge of DIN-35 rail
Mounting type	DIN-35 rail
Weight	170 g

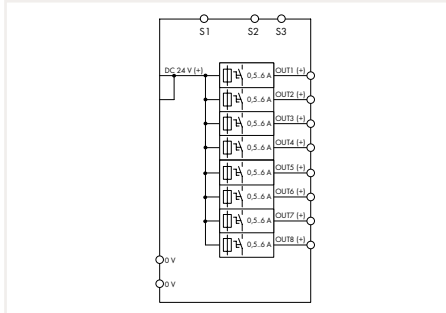
Standards and Specifications

Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL
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Electronic Circuit Breaker; with Active Current Limitation; 24 VDC / 0.5 ... 6 A 787 Series

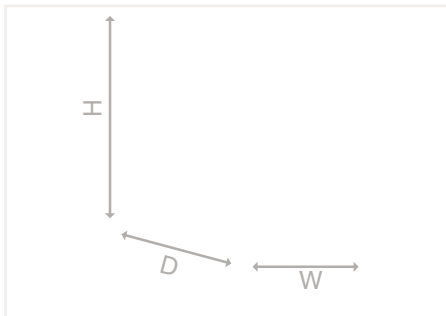


Similar to picture



Electronic circuit breaker; 8-channel; 24 VDC input voltage; adjustable 0.5 ... 6 A; active current limitation; communication capability

Item No.	Pack. Unit
787-1668/006-1000	1



Features:

- Space-saving ECB with eight channels
- Nominal current: 0.5 ... 6 A (adjustable for each channel via sealable selector switch)
- Active current limitation
- Switch-on capacity > 65.000 µF per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Status message for each signal via pulse sequence
- Remote input resets all tripped channels
- Remote input for switching on/off any number of channels via pulse sequence

Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC
Output	
Total number of channels (module)	8
Nominal output voltage $U_{o, \text{nom}}$	8 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i - Voltage drop)
Voltage drop	≤ 155 mV (Input +)
Nominal output current $I_{o, \text{nom}}$	8 x 0.5 / 1 / 2 / 3 / 4 / 6 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 5 s (load-dependent)
Switch-on capacity	> 65.000 µF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	Yes
Current limitation	1.7 x $I_{o, \text{nom}}$ typ.

Signaling and Communication	
Signaling	8 x LED (green/red/orange); 1 x Remote control input (S1); 2 x Active signal output (S2; S3)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence

Efficiency/Power Losses	
Power loss P_i	≤ 1.15 W (no load); ≤ 8.6 W (8 x 6 A)
Efficiency (typ.)	99 %

Fuse Protection	
Internal fuse	T 15 A per channel

Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	No derating
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	42 x 127 x 142.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	440 g

Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL

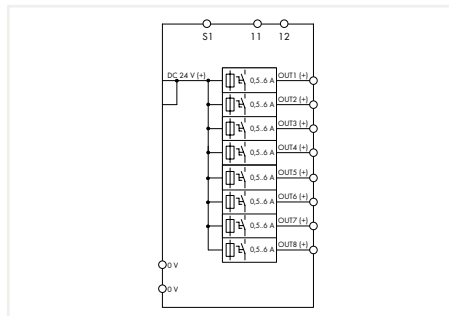
Electronic Circuit Breaker; with Active Current Limitation;

24 VDC / 0.5 ... 6 A

787 Series

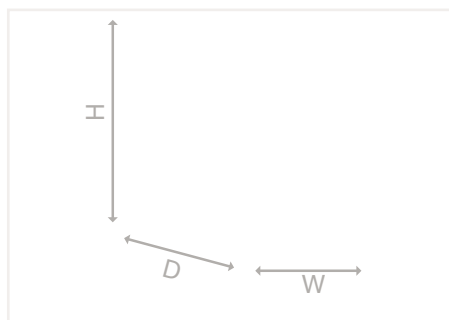


Similar to picture



Electronic circuit breaker; 8-channel; 24 VDC input voltage; adjustable 0.5 ... 6 A; active current limitation; communication capability; Specialty configuration

Item No.	Pack. Unit
787-1668/006-1054	1



Features:

- Space-saving ECB with eight channels
- Nominal current: 0.5 ... 6 A (adjustable for each channel via sealable selector switch)
- Active current limitation
- Switch-on capacity > 65.000 µF per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Remote input resets all tripped channels
- Potential-free signal contact 11/12 reports "channel switched off" and "tripped channel" – does not support communication via pulse sequence

Input

Nominal input voltage $U_{i, nom}$	24 VDC
Input voltage range	18 ... 30 VDC

Output

Total number of channels (module)	8
Nominal output voltage $U_{o, nom}$	8 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i – Voltage drop)
Voltage drop	≤ 155 mV (Input +)
Nominal output current $I_{o, nom}$	8 x 0.5 / 1 / 2 / 3 / 4 / 6 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 5 s (load-dependent)
Switch-on capacity	> 58.000 µF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	Yes
Current limitation	1.3 x $I_{o, nom}$ typ.

Signaling and Communication

Signaling	8 x LED (green/red/orange); 1 x Remote control input (S1); 1 x Group signal contact (11; 12)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms

Efficiency/Power Losses

Power loss P_i	≤ 1.15 W (no load); ≤ 8.6 W (8 x 6 A)
Efficiency (typ.)	99 %

Fuse Protection

Internal fuse	T 15 A per channel
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Safety and Protection/Environmental Requirements

Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	No derating
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	42 x 127 x 142.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	440 g

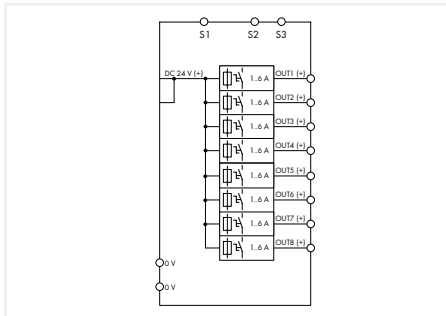
Standards and Specifications

Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL
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Electronic Circuit Breaker; 24 VDC / 1 ... 6 A 787 Series

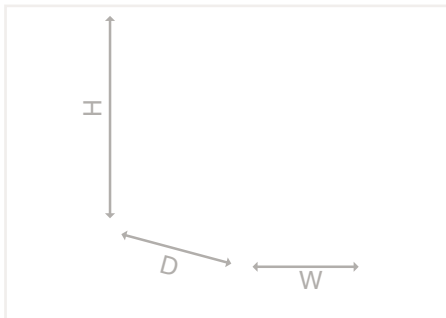


Similar to picture



Electronic circuit breaker; 8-channel; 24 VDC input voltage; adjustable 1 ... 6 A; communication capability

Item No.	Pack. Unit
787-1668/106-000	1



Features:

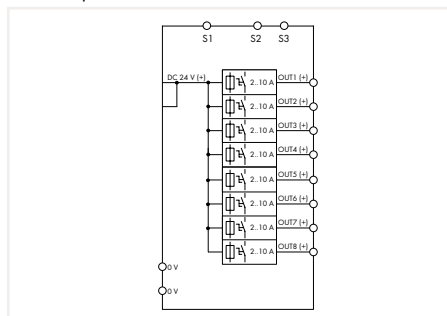
- Space-saving ECB with eight channels
- Nominal current: 1 ... 6 A (adjustable for each channel via sealable selector switch)
- Switch-on capacity > 50.000 μ F per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Status message for each channel via pulse sequence
- Remote input resets all tripped channels
- Remote input for switching on/off any number of channels via pulse sequence

Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC
Output	
Total number of channels (module)	8
Nominal output voltage $U_{o, \text{nom}}$	8 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i - Voltage drop)
Voltage drop	≤ 120 mV (Input +)
Nominal output current $I_{o, \text{nom}}$	8 x 1 / 2 / 3 / 4 / 5 / 6 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 50.000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Signaling and Communication	
Signaling	8 x LED (green/red/orange); 1 x Remote control input (S1); 2 x Active signal output (S2; S3)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence
Efficiency/Power Losses	
Power loss P_i	≤ 1.32 W (no load); ≤ 8 W (8 x 6 A)
Efficiency (typ.)	99 %
Fuse Protection	
Internal fuse	T 15 A per channel
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors - housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	No derating
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	42 x 127 x 142.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	490 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL

Electronic Circuit Breaker; 24 VDC / 2 ... 10 A 787 Series

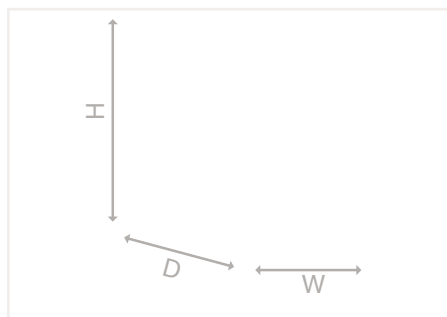


Similar to picture



Electronic circuit breaker; 8-channel; 24 VDC input voltage; adjustable 2 ... 10 A; communication capability

Item No.	Pack. Unit
787-1668	1



Features:

- Space-saving ECB with eight channels
- Nominal current: 2 ... 10 A (adjustable for each channel via sealable selector switch)
- Switch-on capacity > 50.000 µF per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Status message for each channel via pulse sequence
- Remote input resets all tripped channels
- Remote input for switching on/off any number of channels via pulse sequence

Input

Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC

Output

Total number of channels (module)	8
Nominal output voltage $U_{o, \text{nom}}$	8 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i - Voltage drop)
Voltage drop	≤ 200 mV (Input (+))
Nominal output current $I_{o, \text{nom}}$	8 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 50.000 µF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No

Signaling and Communication

Signaling	8 x LED (green/red/orange); 1 x Remote control input (S1); 2 x Active signal output (S2; S3)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence

Efficiency/Power Losses

Power loss P_1	≤ 1.3 W (no load); ≤ 20 W (8 x 10 A)
Efficiency (typ.)	99 %

Fuse Protection

Internal fuse	T 15 A per channel
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Safety and Protection/Environmental Requirements

Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	≥ +50 °C (see instruction manual)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	42 x 127 x 142.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	440 g

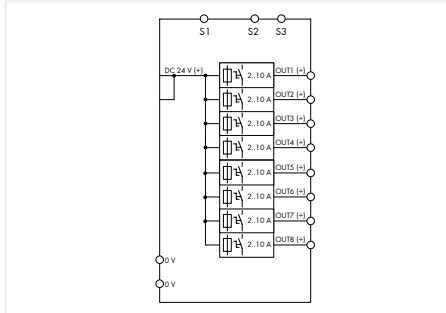
Standards and Specifications

Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL
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Electronic Circuit Breaker; 24 VDC / 2 ... 10 A 787 Series

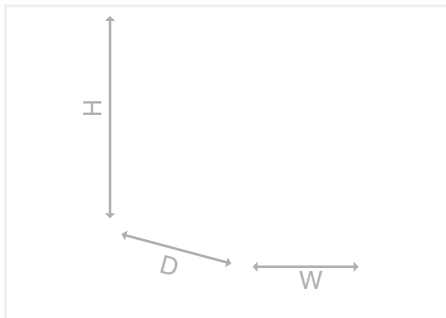


Similar to picture



Electronic circuit breaker; 8-channel; 24 VDC input voltage; adjustable 2 ... 10 A; communication capability; Specialty configuration

Item No.	Pack. Unit
787-1668/000-004	1



Features:

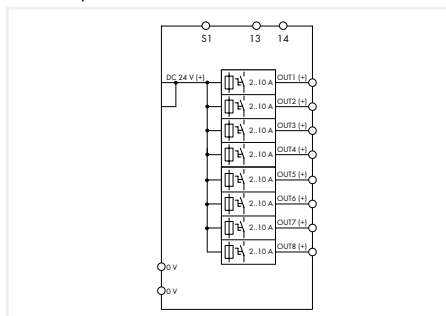
- Space-saving ECB with eight channels
- Nominal current: 2 ... 10 A (adjustable for each channel via sealable selector switch)
- Switch-on capacity > 50.000 μ F per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Status message for each channel via pulse sequence
- Remote input resets all tripped channels
- Remote input for switching on/off any number of channels via pulse sequence
- Group signal S3 reports "channel switched off" and "tripped channel"

Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC
Output	
Total number of channels (module)	8
Nominal output voltage $U_{o, \text{nom}}$	8 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i - Voltage drop)
Voltage drop	≤ 200 mV (Input +)
Nominal output current $I_{o, \text{nom}}$	8 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 50.000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Signaling and Communication	
Signaling	8 x LED (green/red/orange); 1 x Remote control input (S1); 2 x Active signal output (S2; S3)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence
Efficiency/Power Losses	
Power loss P_i	≤ 1.3 W (no load); ≤ 20 W (8 x 10 A)
Efficiency (typ.)	99 %
Fuse Protection	
Internal fuse	T 15 A per channel
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors - housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$\geq +50$ °C (see instruction manual)
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	42 x 127 x 142.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	420 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL

Electronic Circuit Breaker; 24 VDC / 2 ... 10 A 787 Series

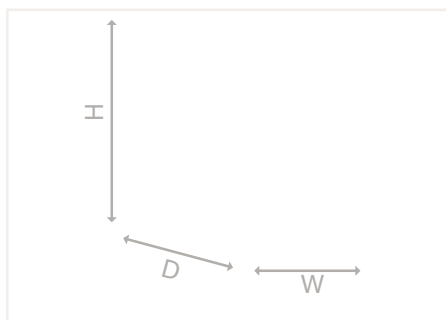


Similar to picture



Electronic circuit breaker; 8-channel; 24 VDC input voltage; adjustable 2 ... 10 A; Signal contact; Specialty configuration

Item No.	Pack. Unit
787-1668/000-054	1



Features:

- Space-saving ECB with eight channels
- Nominal current: 2 ... 10 A (adjustable for each channel via sealable selector switch)
- Switch-on capacity > 50.000 µF per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Remote input resets all tripped channels
- Potential-free signal contact 13 / 14 reports "channel switched off" and "tripped channel" – does not support communication via pulse sequence.

Input

Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC

Output

Total number of channels (module)	8
Nominal output voltage $U_{o, \text{nom}}$	8 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i – Voltage drop)
Voltage drop	≤ 200 mV (Input (+))
Nominal output current $I_{o, \text{nom}}$	8 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch; max. 70 A in total)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 50.000 µF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No

Signaling and Communication

Signaling	8 x LED (green/red/orange); 1 x Remote control input (S1); 1 x Group signal contact (13; 14)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms

Efficiency/Power Losses

Power loss P_i	≤ 1.32 W (no load); ≤ 20 W (8 x 10 A)
Efficiency (typ.)	99 %

Fuse Protection

Internal fuse	T 15 A per channel
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Safety and Protection/Environmental Requirements

Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	≥ +50 °C (see instruction manual)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	42 x 127 x 142.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	440 g

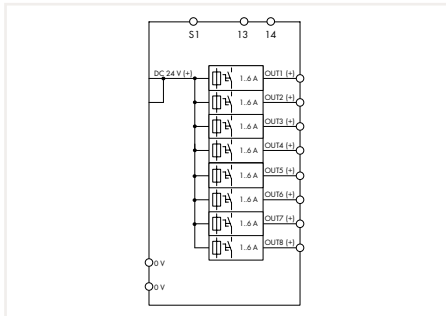
Standards and Specifications

Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL
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Electronic Circuit Breaker; 24 VDC / 1 ... 6 A 787 Series

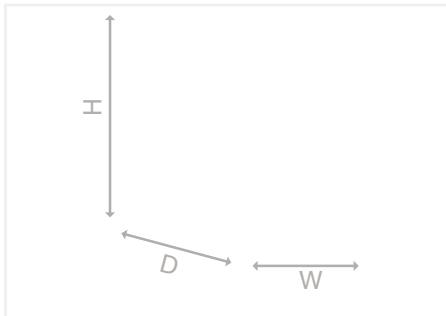


Similar to picture



Electronic circuit breaker; 8-channel; 24 VDC input voltage; adjustable 1 ... 6 A; Signal contact

Item No.	Pack. Unit
787-1668/106-054	1



Features:

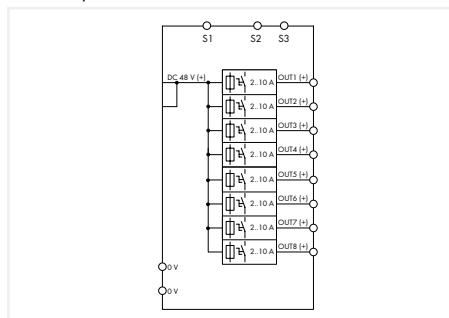
- Space-saving ECB with eight channels
- Nominal current: 1 ... 6 A (adjustable for each channel via sealable selector switch)
- Switch-on capacity > 50.000 μ F per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Remote input resets all tripped channels
- Potential-free signal contact 13/14 reports "channel switched off" and "tripped channel" – does not support communication via pulse sequence

Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC
Output	
Total number of channels (module)	8
Nominal output voltage $U_{o, \text{nom}}$	8 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i – Voltage drop)
Voltage drop	≤ 120 mV (Input +)
Nominal output current $I_{o, \text{nom}}$	8 x 1 / 2 / 3 / 4 / 5 / 6 A (adjustable for each channel via selector switch)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 50.000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Signaling and Communication	
Signaling	8 x LED (green/red/orange); 1 x Remote control input (S1); 1 x Group signal contact (13; 14)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms
Efficiency/Power Losses	
Power loss P_i	≤ 0.84 W (no load); ≤ 8 W (8 x 6 A)
Efficiency (typ.)	99 %
Fuse Protection	
Internal fuse	T 15 A per channel
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	No derating
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	42 x 127 x 142.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	440 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508*; UL 2367*; DNV GL (*pending)

Electronic Circuit Breaker; 48 VDC / 2 ... 10 A 787 Series

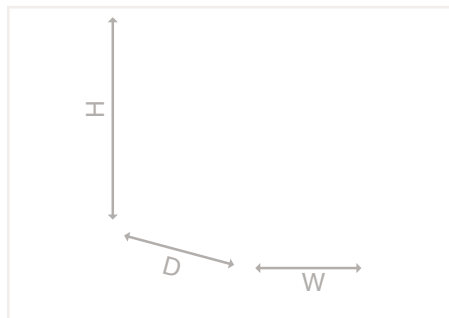


Similar to picture



Electronic circuit breaker; 8-channel; 48 VDC input voltage; adjustable 2 ... 10 A; Signal contact

Item No.	Pack. Unit
787-1668/000-200	1



Features:

- Space-saving ECB with eight channels
- Nominal current: 2 ... 10 A (adjustable for each channel via sealable selector switch)
- Switch-on capacity > 23.000 μ F per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Status message for each channel via pulse sequence
- Remote input for switching on/off any number of channels via pulse sequence

Input

Nominal input voltage $U_{i, \text{nom}}$	48 VDC
Input voltage range	32 ... 58 VDC

Output

Total number of channels (module)	8
Nominal output voltage $U_{o, \text{nom}}$	8 x 48 VDC
Output voltage range	32 ... 58 VDC (U_i - Voltage drop)
Voltage drop	≤ 200 mV (Input +)
Nominal output current $I_{o, \text{nom}}$	8 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch; max. 70 A in total)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 23.000 μ F per channel at 48 VDC, 2.5 mm ² cable cross section and 2.5 m cable length
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No

Signaling and Communication

Signaling	8 x LED (green/red/orange); 1 x Remote control input (S1); 2 x Active signal output (S2; S3)
Remote input	Reactivation of all tripped channels via 15 ... 58 VDC pulse for min. 500 ms; Switching on/off any number of channels via pulse sequence

Efficiency/Power Losses

Power loss P_i	≤ 1.3 W (no load); ≤ 20 W (8 x 10 A)
Efficiency (typ.)	99 %

Fuse Protection

Internal fuse	T 15 A per channel
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Safety and Protection/Environmental Requirements

Isolation voltage (connectors - housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	$\geq +50$ °C (see instruction manual)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	42 x 127 x 142.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	440 g

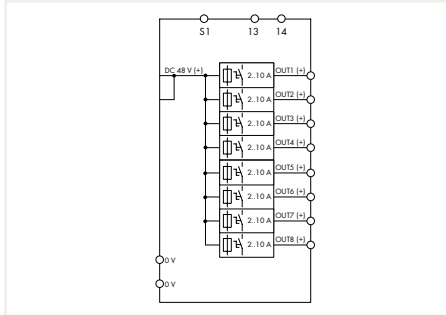
Standards and Specifications

Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL
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Electronic Circuit Breaker; 48 VDC / 2 ... 10 A 787 Series

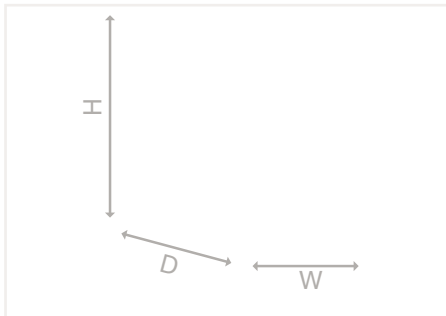


Similar to picture



Electronic circuit breaker; 8-channel; 48 VDC input voltage; adjustable 2 ... 10 A; Signal contact

Item No.	Pack. Unit
787-1668/000-250	1

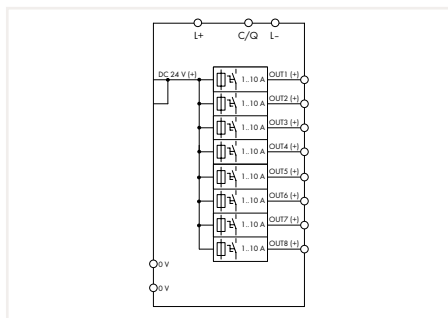


Features:

- Space-saving ECB with eight channels
- Nominal current: 2 ... 10 A (adjustable for each channel via sealable selector switch)
- Switch-on capacity > 23.000 μ F per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Potential-free signal contact 13 / 14 reports "channel switched off" and "tripped channel" – does not support communication via pulse sequence

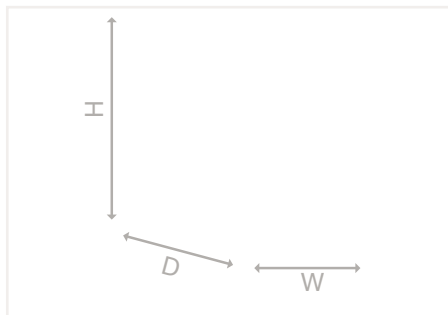
Input	
Nominal input voltage $U_{i, \text{nom}}$	48 VDC
Input voltage range	32 ... 58 VDC
Output	
Total number of channels (module)	8
Nominal output voltage $U_{o, \text{nom}}$	8 x 48 VDC
Output voltage range	32 ... 58 VDC (U_i - Voltage drop)
Voltage drop	\leq 200 mV (Input +)
Nominal output current $I_{o, \text{nom}}$	8 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch; max. 70 A in total)
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 23.000 μ F per channel at 48 VDC, 2.5 mm ² cable cross section and 2.5 m cable length
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Signaling and Communication	
Signaling	8 x LED (green/red/orange); 1 x Remote control input (S1); 1 x Group signal contact (13; 14)
Remote input	Reactivation of all tripped channels via 15 ... 58 VDC pulse for min. 500 ms
Efficiency/Power Losses	
Power loss P_i	\leq 1.3 W (no load); \leq 20 W (8 x 10 A)
Efficiency (typ.)	99 %
Fuse Protection	
Internal fuse	T 15 A per channel
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	\geq +50 °C (see instruction manual)
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	42 x 127 x 142.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	440 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL

Electronic Circuit Breaker; 24 VDC / 1 ... 10 A 787 Series



Electronic circuit breaker; 8-channel; 24 VDC input voltage; adjustable 1 ... 10 A; IO-Link

Item No.	Pack. Unit
787-1668/000-080	1



Features:

- Space-saving ECB with eight channels
- Nominal current: 1 ... 10 A (adjustable for each channel via sealable selector switch or IO-Link interface)
- Switch-on capacity > 50.000 µF per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Status message and current measurement of each individual channel via IO-Link interface
- Switch on/off each channel separately via IO-Link interface

Input

Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC

Output

Total number of channels (module)	8
Nominal output voltage $U_{o, \text{nom}}$	8 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i - Voltage drop)
Voltage drop	≤ 200 mV (Input +)
Nominal output current $I_{o, \text{nom}}$	8 x 1 / 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via IO-Link interface); 1, 2, 4, 6, 10 A (adjustable for each channel via selector switch)

Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	> 50.000 µF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No

Signaling and Communication

Signaling	8 x LED (green/red/orange); 1 x IO-Link interface
Remote input	Switching on/off any number of channels via IO-Link interface

Efficiency/Power Losses

Power loss P_1	≤ 1.3 W (no load); ≤ 20 W (8 x 10 A)
Efficiency	99 %

Fuse Protection

Internal fuse	T 15 A per channel
---------------	--------------------

Safety and Protection/Environmental Requirements

Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	No
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	≥ +50 °C (see instruction manual)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input (+) (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Input (-); Output; Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	42 x 127 x 142.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	440 g

Standards and Specifications






Approvals/standards/specifications	CE; EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL
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4

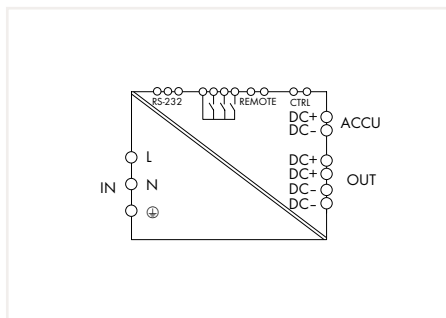


WAGO UPS Chargers and Controllers and WAGO Capacitive Buffer Modules

WAGO UPS Chargers and Controllers and WAGO Capacitive Buffer Modules

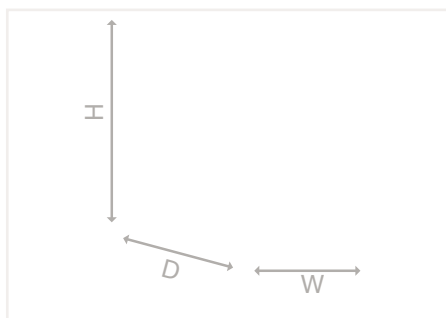
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	Classic Switched-Mode Power Supply with Integrated UPS Charger and Controller; 787 Series	174
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Switched-Mode Power Supply with Integrated UPS Charger and Controller; Classic; 1-phase; 24 VDC / 5 A 787 Series



Switched-mode power supply with integrated charger and controller; Classic; 1-phase; 24 VDC output voltage; 5 A output current; communication capability

	Item No.	Pack. Unit
	787-1675	1



Features:

- Switched-mode power supply with integrated charger and controller for uninterruptible power supply (UPS)
- Battery control technology for smooth charging and predictive maintenance applications
- Potential-free contacts provide function monitoring
- Buffer time can be set on site via rotary switch
- Parameter setting and monitoring via RS-232 interface
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

Input

Nominal input voltage $U_{i,nom}$	100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 ... 372 VDC
Input voltage derating	-1.5 %/V (< 100 VAC); -1 %/V (< 150 VDC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 1.1 A (230 VAC; 5 ADC); ≤ 2.2 A (110 VAC; 5 ADC)
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive

Output

Nominal output voltage $U_{o,nom}$ /adjustment accuracy	24 VDC (SELV) / ≤ 1 %
Output voltage range	23 ... 28.5 VDC (mains operation); 18.5 ... 27.5 VDC (buffer mode)
Nominal output current $I_{o,nom}$	5 A
Nominal output power	120 W
Residual ripple	≤ 50 mV (peak-to-peak)
Overload behavior	Constant current

Energy Storage Systems

Buffer time	1 s ... 20 min (or constant; PC mode; configurable via software)
Switch-on threshold (adjustable)	20 ... 25.5 VDC (configurable via software; pre-configured: 22 VDC)
Charging current	0.3 ... 1 A
End-of-charge voltage	26 ... 29.5 VDC (temperature-controlled; optional fixed setting)
Recommended battery module	787-871, 787-872, 787-873, 787-876, 787-1671

Signaling and Communication

Signaling	1 x Alarm LED (red); 1 x Battery Charge LED (yellow); 1 x DC OK LED (green); 3 x Signal output (24 VDC; max. 200 mA in total); 1 x RS-232 interface
Communication	RS-232 interface
Remote input	Switches buffer mode off

Efficiency/Power Losses

Power loss P_i	≤ 5.2 W (buffer mode; 24 VDC; 5 A); ≤ 17 W (mains operation; 230 VAC; 24 VDC; 5 A); ≤ 22 W
Power loss (max.) $P_{i,max}$	30 W (90 VAC; charging)
Efficiency (typ.)	88 %

Fuse Protection

Internal fuse	T 4 A / 250 VAC (input side)
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and Protection/Environmental Requirements

Isolation voltage (pri.-GND/sec.-GND/pri.-sec.)	2.2 kVDC / 0.7 kVDC / 4.242 kVDC
Protection class/protection type	I / IP20 (per EN 60529)
Reverse voltage protection	Yes
Overvoltage category	II
Parallel operation/series operation	Yes, max. 3 battery modules for buffer time extension/no
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C (device starts at -40 °C, type-tested)
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> +50 °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®
Input/output/signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Interface (solid/fine-stranded/AWG)	0.08 ... 1.5 mm ² / 0.08 ... 1.5 mm ² / 28 ... 14 AWG
Line length (max.)	≤ 3 m (output, battery control)

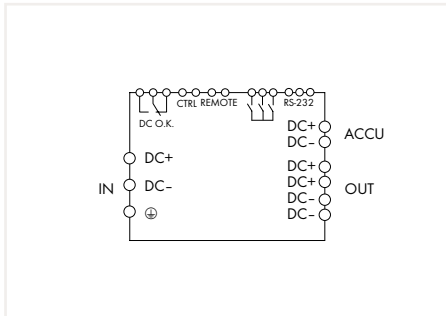
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	60 x 127 x 135.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	885 g

Standards and Specifications

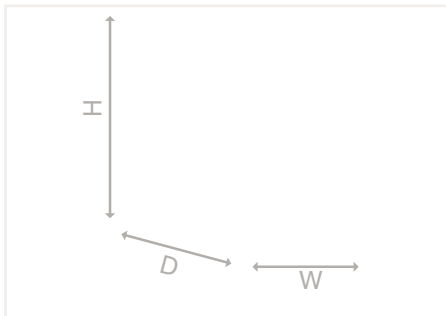
Approvals/standards/specifications	CE; EN 60950; EN 61204-3; EN 61558-2-16; UL 60950; UL 508; GL
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UPS Charger and Controller; 24 VDC / 10 A 787 Series



UPS charger and controller; 24 VDC input voltage; 24 VDC output voltage; 10 A output current; LineMonitor; communication capability

Item No.	Pack. Unit
787-870	1

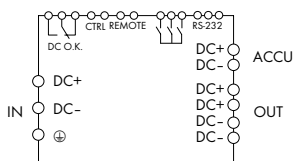


Features:

- Charger and controller for uninterruptible power supply (UPS)
- Current and voltage monitoring, as well as parameter setting via LCD and RS-232 interface
- Active signal outputs for function monitoring
- Remote input for buffered output deactivation
- Input for temperature control of connected battery
- Battery control (from manufacturing no. 215563) detects both battery life and battery type

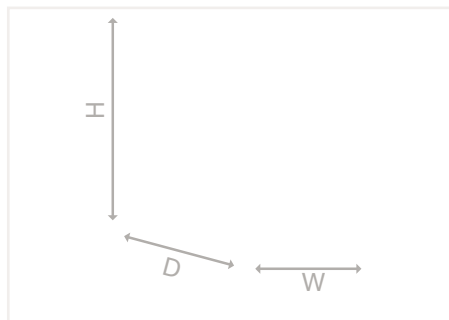
Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	22 ... 29 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.1 A (no load running); ≤ 0.8 A (charging); ≤ 10.8 A
Inrush current	≤ 4 A (no load)
Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC
Output voltage range	$U_i - 1$ VDC (rated operation); 20 ... 25.5 VDC (buffer mode)
Nominal output current $I_{o, \text{nom}}$	10 A
Energy Storage Systems	
Buffer Time	10 ... 600 s (or constant; adjustable)
Switch-on threshold (adjustable)	20 ... 25.5 VDC
Charging current	≤ 0.6 A
End-of-charge voltage	26 ... 29.5 VDC (temperature-controlled; optional fixed setting)
Recommended battery module	787-871, 787-872, 787-873, 787-876, 787-1671
Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x Warning LED (yellow); 1 x Error LED (red); LCD; 3 x Signal output (24 VDC; max. 25 mA); 1 x Isolated relay contact (max. 30 VDC; 1 A); 1 x RS-232 interface; Battery control (C+; C-)
Communication	RS-232 interface
Remote input	Switches buffer mode off
Efficiency/Power Losses	
Power loss P_i	≤ 15 W (no load); ≤ 20 W (nominal load)
Efficiency (typ.)	95 %
Fuse Protection	
Internal fuse	T 15 A
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	Yes
Parallel operation/series operation	Yes, a maximum three battery modules for buffer time extension (temperature measurement evaluation is only possible via one battery module)/no
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-10 ... +60 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
LED indication (solid/fine-stranded/AWG)	0.08 ... 0.5 mm ² / 0.08 ... 0.5 mm ² / 28 ... 20 AWG
Line length (max.)	≤ 3 m (input, output, battery control)
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	40 x 163 x 163; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	800 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; UL 60950; UL 508; EN 61000-6-2; EN 61000-6-3

UPS Charger and Controller; 24 VDC / 20 A 787 Series



UPS charger and controller; 24 VDC input voltage; 24 VDC output voltage; 20 A output current; LineMonitor; communication capability

Item No.	Pack. Unit
787-875	1



Features:

- Charger and controller for uninterruptible power supply (UPS)
- Current and voltage monitoring, as well as parameter setting via LCD and RS-232 interface
- Active signal outputs for function monitoring
- Remote input for buffered output deactivation
- Input for temperature control of connected battery
- Battery control (from manufacturing no. 215563) detects both battery life and battery type

Input

Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	22 ... 29 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.1 A (no load running); ≤ 1.5 A (charging); ≤ 21.5 A
Inrush current	≤ 4 A (no load)

Output

Nominal output voltage $U_{o, \text{nom}}$	24 VDC
Output voltage range	$U_i - 1$ VDC (rated operation); 20 ... 25.5 VDC (buffer mode)
Nominal output current $I_{o, \text{nom}}$	20 A

Energy Storage Systems

Buffer Time	10 s ... 10 min (or constant; adjustable)
Switch-on threshold (adjustable)	20 ... 25.5 VDC
Charging current	≤ 1 A
End-of-charge voltage	26 ... 29.5 VDC (temperature-controlled; optional fixed setting)
Recommended battery module	787-871, 787-872, 787-873

Signaling and Communication

Signaling	1 x DC OK LED (green); 1 x Warning LED (yellow); 1 x Error LED (red); LCD; 3 x Signal output (24 VDC; max. 25 mA); 1 x Isolated relay contact (max. 30 VDC; 1 A); 1 x RS-232 interface; Battery control (C+; C-)
Communication	RS-232 interface
Remote input	Switches buffer mode off

Efficiency/Power Losses

Power loss P_i	≤ 15 W (no load); ≤ 30 W (nominal load)
Efficiency (typ.)	95 %

Fuse Protection

Internal fuse	T 25 A
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Safety and Protection/Environmental Requirements

Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	Yes
Parallel operation/series operation	Yes, a maximum three battery modules for buffer time extension (temperature measurement evaluation is only possible via one battery module)/no
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-10 ... +60 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
LED indication (solid/fine-stranded/AWG)	0.08 ... 0.5 mm ² / 0.08 ... 0.5 mm ² / 28 ... 20 AWG
Line length (max.)	≤ 3 m (input, output, battery control)

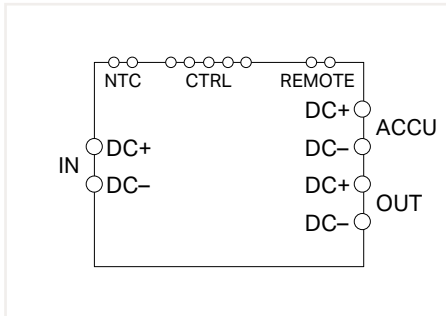
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	57 x 171 x 163; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1200 g

Standards and Specifications

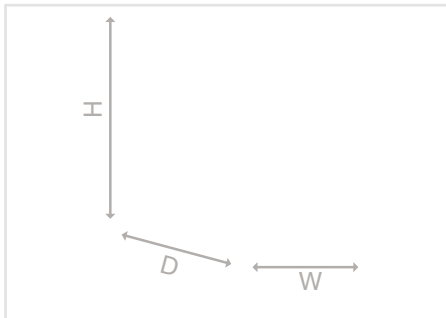
Approvals/standards/specifications	CE; EN 60950; UL 60950; UL 508; EN 61000-6-2; EN 61000-6-3
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DC UPS Module; 24 VDC / 40 A 787 Series



DC UPS Module; Input voltage: 24 VDC;
Output voltage: 24 VDC; Output current: 40 A

	Item No.	Pack. Unit
	787-915	1



Features:

- DC UPS module for uninterruptible power supply (UPS)
- Potential-free contacts provide function monitoring
- Remote input for buffered output deactivation
- Input for temperature control of connected battery
- Battery internal resistance measurement for diagnosing batteries, including connection cable and fuse

Note:

For North America: Use only batteries with appropriate safety approvals!

Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	22 ... 28 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.16 A (no load running); ≤ 4 A (charging); ≤ 44 A

Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC
Output voltage range	U_i (rated operation); 19.5 ... 26.5 VDC (battery voltage in buffer mode)
Nominal output current $I_{o, \text{nom}}$	40 A

Energy Storage Systems	
Buffer time	Load-dependent
Switch-on threshold (adjustable)	21.5 ... 22.5 VDC
Charging current	1 ... 4 A (adjustable in 1 A steps via DIP switch; Default setting: 2 A)
End-of-charge voltage	26.4 ... 29 VDC (temperature controlled with NTC; without temperature sensor: 27.2 V)
Recommended battery module	Type: VRLA 24 V; 7 ... 40 Ah

Signaling and Communication	
Signaling	1 x Power LED (green); 1 x UPS LED (yellow); 1 x Warning LED (red); 2 x isolated relay contact (max. 30 VDC, 1 A)
Remote input	Switches buffer mode off

Efficiency/Power Losses	
Power loss P_i	≤ 4 W (no load); ≤ 22.5 W (nominal load)
Efficiency (typ.)	97 % (rated operation); 85 % (charging)

Fuse Protection	
Internal fuse	T 6.3 A (charging circuit)
Recommended backup fusing	T 50 A

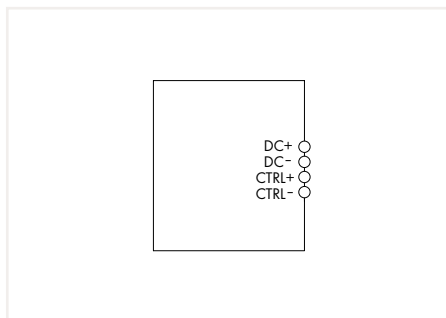
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	Yes
Parallel operation/series operation	No/no
MTBF	600.000 h (+40 °C; per SN 29500)
Surrounding air temperature (operation)	0 ... +50 °C
Relative humidity	5 ... 95 % (no condensation permissible)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.75 ... 16 mm ² / 0.75 ... 25 mm ² / 18 ... 4 AWG
Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	68 x 181 x 162; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1100 g

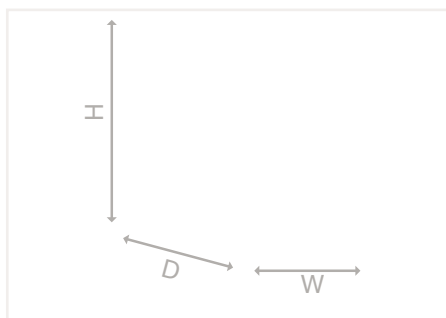
Standards and Specifications	
Approvals/standards/specifications	CE; EN 62368-1; EN 61000-6-2; EN 61000-6-3; CSA* (*pending)

Lead-Acid AGM Battery Module; 24 VDC / 5 A; Capacity 0.8 Ah 787 Series



Lead-acid AGM battery module; 24 VDC input voltage;
5 A output current; Capacity: 0.8 Ah; with battery
control

Item No.	Pack. Unit
787-1671	1



Features:

- Lead-acid, absorbed glass mat (AGM) battery module for uninterruptible power supply (UPS)
- Can be connected to both 787-870/875 UPS Charger/Controller and 787-1675 Power Supply with integrated UPS charger and controller
- Parallel operation provides higher buffer time
- Built-in temperature sensor
- DIN-35-rail mounting
- Battery control (from manufacturing no. 216570) detects both battery life and battery type

Note:

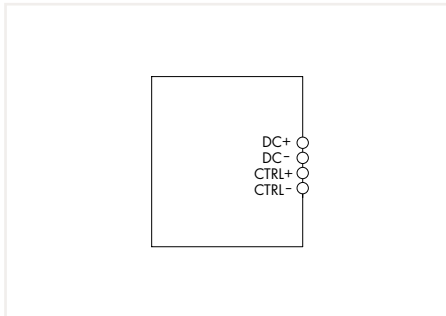
For parallel connection, please switch battery capacity setting to "OFF" in the UPS charger and controller.

Input	
Nominal input voltage $U_{i,nom}$	24 VDC
Output	
Nominal output voltage $U_{o,nom}$	24 VDC
Nominal output current $I_{o,nom}$	5 A
Energy Storage Systems	
Battery capacity	0.8 Ah
Charging current	0.2 A (recommended)
End-of-charge voltage	27 VDC (+25 °C)
Signaling and Communication	
Signaling	Battery control (C+; C-)
Fuse Protection	
Internal fuse	T 10 A / 250 VAC
Safety and Protection/Environmental Requirements	
Protection class/protection type	III / IP20 (per EN 60529)
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Service life (typ.)	5 / 4 / 2 a (20 / 30 / 40 °C)
Surrounding air temperature (operation)	-15 ... +40 °C (-20 ... +40 °C during discharge)
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®
Input/output/battery control (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Line length (max.)	3 m
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	72 x 97 x 124; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1000 g
Standards and Specifications	
Approvals/standards/specifications	CE; UL 508*; (*pending)

Lead-Acid AGM Battery Module; 24 VDC / 7.5 A; Capacity 1.2 Ah 787 Series

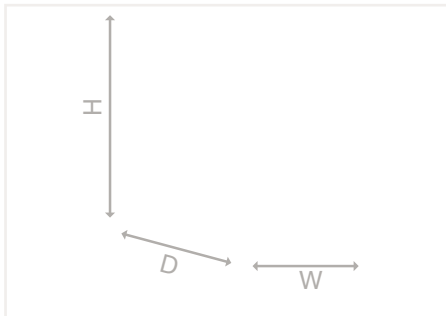


Similar to pictured device



Lead-acid AGM battery module; 24 VDC input voltage;
20 A output current; 3.2 Ah capacity; with battery control

	Item No.	Pack. Unit
	787-876	1



Features:

- Lead-acid, absorbed glass mat (AGM) battery module for uninterruptible power supply (UPS)
- Can be connected to both 787-870/875 UPS Charger/Controller and 787-1675 Power Supply with integrated UPS charger and controller
- Parallel operation provides higher buffer time
- Built-in temperature sensor
- DIN-35-rail mountable
- Battery control (from manufacturing no. 216570) detects both battery life and battery type

Note:

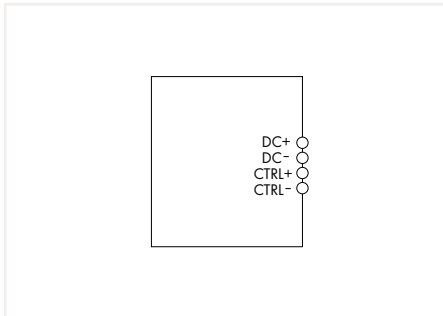
For parallel connection, please switch battery capacity setting to "OFF" in the UPS charger and controller.

Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC
Nominal output current $I_{o, \text{nom}}$	7.5 A
Energy Storage Systems	
Battery capacity	1.2 Ah
Charging current	≤ 0.3 A
End-of-charge voltage	27 VDC (+25 °C)
Signaling and Communication	
Signaling	Battery control (C+; C-)
Fuse Protection	
Internal fuse	T 15 A
Safety and Protection/Environmental Requirements	
Protection class/protection type	III / IP20 (per EN 60529)
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Service life (typ.)	5 / 4 / 2 a (20 / 30 / 40 °C)
Surrounding air temperature (operation)	-10 ... +40 °C
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®
Input/output/battery control (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Line length (max.)	3 m (input, output, battery control)
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	55 x 153 x 126.6; height including connector; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	2140 g
Standards and Specifications	
Approvals/standards/specifications	CE; VdS-tested battery; UL 508

Lead-Acid AGM Battery Module; 24 VDC / 20 A; Capacity 3.2 Ah 787 Series

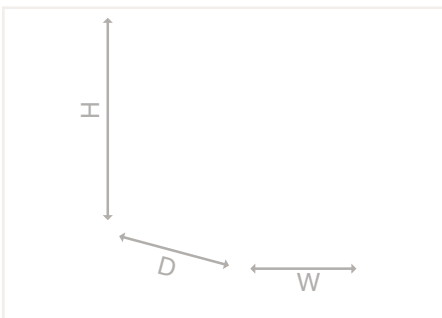


Similar to pictured device



Lead-Acid (AGM) Battery Module; Input voltage: 24 VDC;
Output current: 20 A; Capacity: 3.2 Ah; with battery
control

Item No.	Pack. Unit
787-871	1



Features:

- Lead-acid, absorbed glass mat (AGM) battery module for uninterruptible power supply (UPS)
- Can be connected to both 787-870/875 UPS Charger/Controller and 787-1675 Power Supply with integrated UPS charger and controller
- Parallel operation provides higher buffer time
- Built-in temperature sensor
- Mounting plate installation via continuous DIN-rail
- Battery control (from manufacturing no. 216570) detects both battery life and battery type

Note:

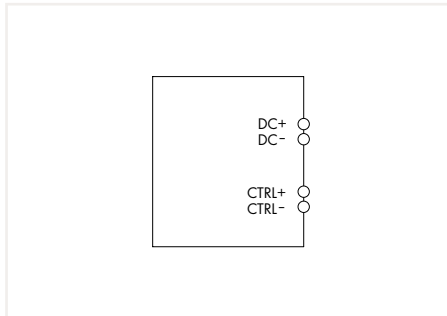
For parallel connection, please switch battery capacity setting to "OFF" in the UPS charger and controller.

Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC
Nominal output current $I_{o, \text{nom}}$	20 A
Energy Storage Systems	
Battery capacity	3.2 Ah
Charging current	$\leq 0.8 \text{ A}$
End-of-charge voltage	27 VDC (+25 °C)
Signaling and Communication	
Signaling	Battery control (C+; C-)
Fuse Protection	
Internal fuse	T 25 A
Safety and Protection/Environmental Requirements	
Protection class/protection type	III / IP20 (per EN 60529)
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Service life (typ.)	5 / 4 / 2 a (20 / 30 / 40 °C)
Surrounding air temperature (operation)	-10 ... +40 °C
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®
Input/output/battery control (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Line length (max.)	3 m (input, output, battery control)
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	76.2 x 168 x 175.5
Mounting type	Screw mount
Weight	3079 g
Standards and Specifications	
Approvals/standards/specifications	CE; VdS-tested battery; UL 508

Lead-Acid AGM Battery Module; 24 VDC / 40 A; Capacity 7 Ah 787 Series

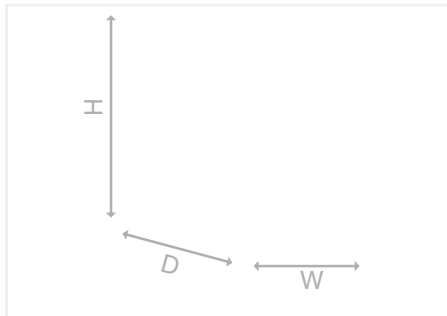


Similar to pictured device



Lead-acid AGM battery module; 24 VDC input voltage;
40 A output current; 7 Ah capacity; with battery control

	Item No.	Pack. Unit
	787-872	1



Features:

- Lead-acid, absorbed glass mat (AGM) battery module for uninterruptible power supply (UPS)
- Can be connected to both 787-870/875 UPS Charger/Controller and 787-1675 Power Supply with integrated UPS charger and controller
- Parallel operation provides higher buffer time
- Built-in temperature sensor
- Mounting plate installation via continuous DIN-rail
- Battery control (from manufacturing no. 216570) detects both battery life and battery type

Note:

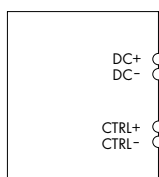
For parallel connection, please switch battery capacity setting to "OFF" in the UPS charger and controller.

Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC
Nominal output current $I_{o, \text{nom}}$	40 A
Energy Storage Systems	
Battery capacity	7 Ah
Charging current	$\leq 1.8 \text{ A}$
End-of-charge voltage	27 VDC (+25 °C)
Signaling and Communication	
Signaling	Battery control (C+; C-)
Fuse Protection	
Internal fuse	2 x T 25 A
Safety and Protection/Environmental Requirements	
Protection class/protection type	III / IP20 (per EN 60529)
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Service life (typ.)	5 / 4 / 2 a (20 / 30 / 40 °C)
Surrounding air temperature (operation)	-10 ... +40 °C
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Battery control (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Line length (max.)	3 m (input, output, battery control)
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	86 x 239 x 217.5
Mounting type	Screw mount
Weight	6500 g
Standards and Specifications	
Approvals/standards/specifications	CE; VdS-tested battery; UL 508

Lead-Acid AGM Battery Module; 24 VDC / 40 A; Capacity 12 Ah 787 Series

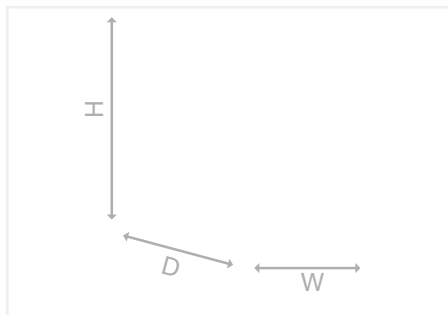


Similar to pictured device



Pure Lead Battery Module; 24 VDC input voltage; 40 A output current; Capacity: 13 Ah; with battery control

Item No.	Pack. Unit
787-873	1



Features:

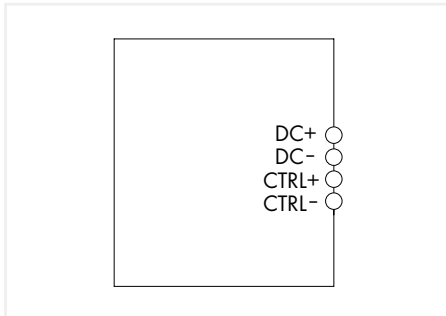
- Lead-acid, absorbed glass mat (AGM) battery module for uninterruptible power supply (UPS)
- Can be connected to both 787-870/875 UPS Charger/Controller and 787-1675 Power Supply with integrated UPS charger and controller
- Parallel operation provides higher buffer time
- Built-in temperature sensor
- Mounting plate installation via continuous DIN-rail
- Battery control (from manufacturing no. 216570) detects both battery life and battery type

Note:

For parallel connection, please switch battery capacity setting to "OFF" in the UPS charger and controller.

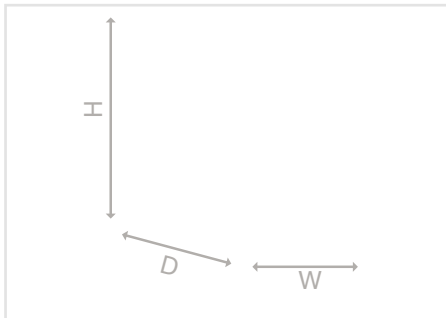
Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC
Nominal output current $I_{o, \text{nom}}$	40 A
Energy Storage Systems	
Battery capacity	12 Ah
Charging current	≤ 3 A
End-of-charge voltage	27 VDC (+25 °C)
Signaling and Communication	
Signaling	Battery control (C+; C-)
Fuse Protection	
Internal fuse	2 x T 25 A
Safety and Protection/Environmental Requirements	
Protection class/protection type	III / IP20 (per EN 60529)
Series operation	No
MTBF	> 500.000 h (per IEC 61709)
Service life (typ.)	5 / 4 / 2 a (20 / 30 / 40 °C)
Surrounding air temperature (operation)	-10 ... +40 °C
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Battery control (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Line length (max.)	3 m (input, output, battery control)
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	120.5 x 239 x 217.5
Mounting type	Screw mount
Weight	10.650 g
Standards and Specifications	
Approvals/standards/specifications	CE; VdS-tested battery; UL 508

Pure Lead Battery Module; 24 VDC / 20 A 787 Series



Pure Lead Battery Module; 24 VDC input voltage; 20 A output current; Capacity: 2.5 Ah; with battery control

Item No.	Pack. Unit
787-878/000-2500	1

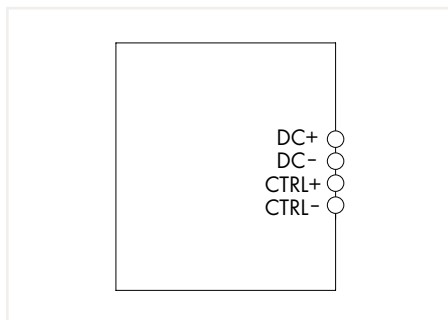


Features:

- Pure lead battery module: 12 x CYCLON battery (D cell) per module
- Various mounting options
- Intelligent battery management (battery control)
- Optional coated PCB
- Pluggable connection technology (WAGO MULTI CONNECTION SYSTEM)

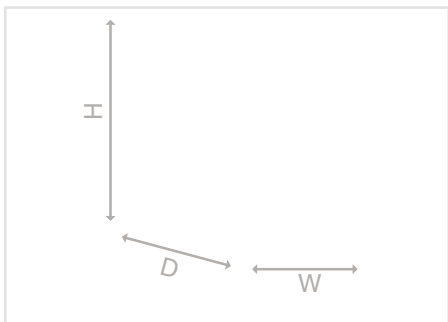
Input	
Nominal input voltage $U_{i,nom}$	24 VDC
Output	
Nominal output voltage $U_{o,nom}$	24 VDC
Nominal output current $I_{o,nom}$	20 A
Energy Storage System	
Battery capacity	2.5 Ah
Charging current	≤ 5 A
End-of-charge voltage	27 VDC (25 °C)
Signaling and Communication	
Signaling	Battery control (C+; C-)
Fuse Protection	
Internal fuse	T 25 A
Safety and Protection/Environmental Requirements	
Protection class/type	III / IP20 (per EN 60529)
Parallel operation	Yes
Service life (typ.)	15 / 8 / 4 a (20 / 30 / 40 °C)
Surrounding air temperature (operation)	-40 ... +60 °C
Pollution degree	2
Self-discharge	3 % per month at 20 °C
Commissioning	< 6 months at 30 ... 40 °C
Connection Data	
Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Battery control (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Line length (max.)	3 m
Physical Data/Mechanical Data/Material Data	
Width x Height x Depth (mm)	86 x 186 x 160
Mounting type	Direct screw connection; optional DIN-rail-mount (EN 60715)
Weight	3800 g
Standards and Specifications	
Approvals/standards/specifications	CE

Pure Lead Battery Module; 24 VDC / 40 A 787 Series



Pure Lead Battery Module;
Input voltage: 24 VDC;
Output current: 40 A;
Capacity: 13 Ah; with battery control

	Item No.	Pack. Unit
	787-878/001-3000	1

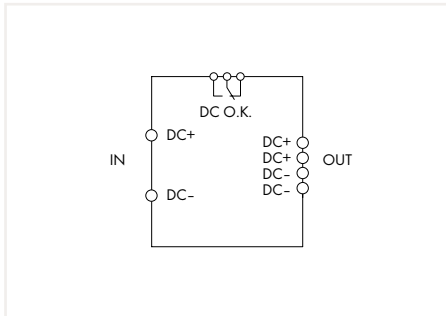


Features:

- Pure lead battery module:
2 x Genesis EPX battery per module
- Intelligent battery management (battery control)
- Optional coated PCB
- Pluggable connection technology
(WAGO *MULTI CONNECTION SYSTEM*)

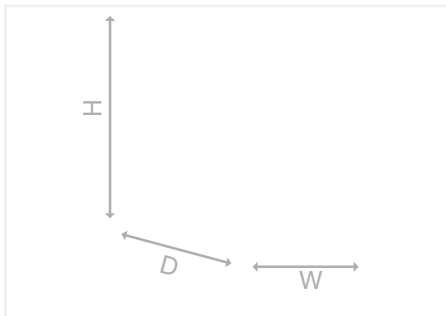
Input	
Nominal input voltage $U_{i,nom}$	24 VDC
Output	
Nominal output voltage $U_{o,nom}$	24 VDC
Nominal output current $I_{o,nom}$	40 A
Energy Storage System	
Battery capacity	13 Ah
Charging current	≤ 5 A
End-of-charge voltage	27 VDC (25 °C)
Signaling and Communication	
Signaling	Battery control (C+; C-)
Fuse Protection	
Internal fuse	2 x T 25 A
Safety and Protection/Environmental Requirements	
Protection class/type	III / IP20 (per EN 60529)
Parallel operation	Yes
Service life (typ.)	15 / 8 / 4 a (20 / 30 / 40 °C)
Surrounding air temperature (operation)	-40 ... +60 °C
Pollution degree	2
Self-discharge	3 % per month at 20 °C
Commissioning	< 6 months at 30 ... 40 °C
Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Battery control (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Line length (max.)	≤ 3 m
Physical Data/Mechanical Data/Material Data	
Width x Height x Depth (mm)	217 x 186 x 199.5
Mounting type	Direct screw connection
Weight	12300 g
Standards and Specifications	
Approvals/standards/specifications	CE

Capacitive Buffer Module; 24 VDC / 10 A 787 Series



capacitive buffer module; 24 VDC input voltage; 24 VDC output voltage; 10 A output current; 0.06 ... 7.2 s buffer time; communication capability

Item No.	Pack. Unit
787-880	1



Features:

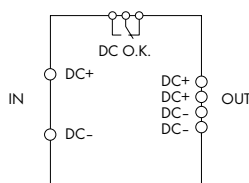
- Capacitive buffer module bridges short duration voltage drops or load fluctuations
- For uninterruptible power supply
- Internal diode between input and output enables operation with decoupled output.
- Buffer modules can be readily parallel-connected to increase buffer time or load current.
- Potential-free contact for charge condition monitoring

Input	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC
Input voltage range	20 ... 30 VDC
Input current I_i	≤ 0.06 A (no load running); ≤ 1 A (charging); ≤ 11 A
Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC
Output voltage range	$U_i - 0.5$ VDC (rated operation); 20.4 ... 24 VDC (buffer mode)
Nominal output current $I_{o, \text{nom}}$	10 A
Switch-on threshold (adjustable)	20 ... 24 VDC
Energy Storage Systems	
Buffer time	0.06 ... 7.2 s (depends on load current and switch-on threshold)
Switch-on threshold (adjustable)	20 ... 24 VDC
Charging time (typ.)	5 min
Signaling and Communication	
Signaling	1 x LED DC OK (green); 1 x LED Charge (yellow); 1 x LED DC not OK (red); 1 x isolated relay contact (max. 30 VDC, 1 A)
Efficiency/Power Losses	
Power loss P_i	≤ 1.5 W (no load); ≤ 6.5 W (nominal load)
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	Yes
Parallel operation/series operation	Yes/no
MTBF	typ. 87.600 h (at +25 °C); typ. 30.500 h (at +40 °C)
Surrounding air temperature (operation)	-10 ... +50 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®
Input/output/relay (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	57 x 163 x 179; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1000 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; UL 508; EN 61000-6-2; EN 61000-6-3

Capacitive Buffer Module; 24 VDC / 20 A 787 Series

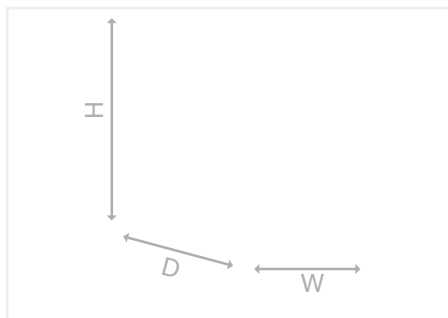


Similar to picture



capacitive buffer module; 24 VDC input voltage; 24 VDC output voltage; 20 A output current; 0.17 ... 16.5 s buffer time; communication capability

Item No.	Pack. Unit
787-881	1

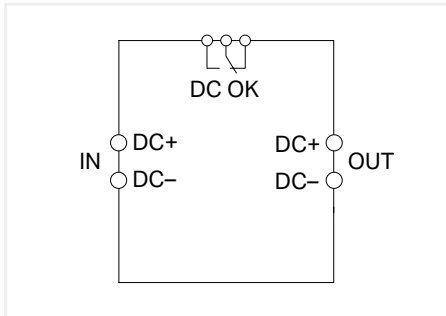


Features:

- Capacitive buffer module bridges short duration voltage drops or load fluctuations
- For uninterruptible power supply
- Internal diode between input and output enables operation with decoupled output.
- Buffer modules can be readily parallel-connected to increase buffer time or load current.
- Potential-free contact for charge condition monitoring

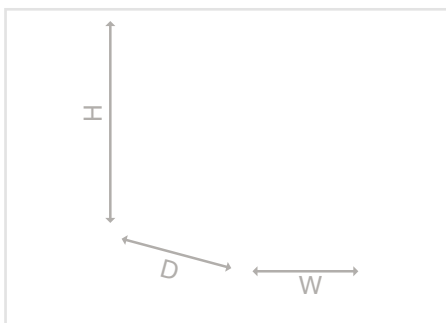
Input	
Nominal input voltage $U_{i,nom}$	24 VDC
Input voltage range	20 ... 30 VDC
Input current I_i	≤ 0.06 A (no load running); ≤ 1 A (charging); ≤ 22 A
Output	
Nominal output voltage $U_{o,nom}$	24 VDC
Output voltage range	$U_i - 1$ VDC (rated operation); 20.4 ... 24 VDC (buffer mode)
Nominal output current $I_{o,nom}$	20 A
Switch-on threshold (adjustable)	20 ... 24 VDC
Energy Storage Systems	
Buffer time	0.17 ... 16.5 s (depends on load current and switch-on threshold)
Switch-on threshold (adjustable)	20 ... 24 VDC
Charging time (typ.)	5 min
Signaling and Communication	
Signaling	1 x LED DC OK (green); 1 x LED Charge (yellow); 1 x LED DC not OK (red); 1 x isolated relay contact (max. 30 VDC, 1 A)
Efficiency/Power Losses	
Power loss P_i	≤ 1.5 W (no load); ≤ 15 W (nominal load)
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	Yes
Parallel operation/series operation	Yes/no
MTBF	typ. 87.600 h (at +25 °C); typ. 30.500 h (at +40 °C)
Surrounding air temperature (operation)	-10 ... +50 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Relay (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	57 x 181 x 179; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	1000 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; UL 508; EN 61000-6-2; EN 61000-6-3

Capacitive Buffer Module; 24 VDC / 40 A 787 Series



capacitive buffer module; 24 VDC input voltage; 24 VDC output voltage; 40 A output current; Buffer time: 0.3 ... 6.6 s

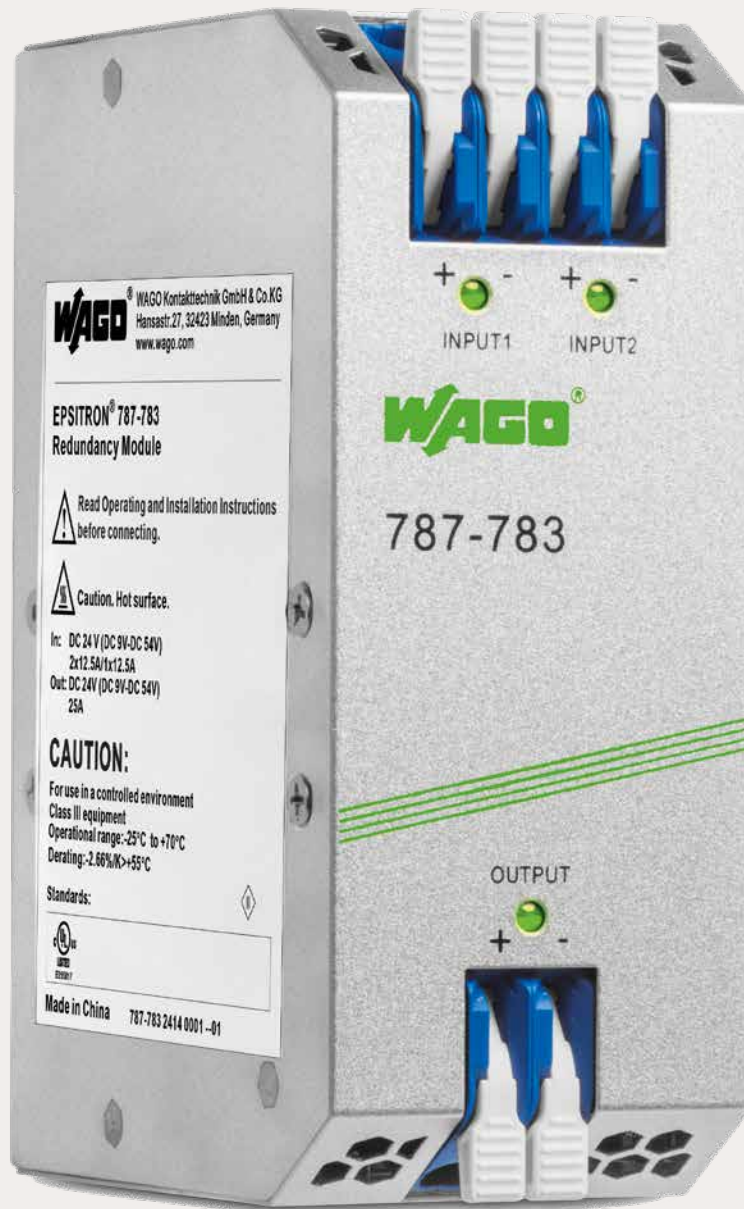
Item No.	Pack. Unit
787-916	1



Features:

- Capacitive buffer module bridges short duration voltage drops or load fluctuations
- Internal diode between input and output enables operation with decoupled output
- Potential-free contact for charge condition monitoring

Input	
Nominal input voltage $U_{i, nom}$	24 VDC
Input voltage range	23 ... 30 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.06 A (no load running); ≤ 0.8 A (charging); ≤ 40.8 A
Output	
Nominal output voltage $U_{o, nom}$	24 VDC
Output voltage range	$U_i - 0.5$ VDC (mains operation; $I_o = 20$ A); $U_i - 0.8$ VDC (mains operation; $I_o = 40$ A); 20 ... 29 VDC (buffer mode)
Nominal output current $I_{o, nom}$	40 A
Energy Storage Systems	
Buffer time	0.3 ... 6.6 s (depends on load current and temperature)
Switch-on threshold (typ.)	22 VDC
Nominal capacity	4.17 F
Nominal voltage	32.4 VDC
Effective energy content (typ.)	500 Ws
Charging time (typ.)	2.5 min
Signaling and Communication	
Signaling	1 x DC OK LED (green); 1 x UPS LED (yellow); 1 x Warning LED (red); 1 x isolated relay contact (max. 30 VDC, 1 A)
Efficiency/Power Losses	
Power loss P_i	≤ 1.9 W (operation without decoupled output); ≤ 11.5 W (operation with decoupled output; $I^o = 20$ A); ≤ 33.5 W (operation with decoupled output; $I_o = 40$ A)
Efficiency (typ.)	96.5 %
Fuse Protection	
Internal fuse	No
Recommended backup fusing	T 40 A
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	Yes
Parallel operation/series operation	No/no
Life service	74.000 h (+25 °C; $I_o = 40$ A); 28.200 h (+40 °C; $I_o = 40$ A)
Surrounding air temperature (operation)	-10 ... +50 °C
Relative humidity	5 ... 95 % (no condensation permissible)
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.75 ... 1.6 mm ² / 0.75 ... 2.5 mm ² / 18 ... 4 AWG
Signaling (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	68 x 181 x 162; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	900 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 62368-1; EN 61000-6-2; EN 61000-6-3; CSA* (*pending)



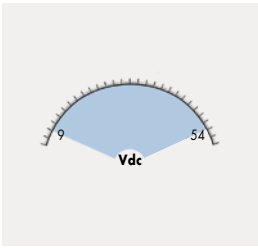
WAGO Redundancy Modules

WAGO Redundancy Modules



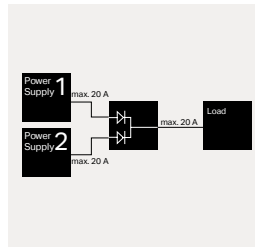
Redundancy Modules
787 Series

Page
191



Highly Versatile

- The diode redundancy modules (787-783 and -785) can be used for the 12 V, 15 V, 24 V, or 48 V power supplies thanks to their wide voltage range



High Overload Capability

- Power diodes in each input path feature a high overload capacity and are also suitable for power supplies with TopBoost or PowerBoost
- Output currents up to 76 A thanks to parallel connection of the input paths



Signaling

- Three LEDs indicate the presence of an input or output voltage
- An isolated signal contact optionally indicates a power supply failure on the input*

*only for 787-885 and -886



Low Power Dissipation

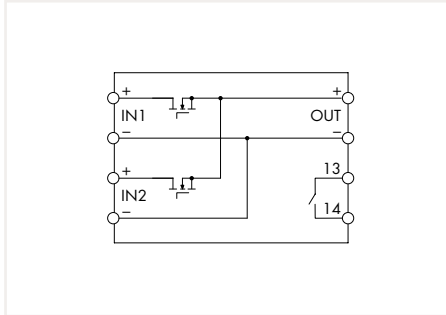
- Low power dissipation via active-switching MOSFETs*
- Includes MOSFET function monitoring*

*only for 787-1685

Redundancy Module; 24 VDC / 40 A 787 Series

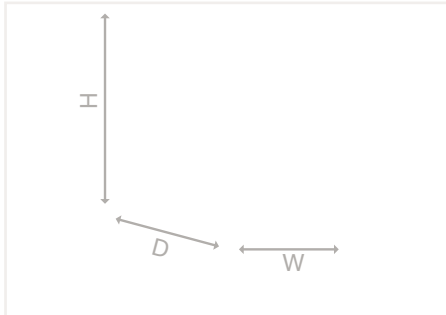


Similar to picture



Redundancy Module; 2 x 24 VDC input voltage; 2 x 20 A input current; 24 VDC output voltage; 40 A output current

Item No.	Pack. Unit
787-1685	1



Features:

- Redundancy module with low-loss Mosfet® decouples two power supplies
- For redundant and fail-safe power supply, incl. Mosfet® monitoring
- Continuous output current: 40 ADC, in any ratio of both inputs (e.g., 20 A / 20 A or 0 A / 40 A)
- Suitable for power supplies with PowerBoost and TopBoost
- Same profile as CLASSIC Power Supplies
- Connects to power supplies with electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

Input

Nominal input voltage $U_{i, \text{nom}}$	2 x 24 VDC
Input voltage range	2 x 10 ... 36 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 40 A (from one input path); ≤ 20 A (via both input paths)
PowerBoost input	60 ADC (4 s); 50 ADC (8 s)
TopBoost input	100 ADC (50 ms)

Output

Nominal output voltage $U_{o, \text{nom}}$	24 VDC
Output voltage range	10 ... 36 VDC (U_i - Voltage drop)
Voltage drop	≤ 100 mV (input/output)
Nominal output current $I_{o, \text{nom}}$	40 A
Nominal output power	960 W
Switching frequency	5 kHz
TopBoost	200 ADC (50 ms)
PowerBoost	120 ADC (4 s); 100 ADC (8 s)

Signaling and Communication

Signaling	1 x IN1 LED (green); 1 x IN2 LED (green); 1 x DC OK signal contact (IN1 and IN2 > 10 VDC)
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Efficiency/Power Losses

Power loss P_i	≤ 1.5 W (no load); ≤ 9.5 W (nominal load)
Efficiency (typ.)	≥ 99.5 %

Fuse Protection

Internal fuse	No
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Safety and Protection/Environmental Requirements

Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	Yes
Parallel operation/series operation	Yes/no
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	-40 ... +70 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-1.5 %/K (> +65 °C)
Pollution degree	2

Connection Data

Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
LED indication (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

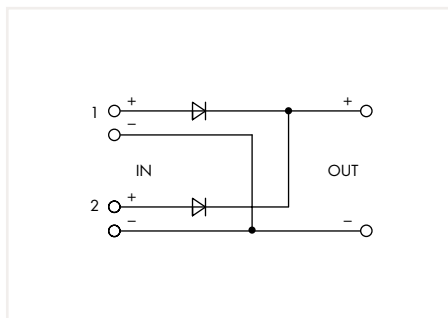
Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	42 x 127 x 139.5; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	450 g

Standards and Specifications

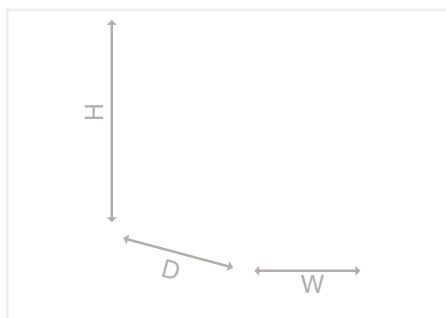
Approvals/standards/specifications	CE; EN 61204-3; EN 60950-1; UL 60950; UL 508; DNV GL
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Redundancy Module; 24 VDC / 25 A 787 Series



Redundancy Module; Input voltage: 2 x 9 ... 54 VDC;
Input current: 2 x 12.5 A; Output voltage:
9 ... 54 VDC; Output current: 25 A

	Item No.	Pack. Unit
	787-783	1



Features:

- Redundancy module with two inputs for decoupling two power supplies
- For redundant and fail-safe power supply
- With LED for input voltage monitoring on site

Input	
Nominal input voltage $U_{i,nom}$	2 x 24 VDC
Input voltage range	2 x 9 ... 54 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 12.5 A (per path)

Output	
Nominal output voltage $U_{o,nom}$	24 VDC
Output voltage range	9 ... 54 VDC (U_i - Voltage drop)
Voltage drop	≤ 0.8 V (input/output)
Nominal output current $I_{o,nom}$	25 A
Output power (max.)	≤ 1350 W
Nominal output power	600 W

Signaling and Communication	
Signaling	1 x IN1 LED (green); 1 x IN2 LED (green); 1 x OUT LED (green)

Efficiency/Power Losses	
Power loss P_l	≤ 19 W (nominal load)
Efficiency (typ.)	96 %

Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Short-circuit-protected	No
Parallel operation/series operation	Yes/no
MTBF	> 10 million h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.66 %/K (+55 °C < Tamb ≤ +70 °C)
Pollution degree	2

Connection Data	
Connection technology	Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.5 ... 6 mm ² / 0.5 ... 6 mm ² / 20 ... 10 AWG

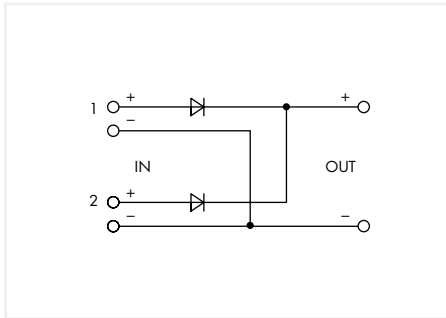
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	50 x 130 x 92; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	470 g

Standards and Specifications	
Approvals/standards/specifications	CE; UL 508

Redundancy Module; 24 VDC / 25 A; Ex Approval 787 Series

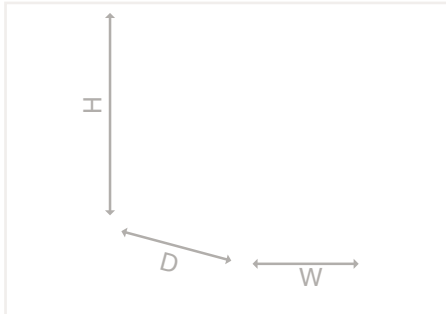


Similar to illustration



Redundancy Module;
Input voltage: 2 x 9 ... 54 VDC;
Input current: 2 x 12.5 A;
Output voltage: 9 ... 54 VDC;
Output current: 25 A

Item No.	Pack. Unit
787-783/000-040	1



Features:

- Redundancy module with two inputs for decoupling two power supplies
- For redundant and fail-safe power supply
- With LED for input voltage monitoring on site

Input	
Nominal input voltage $U_{i, \text{nom}}$	2 x 24 VDC
Input voltage range	2 x 9 ... 54 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 12.5 A (per path)

Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC
Output voltage range	9 ... 54 VDC (U_i - Voltage drop)
Voltage drop	≤ 0.8 V (input/output)
Nominal output current $I_{o, \text{nom}}$	25 A
Output power (max.)	1350 W
Nominal output power	600 W

Signaling and Communication	
Signaling	1 x IN1 LED (green); 1 x IN2 LED (green); 1 x OUT LED (green)

Efficiency/Power Losses	
Power loss P_i	≤ 19 W (nominal load)
Efficiency (typ.)	96 %

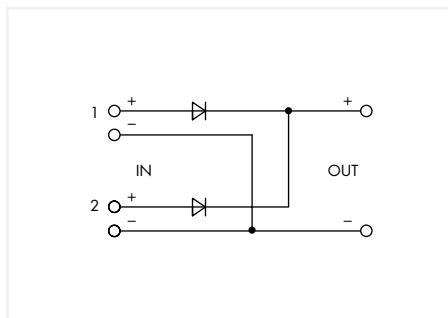
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/type	III / IP20 (per EN 60529)
Short-circuit-protected	No
Parallel/series operation	Yes/No
MTBF	> 10 million h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.66 %/K (55 °C < T_a ≤ 70 °C)
Pollution degree	2

Connection Data	
Connection technology	Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.5 ... 6 mm ² / 0.5 ... 6 mm ² / 20 ... 10 AWG

Physical Data/Mechanical Data/Material Data	
Width x Height x Depth (mm)	50 x 130 x 92; Depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	470 g

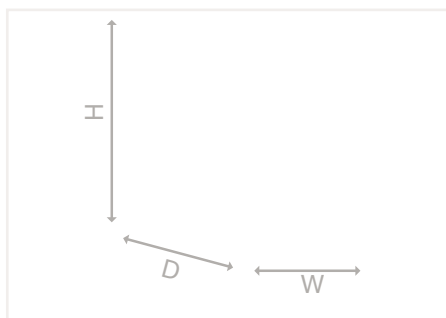
Standards and Specifications	
Approvals/standards/specifications	CE; UL 508; ATEX; IEC Ex; ANSI/ISA 12.12.01 (Class I Div. 2)

Redundancy Module; 24 VDC / 76 A 787 Series



Redundancy Module; Input voltage: 2 x 9 ... 54 VDC;
Input current: 2 x 40 A; Output voltage:
9 ... 54 VDC; Output current: 76 A

	Item No.	Pack. Unit
	787-785	1



Features:

- Redundancy module with two inputs for decoupling two power supplies
- For redundant and fail-safe power supply
- With LED for input voltage monitoring on site

Input

Nominal input voltage $U_{i,nom}$	2 x 24 VDC
Input voltage range	2 x 9 ... 54 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 40 A (per path); ≤ 76 A (in total)

Output

Nominal output voltage $U_{o,nom}$	24 VDC
Output voltage range	9 ... 54 VDC (U_i - Voltage drop)
Voltage drop	≤ 0.5 V (input/output)
Nominal output current $I_{o,nom}$	76 A (UL: max. 65 A)
Output power (max.)	4104 W
Nominal output power	1824 W

Signaling and Communication

Signaling	1 x IN1 LED (green); 1 x IN2 LED (green); 1 x OUT LED (green)
-----------	--

Efficiency/Power Losses

Power loss P_l	≤ 38 W (nominal load)
Efficiency (typ.)	97 %

Safety and Protection/Environmental Requirements

Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Short-circuit-protected	No
Parallel operation/series operation	Yes/no
MTBF	> 10 million h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.66 %/K (+55 °C < Tamb ≤ +70 °C)
Pollution degree	2

Connection Data

Connection technology	Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	1.5 ... 16 mm ² / 1.5 ... 16 mm ² / 16 ... 6 AWG

Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	83 x 130 x 153; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	960 g

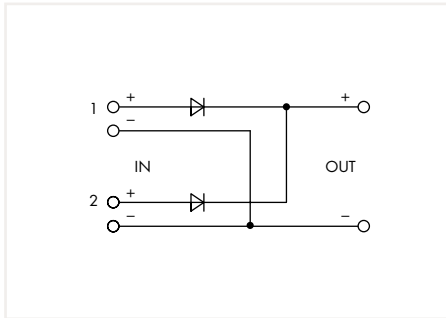
Standards and Specifications

Approvals/standards/specifications	CE; UL 508
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Redundancy Module; 24 VDC / 76 A; Ex Approval 787 Series

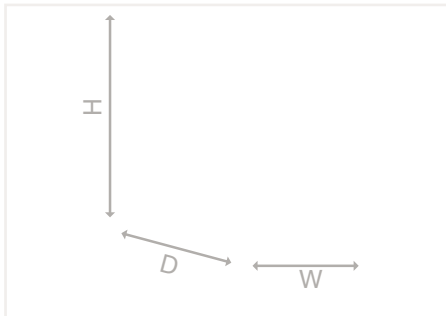


Similar to illustration



Redundancy Module;
Input voltage: 2 x 9 ... 54 VDC;
Input current: 2 x 40 A;
Output voltage: 9 ... 54 VDC;
Output current: 76 A

Item No.	Pack. Unit
787-785/000-040	1



Features:

- Redundancy module with two inputs for decoupling two power supplies
- For redundant and fail-safe power supply
- With LED for input voltage monitoring on site

Input	
Nominal input voltage $U_{i, \text{nom}}$	2 x 24 VDC
Input voltage range	2 x 9 ... 54 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 40 A (per path); ≤ 76 A (in total)

Output	
Nominal output voltage $U_{o, \text{nom}}$	24 VDC
Output voltage range	9 ... 54 VDC (U_i - Voltage drop)
Voltage drop	≤ 0.5 V (input/output)
Nominal output current $I_{o, \text{nom}}$	76 A (UL: max. 65 A)
Output power (max.)	4104 W
Nominal output power	1824 W

Signaling and Communication	
Signaling	1 x IN1 LED (green); 1 x IN2 LED (green); 1 x OUT LED (green)

Efficiency/Power Losses	
Power loss P_i	≤ 38 W (nominal load)
Efficiency (typ.)	97 %

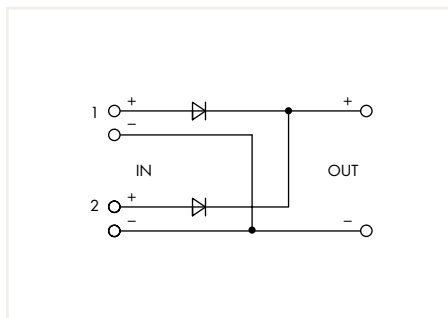
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/type	III / IP20 (per EN 60529)
Short-circuit-protected	No
Parallel/series operation	Yes/No
MTBF	> 10 million h (per IEC 61709)
Surrounding air temperature (operation)	-25 ... +70 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	-2.66 %/K (55 °C < T_a ≤ 70 °C)
Pollution degree	2

Connection Data	
Connection technology	Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	1.5 ... 16 mm ² / 1.5 ... 16 mm ² / 16 ... 6 AWG

Physical Data/Mechanical Data/Material Data	
Width x Height x Depth (mm)	83 x 130 x 153; Depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	960 g

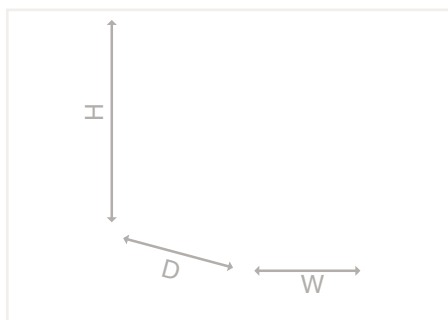
Standards and Specifications	
Approvals/standards/specifications	CE; UL 508; ATEX; IEC Ex; ANSI/ISA 12.12.01 (Class I Div. 2)

Redundancy Module; 24 VDC / 40 A 787 Series



Redundancy Module; 2 x 24 VDC input voltage; 2 x 20 A input current; 24 VDC output voltage; 40 A output current; communication capability

Item No.	Pack. Unit
787-885	1



Features:

- Redundancy module with two inputs for decoupling two power supplies
- For redundant and fail-safe power supply
- With LED and potential-free contact for input voltage monitoring on site and remotely

Input	
Nominal input voltage $U_{i,nom}$	2 x 24 VDC
Input voltage range	2 x 18 ... 30 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 20 A (per path)

Output	
Nominal output voltage $U_{o,nom}$	24 VDC
Output voltage range	18 ... 30 VDC (U_i - Voltage drop)
Voltage drop	≤ 0.6 V (input/output)
Nominal output current $I_{o,nom}$	40 A
Output power (max.)	1200 W
Nominal output power	960 W

Signaling and Communication	
Signaling	1 x OUT LED (green); 1 x IN1 LED (yellow); 1 x IN2 LED (yellow); 1 x isolated relay contact (max. 30 VDC, 1 A)

Efficiency/Power Losses	
Power loss P_l	≤ 1.5 W (no load); ≤ 14 W (24 VDC; 20 A); ≤ 26 W (48 VDC; 40 A)
Efficiency (typ.)	97 %

Fuse Protection	
Internal fuse	No

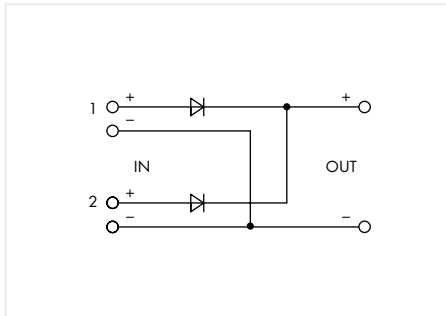
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors - housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	Yes
Parallel operation/series operation	Yes/no
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	$-10 \dots +60$ °C
Relative humidity	5 ... 96 % (no condensation permissible)
Pollution degree	2

Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Relay (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG

Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	40 x 181 x 163; height including connector; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	870 g

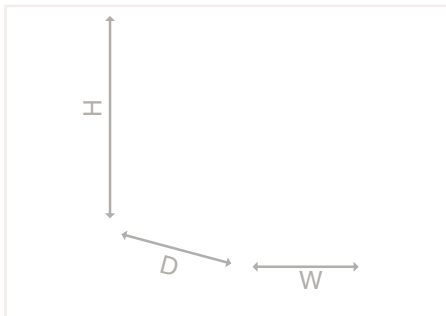
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; UL 60950; UL 508; EN 61000-6-2; EN 61000-6-3

Redundancy Module; 48 VDC / 40 A 787 Series



Redundancy Module; 2 x 48 VDC input voltage; 2 x 20 A input current; 48 VDC output voltage; 40 A output current; communication capability

Item No.	Pack. Unit
787-886	1



Features:







- Redundancy module with two inputs for decoupling two power supplies
- For redundant and fail-safe power supply
- With LED and potential-free contact for input voltage monitoring on site and remotely

Input	
Nominal input voltage $U_{i, \text{nom}}$	2 x 48 VDC
Input voltage range	2 x 36 ... 54 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 20 A (per path)
Output	
Nominal output voltage $U_{o, \text{nom}}$	48 VDC
Output voltage range	36 ... 54 VDC (U_i - Voltage drop)
Voltage drop	≤ 1 V (input/output)
Nominal output current $I_{o, \text{nom}}$	40 A
Output power (max.)	≤ 2160 W
Nominal output power	1920 W
Signaling and Communication	
Signaling	1 x OUT LED (green); 1 x IN1 LED (yellow); 1 x IN2 LED (yellow); 1 x isolated relay contact (max. 30 VDC, 1 A)
Efficiency/Power Losses	
Power loss P_i	≤ 1.7 W (48 VDC; no load); ≤ 20 W (48 VDC; 20 A); ≤ 40 W (48 VDC; 40 A)
Efficiency (typ.)	96 %
Fuse Protection	
Internal fuse	No
Safety and Protection/Environmental Requirements	
Isolation voltage (connectors – housing)	500 VDC
Protection class/protection type	III / IP20 (per EN 60529)
Reverse voltage protection	Yes
Parallel operation/series operation	Yes/no
MTBF	> 500.000 h (per IEC 61709)
Surrounding air temperature (operation)	$-10 \dots +60$ °C
Relative humidity	5 ... 96 % (no condensation permissible)
Pollution degree	2
Connection Data	
Connection technology	CAGE CLAMP®; Push-in CAGE CLAMP®
Input/output (solid/fine-stranded/AWG)	0.5 ... 10 mm ² / 0.5 ... 10 mm ² / 20 ... 8 AWG
Relay (solid/fine-stranded/AWG)	0.08 ... 2.5 mm ² / 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Geometric Data/Mechanical Data/Material Data	
Width x height x depth (mm)	40 x 181 x 163; height including connector; depth from upper-edge of DIN-rail
Mounting type	DIN-35 rail
Weight	860 g
Standards and Specifications	
Approvals/standards/specifications	CE; EN 60950; UL 60950*; UL 508*; EN 61000-6-2; EN 61000-6-3 (*pending)



WAGO Current and Energy Measurement Technology

WAGO Current and Energy Measurement Technology

		Page
	Energy consumption meter; with Push-in CAGE CLAMP® Connection Technology 879 Series	200
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Energy Meter (MID); with Push-in CAGE CLAMP® and Lever; Direct Connection (4PU) 879 Series



9	+ (M-bus)		
8	B/- (RS485)	L3	OUT
7	A (RS485)	L3	IN
6	S02		
5	GND		
4	S01	L2	OUT
11	Tariff 230 V~	L2	IN
10	Tariff 230 V~	L1	OUT
N		L1	IN

Energy Meter; with Push-in CAGE CLAMP® and Lever; Direct Connection (4PU)

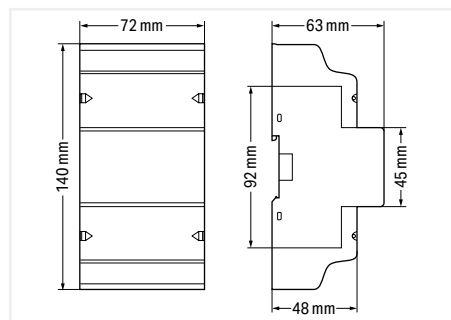
	Item No.	Pack. Unit
	879-3000	1

Short description:

Comprehensive energy measurement is necessary for optimizing energy consumption. WAGO now has new energy meters in its portfolio that simplify this task while providing several key advantages. They use the push-in connection technology with a lever, making them connect quickly and easily. The devices have a width of just 72 mm for direct measurement. These widths save a tremendous amount of control cabinet space. In addition to the values for active and reactive energy, the energy meters also record the mains frequency as well as current, voltage and power for all phases. And the user can conveniently see all of these energy characteristics at a glance on a large, illuminated display.

Features:

- Saving time at every level thanks to the Push-in CAGE CLAMP® and lever
- Real space savings: 72 mm wide (4PU)
- The communications pro: M-Bus and Modbus® interface and 2 S0 pulse outputs
- Full transparency at a glance: Display energy quality characteristics on an illuminated full-format display
- Intuitive configuration: Touch-sensitive controls and configuration app via *Bluetooth*®



Configuration

Configuration options	Touch-sensitive controls; Configuration app via <i>Bluetooth</i> ®
-----------------------	---

Input

Input voltage range	3 x 230 ... 400 VAC; ±20 %
Reference current I_{ref}	5 A
Input current	65 A
Frequency range	45 ... 65 Hz
Network configuration	Two-wire, three-wire and four-wire networks
Power consumption P_{max}	≤ 2 W/phase; ≤ 10 VA/phase
Measured variable	Active and reactive energy in supply and reference direction

Communication

Communication	Modbus®; M-Bus; <i>Bluetooth</i> ®
Interface	RS-485 (2-wire); 2x S0 interfaces (configurable)
Rate control input	230 VAC/VDC
Indicators	LCD with backlight

Measurement Error

Accuracy class	Class B (= 1 % error); Active energy per EN 50470-3
Calibration validity period	8 years

Power Supply

Power supply type	Via measurement circuit
-------------------	-------------------------

Safety and Protection

Dielectric strength	4 kV, 1 min; 1.2/50 µs at 6 kV
Protection class	IP51 (front side); IP20 (connection)
Protection class	II
Pollution degree	2

Connection Data

Connection type (1)	Voltage/Current
Connection technology	Push-in CAGE CLAMP®
Actuation type	Lever
WAGO Connector	2616 Series
Solid conductor	0.75 ... 16 mm ² / 18 ... 4 AWG
Fine-stranded conductor	0.75 ... 25 mm ² / 18 ... 4 AWG
Fine-stranded conductor; with insulated ferrule	0.75 ... 16 mm ²
Fine-stranded conductor; with uninsulated ferrule	0.75 ... 16 mm ²
Fine-stranded conductor; with twin ferrule	0.75 ... 6 mm ²
Strip length	18 ... 20 mm / 0.71 ... 0.79 inch
Connection type 2	Communication and rate control input
Connection technology 2	Push-in CAGE CLAMP®
Actuation type 2	Lever
WAGO Connector 2	2604 Series
Solid conductor 2	0.2 ... 4 mm ² / 24 ... 12 AWG
Fine-stranded conductor 2	0.2 ... 4 mm ² / 24 ... 12 AWG
Fine-stranded conductor; with insulated ferrule 2	0.25 ... 2.5 mm ²
Fine-stranded conductor; with uninsulated ferrule 2	0.25 ... 2.5 mm ²
Fine-stranded conductor; with twin ferrule 2	0.25 ... 1.5 mm ²
Strip length 2	9 ... 11 mm / 0.35 ... 0.43 inch

Physical Data

Width	72 mm
Height	140 mm
Depth	63 mm
Note (dimensions)	Height without cover: 92 mm

Mechanical Data

Mounting type	DIN-35 rail (EN 60715)
---------------	------------------------

Material Data

Housing material	PC 940A
------------------	---------

Environmental Requirements	
Surrounding air temperature (operation)	-40 ... +70 °C
Relative humidity	≤ 75 % (during storage ≤ 95 %)
Standards and Specifications	
Conformity marking	CE
Standards/Specifications	EN 50470-1/3; MID-compliant

Energy Meter (MID); with Push-in CAGE CLAMP® and Lever; Direct Connection (4PS) 879 Series



9 + (M-bus)		L3	OUT
8 B/- (RS485)		L3	IN
7 A (RS485)			
6 S02		L2	OUT
5 GND			
4 S01		L2	IN
11 Tariff 230 V~			
10 Tariff 230 V~		L1	OUT
N			

Energy Meter; with Push-in CAGE CLAMP® and Lever; Direct Connection (4PS)

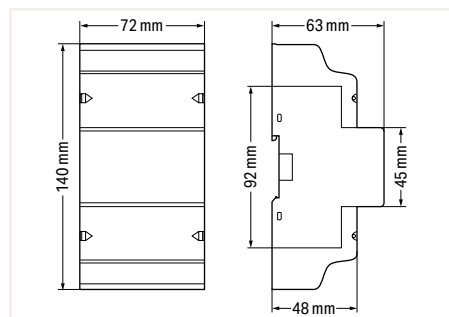
Item No.	Pack. Unit
879-3020	1

Short description:

Comprehensive energy measurement is necessary for optimizing energy consumption. WAGO now has new energy meters in its portfolio that simplify this task while providing several key advantages. They use the push-in connection technology with a lever, making them connect quickly and easily. The devices have a width of just 72 mm for direct measurement. These widths save a tremendous amount of control cabinet space. In addition to the values for active and reactive energy, the energy meters also record the mains frequency as well as current, voltage and power for all phases. And the user can conveniently see all of these energy characteristics at a glance on a large, illuminated display.

Features:

- Saving time at every level thanks to the Push-in CAGE CLAMP® and lever
- Real space savings: 72 mm wide (4PS)
- The communications pro: M-Bus and Modbus® interface and 2 S0 pulse outputs
- Full transparency at a glance:
Display energy quality characteristics on an illuminated full-format display
- Intuitive configuration: Touch-sensitive controls and configuration app via *Bluetooth*®



Configuration

Configuration options	Touch-sensitive controls; Configuration app via <i>Bluetooth</i> ®
-----------------------	---

Input

Input voltage range	3 x 230 ... 400 VAC; ±20 %
Reference current I_{ref}	5 A
Input current	65 A
Frequency range	45 ... 65 Hz
Network configuration	Two-wire, three-wire and four-wire networks
Power consumption P_{max}	≤ 2 W/phase; ≤ 10 VA/phase
Measured variable	Active and reactive energy in supply and reference direction

Communication

Communication	Modbus®; M-Bus; <i>Bluetooth</i> ®
Interface	RS-485 (2-wire); 2x S0 interfaces (configurable)
Rate control input	230 VAC/VDC
Indicators	LCD with backlight

Measurement Error

Accuracy class	Class B (= 1 % error); Active energy per EN 50470-3
Calibration validity period	8 years

Power Supply

Power supply type	Via measurement circuit
-------------------	-------------------------

Safety and Protection

Dielectric strength	4 kV, 1 min; 1.2/50 μs at 6 kV
Protection class	IP51 (front side); IP20 (connection)
Protection class	II
Pollution degree	2

Connection Data

Connection type (1)	Voltage/Current
Connection technology	Push-in CAGE CLAMP®
Actuation type	Lever
WAGO Connector	2616 Series
Solid conductor	0.75 ... 16 mm ² / 18 ... 4 AWG
Fine-stranded conductor	0.75 ... 25 mm ² / 18 ... 4 AWG
Fine-stranded conductor; with insulated ferrule	0.75 ... 16 mm ²
Fine-stranded conductor; with uninsulated ferrule	0.75 ... 16 mm ²
Fine-stranded conductor; with twin ferrule	0.75 ... 6 mm ²
Strip length	18 ... 20 mm / 0.71 ... 0.79 inch
Connection type 2	Communication and rate control input
Connection technology 2	Push-in CAGE CLAMP®
Actuation type 2	Lever
WAGO Connector 2	2604 Series
Solid conductor 2	0.2 ... 4 mm ² / 24 ... 12 AWG
Fine-stranded conductor 2	0.2 ... 4 mm ² / 24 ... 12 AWG
Fine-stranded conductor; with insulated ferrule 2	0.25 ... 2.5 mm ²
Fine-stranded conductor; with uninsulated ferrule 2	0.25 ... 2.5 mm ²
Fine-stranded conductor; with twin ferrule 2	0.25 ... 1.5 mm ²
Strip length 2	9 ... 11 mm / 0.35 ... 0.43 inch

Physical Data

Width	72 mm
Height	140 mm
Depth	63 mm
Note (dimensions)	Height without cover: 92 mm

Mechanical Data

Mounting type	DIN-35 rail (EN 60715)
---------------	------------------------

Material Data

Housing material	PC 940A
------------------	---------

Environmental Requirements	
Surrounding air temperature (operation)	-40 ... +70 °C
Relative humidity	≤ 75 % (during storage ≤ 95 %)
Standards and Specifications	
Conformity marking	CE
Standards/Specifications	EN 50470-1/3; MID-compliant

Energy Meter (MID); with Push-in CAGE CLAMP® and Lever; Transformer Connection (2PCT) 879 Series



11	Tariff 230 V~	9	+ (M-bus)	CT3	OUT
10	Tariff 230 V~	8	B/- (RS485)	CT3	IN
	N	7	A (RS485)	CT2	OUT
	U3	6	S02	CT2	IN
	U2	5	GND	CT1	OUT
	U1	4	S01	CT1	IN

Energy Meter; with Push-in CAGE CLAMP® and Lever; Transformer Connection (2PCT)

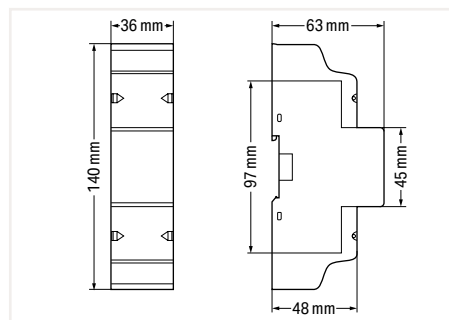
	Item No.	Pack. Unit
	879-3040	1

Short description:

Comprehensive energy measurement is necessary for optimizing energy consumption. WAGO now has new energy meters in its portfolio that simplify this task while providing several key advantages. They use the push-in connection technology with a lever, making them connect quickly and easily. Versions for current transformers are even slimmer at only 35 mm. These widths save a tremendous amount of control cabinet space. In addition to the values for active and reactive energy, the energy meters also record the mains frequency as well as current, voltage and power for all phases. And the user can conveniently see all of these energy characteristics at a glance on a large, illuminated display.

Features:

- Saving time at every level thanks to the Push-in CAGE CLAMP® and lever
- Real space savings: 35 mm wide (2PCT)
- The communications pro: M-Bus and Modbus® interface and 2 S0 pulse outputs
- Full transparency at a glance:
Display energy quality characteristics on an illuminated full-format display
- Intuitive configuration: Touch-sensitive controls and configuration app via Bluetooth®



Configuration

Configuration options	Touch-sensitive controls; Configuration app via Bluetooth®
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Input

Input voltage range	3 x 230 ... 400 VAC; ±20 %
Reference current I_{ref}	1 A
Input current	6 A
Current transformer (secondary)	1 A / 5 A
Current transformer ratio	1 ... 10.000
Frequency range	45 ... 65 Hz
Network configuration	Two-wire, three-wire and four-wire networks
Power consumption P_{max}	≤ 2 W/phase; ≤ 10 VA/phase
Measured variable	Active and reactive energy in supply and reference direction

Communication

Communication	Modbus®, M-Bus; Bluetooth®
Interface	RS-485 (2-wire); 2x S0 interfaces (configurable)
Rate control input	230 VAC/VDC
Indicators	LCD with backlight

Measurement Error

Accuracy class	Class B (= 1 % error); Active energy per EN 50470-3
Calibration validity period	8 years

Power Supply

Power supply type	Via measurement circuit
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Safety and Protection

Dielectric strength	4 kV, 1 min; 1.2/50 µs at 6 kV
Protection class	IP51 (front side); IP20 (connection)
Protection class	II
Pollution degree	2

Connection Data

Connection type (1)	Voltage/Current
Connection technology	Push-in CAGE CLAMP®
Actuation type	Lever
WAGO Connector	2604 Series
Solid conductor	0.2 ... 4 mm ² / 24 ... 12 AWG
Fine-stranded conductor	0.2 ... 4 mm ² / 24 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 2.5 mm ²
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm ²
Fine-stranded conductor; with twin ferrule	0.25 ... 1.5 mm ²
Strip length	9 ... 11 mm / 0.35 ... 0.43 inch
Connection type 2	Communication and rate control input
Connection technology 2	Push-in CAGE CLAMP®
Actuation type 2	Lever
WAGO Connector 2	2604 Series
Solid conductor 2	0.2 ... 4 mm ² / 24 ... 12 AWG
Fine-stranded conductor 2	0.2 ... 4 mm ² / 24 ... 12 AWG
Fine-stranded conductor; with insulated ferrule 2	0.25 ... 2.5 mm ²
Fine-stranded conductor; with uninsulated ferrule 2	0.25 ... 2.5 mm ²
Fine-stranded conductor; with twin ferrule 2	0.25 ... 1.5 mm ²
Strip length 2	9 ... 11 mm / 0.35 ... 0.43 inch

Physical Data

Width	36 mm
Height	140 mm
Depth	63 mm
Note (dimensions)	Height without cover: 98.2 mm

Mechanical Data

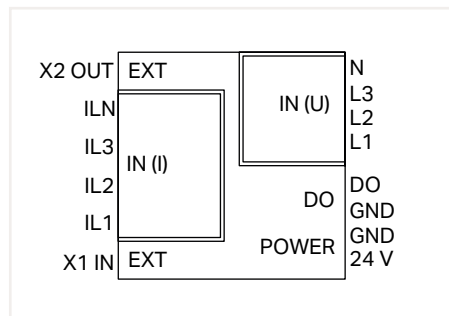
Mounting type	DIN-35 rail (EN 60715)
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Material Data

Housing material	PC 940A
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Environmental Requirements	
Surrounding air temperature (operation)	-40 ... +70 °C
Relative humidity	≤ 75 % (during storage ≤ 95 %)
Standards and Specifications	
Conformity marking	CE
Standards/Specifications	EN 50470-1/3; MID-compliant

3-Phase Power Measurement Module; 3 x 400 / 690 V; 1 A; Modbus RTU Serie 2857



3-Phase Power Measurement Module; 3x400/690 V/1 A; Modbus RTU; Digital output; Configuration via software; Supply voltage: 24 VDC

Item No.	Pack. Unit
2857-570/024-001	1

Short description:

WAGO's 3-phase power measurement module in a DIN-rail-mount enclosure measures electrical data in three-phase supply networks – remotely from the control level.

Measured variables such as active/apparent/reactive power, energy consumption, power factor, phase angle and frequency can be accessed via Modbus® Interface. In addition, the measured variables can be stored on a microSD card.

Features:

- Current measurement via 1A current transformer
- Mobile measurement and storage of measured values on microSD card
- Configuration and display of measured values during operation via configuration interface
- Compact device in DIN-rail-mount enclosure saves space used for building technology
- Communication of measured values via Modbus® Interface
- Configurable digital signal output as pulse output

Note:

- Additional setting options via interface configuration software

Specialty Functions:



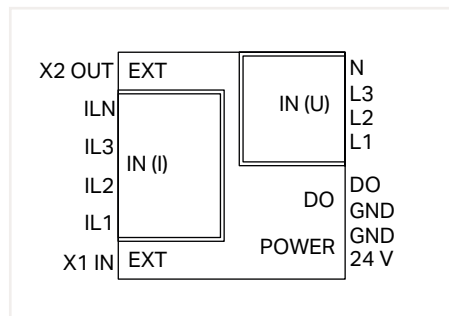
Configuration via:



Configuration	
Configuration options	WAGO interface configuration software
Input	
Input signal type	Voltage; Current
Network configuration	3-phase power measurement with N-conductor (4-conductor); 3-phase power measurement without N-conductor (3-conductor)
Input signal (voltage)	AC 400 V (U_{LN}); AC 690 V (U_{LL})
Input signal (current)	AC 1 A; (Current transformer)
Frequency range	45 ... 65 Hz (Harmonics analysis: 0 ... 3.3 kHz)
Input resistance (current input)	22 mΩ
Input resistance (voltage input)	1.5 MΩ
Input current (max.)	1 AAC
Input voltage (max.)	400 VAC (U_{LN}); 690 VAC (U_{LL})
Response threshold	10 mA
Resolution (current)	10 mA
Output – digital	
Switching voltage (DO) (max.)	Supply voltage (applied)
Continuous current (DO) (max.)	100 mA (no internal restriction)
Configurable functions (DO)	Threshold value switch; Pulse output (S0 interface)
Communication	
Communication	Modbus® RTU
Interface	RS-485 (2-wire) via RJ-45
Number of devices (max.)	32
Addressing	Via Interface configuration software
Signal processing	
Measurement method	True RMS measurement (measured value acquisition with 8 kHz)
Measured variables (calculated)	Line-to-line voltage; Outputs; Energy sources; Energy sources; Power factors; Mains frequency; Harmonics analysis (up to 41st harmonic); Total harmonic distortion (THD)
Signal form	Any periodic signals (considering the threshold frequencies)
Limit frequency	15.9 kHz
Memory card type	WAGO 758-879/000-3102 (microSD; 2 GB)
Measurement error	
Transmission error (max.)	≤ 0.5 % for current and voltage (of the full scale value)
Supply	
Nominal supply voltage U_s	DC 24 V (SELV)
Supply voltage range	±30 %
Power consumption at nominal supply voltage	≤ 50 mA (+ IDO)
Safety and protection	
Line-to-neutral conductor voltage	AC / DC 600 V
Oversvoltage category	III
Pollution degree	2
Safe isolation	Input/supply and communication per EN 61010-1
Requirement (N input)	Shall not be dangerously active
Requirement (ILx input)	Coils/converters with basic insulation
Protection type	IP20
Test voltage	
Test voltage (input/output/supply)	AC 3.51 kV; 50 Hz; 1 min

Connection data	
Connection type 1	Voltage
Connection technology 1	Push-in CAGE CLAMP®
WAGO Connector 1	WAGO 804 Series
Solid conductor 1	0.25 ... 2.5 mm ² / 20 ... 12 AWG
Fine-stranded conductor 1	0.25 ... 2.5 mm ² / 22 ... 12 AWG
Strip length 1	10 ... 11 mm / 0.39 ... 0.43 inch
Connection type 2	Current/Power supply/DO
Connection technology 2	Push-in CAGE CLAMP®
WAGO Connector 2t	WAGO 805 Series
Solid conductor 2	0.2 ... 1.5 mm ² / 24 ... 16 AWG
Fine-stranded conductor 2	0.2 ... 1.5 mm ² / 24 ... 16 AWG
Strip length 2	9 ... 10 mm / 0.35 ... 0.39 inch
Connection type 3	Modbus® communication
Pluggable connectors 3	2 x RJ-45 (daisy chain configuration)
Physical data	
Width	72 mm / 2.835 inch
Height from upper-edge of DIN-rail	55 mm / 2.165 inch
Depth	90 mm / 3.54 inch
Mechanical data	
Mounting type	DIN-35 rail
Material data	
Weight	115.6 g
Environmental requirements	
Surrounding air temperature (operation)	-40 ... 70 °C
Surrounding air temperature (storage)	-40 ... 85 °C
Relative humidity	5 ... 95 % (non-condensing)
Standards and specifications	
Conformity marking	CE
EMC immunity to interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-3
Standards/Specifications	EN 61010-1

3-Phase Power Measurement Module; 3 x 400 / 690 V; 5 A; Modbus RTU Serie 2857



3-Phase Power Measurement Module; 3x400/690 V/5 A; Modbus RTU; Digital output; Configuration via software; Supply voltage: 24 VDC

Item No.	Pack. Unit
2857-570/024-005	1

Short description:

WAGO's 3-phase power measurement module in a DIN-rail-mount enclosure measures electrical data in three-phase supply networks – remotely from the control level. Measured variables such as active/apparent/reactive power, energy consumption, power factor, phase angle and frequency can be accessed via Modbus® Interface. In addition, the measured variables can be stored on a microSD card.

Features:

- Current measurement via 5A current transformer
- Mobile measurement and storage of measured values on microSD card
- Configuration and display of measured values during operation via configuration interface
- Compact device in DIN-rail-mount enclosure saves space used for building technology
- Communication of measured values via Modbus® Interface
- Configurable digital signal output as pulse output

Note:

- Additional setting options via interface configuration software

Specialty Functions:



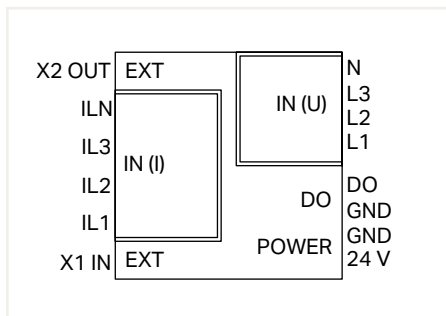
Configuration via:



Configuration	
Configuration options	WAGO interface configuration software
Input	
Input signal type	Voltage; Current
Network configuration	3-phase power measurement with N-conductor (4-conductor); 3-phase power measurement without N-conductor (3-conductor)
Input signal (voltage)	AC 400 V (U_{LN}); AC 690 V (U_{LL})
Input signal (current)	AC 5 A; (Current transformer)
Frequency range	45 ... 65 Hz (Harmonics analysis: 0 ... 3.3 kHz)
Input resistance (current input)	22 mΩ
Input resistance (voltage input)	1.5 MΩ
Input current (max.)	5 AAC
Input voltage (max.)	400 VAC (U_{LN}); 690 VAC (U_{LL})
Response threshold	5 mA
Resolution (current)	0.15 mA
Output – digital	
Switching voltage (DO) (max.)	Supply voltage (applied)
Continuous current (DO) (max.)	100 mA (no internal restriction)
Configurable functions (DO)	Threshold value switch; Pulse output (S0 interface)
Communication	
Communication	Modbus® RTU
Interface	RS-485 (2-wire) via RJ-45
Number of devices (max.)	32
Addressing	Via Interface configuration software
Signal processing	
Measurement method	True RMS measurement (measured value acquisition with 8 kHz)
Measured variables (calculated)	Line-to-line voltage; Outputs; Energy sources; Power factors; Mains frequency; Harmonics analysis (up to 41st harmonic); Total harmonic distortion (THD)
Signal form	Any periodic signals (considering the threshold frequencies)
Limit frequency	15.9 kHz
Memory card type	WAGO 758-879/000-3102 (microSD; 2 GB)
Measurement error	
Transmission error (max.)	≤ 0.5 % for current and voltage (of the full scale value)
Supply	
Nominal supply voltage U_s	DC 24 V (SELV)
Supply voltage range	±30 %
Power consumption at nominal supply voltage	≤ 50 mA (+ IDO)
Safety and protection	
Line-to-neutral conductor voltage	AC / DC 600 V
Overvoltage category	III
Pollution degree	2
Safe isolation	Input/supply and communication per EN 61010-1
Requirement (N input)	Shall not be dangerously active
Requirement (ILx input)	Coils/converters with basic insulation
Protection type	IP20
Test voltage	
Test voltage (input/output/supply)	AC 3.51 kV; 50 Hz; 1 min

Connection data	
Connection type 1	Voltage
Connection technology 1	Push-in CAGE CLAMP®
WAGO Connector 1	WAGO 804 Series
Solid conductor 1	0.25 ... 2.5 mm ² / 20 ... 12 AWG
Fine-stranded conductor 1	0.25 ... 2.5 mm ² / 22 ... 12 AWG
Strip length 1	10 ... 11 mm / 0.39 ... 0.43 inch
Connection type 2	Current/Power supply/DO
Connection technology 2	Push-in CAGE CLAMP®
WAGO Connector 2t	WAGO 805 Series
Solid conductor 2	0.2 ... 1.5 mm ² / 24 ... 16 AWG
Fine-stranded conductor 2	0.2 ... 1.5 mm ² / 24 ... 16 AWG
Strip length 2	9 ... 10 mm / 0.35 ... 0.39 inch
Connection type 3	Modbus® communication
Pluggable connectors 3	2 x RJ-45 (daisy chain configuration)
Physical data	
Width	72 mm / 2.835 inch
Height from upper-edge of DIN-rail	55 mm / 2.165 inch
Depth	90 mm / 3.54 inch
Mechanical data	
Mounting type	DIN-35 rail
Material data	
Weight	115.6 g
Environmental requirements	
Surrounding air temperature (operation)	-40 ... 70 °C
Surrounding air temperature (storage)	-40 ... 85 °C
Relative humidity	5 ... 95 % (non-condensing)
Standards and specifications	
Conformity marking	CE
EMC immunity to interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-3
Standards/Specifications	EN 61010-1

3-Phase Power Measurement Module; 3 x 400 / 690 V; RC; Modbus RTU Serie 2857



3-Phase Power Measurement Module; 3x400/690 V/RC; Modbus RTU; Digital output; Configuration via software; Supply voltage: 24 VDC

Item No.	Pack. Unit
2857-570/024-000	1

Short description:

WAGO's 3-phase power measurement module in a DIN-rail-mount enclosure measures electrical data in three-phase supply networks – remotely from the control level. Measured variables such as active/apparent/reactive power, energy consumption, power factor, phase angle and frequency can be accessed via Modbus® Interface. In addition, the measured variables can be stored on a microSD card.

Features:

- Current measurement via Rogowski Coils RC xxx
- Mobile measurement and storage of measured values on microSD card
- Configuration and display of measured values during operation via configuration interface
- Compact device in DIN-rail-mount enclosure saves space used for building technology
- Communication of measured values via Modbus® Interface
- Configurable digital signal output as pulse output

Note:

- Additional setting options via interface configuration software

Specialty Functions:



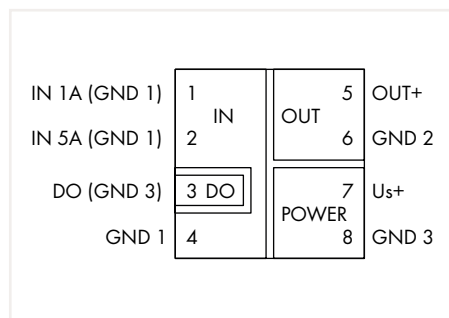
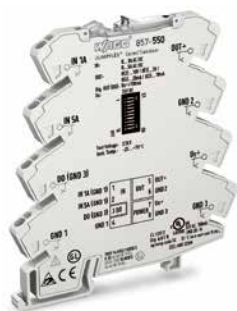
Configuration via:



Configuration	
Configuration options	WAGO interface configuration software
Input	
Input signal type	Voltage; Current
Network configuration;	3-phase power measurement with N-conductor (4-conductor); 3-phase power measurement without N-conductor (3-conductor)
Input signal (voltage)	AC 400 V (U_{LN}); AC 690 V (U_{LL}); AC 90 mV (WAGO Rogowski Coils RC xxx)
Sensitivity	22.5 mV/kA (WAGO Rogowski Coils RC xxx)
Measurement range (current)	4 x AC 4000 A (WAGO Rogowski Coils RC xxx)
Frequency range	45 ... 65 Hz (Harmonics analysis: 0 ... 3.3 kHz)
Output – digital	
Switching voltage (DO) (max.)	Supply voltage (applied)
Continuous current (DO) (max.)	100 mA (no internal restriction)
Configurable functions (DO)	Threshold value switch; Pulse output (S0 interface)
Communication	
Communication	Modbus® RTU
Interface	RS-485 (2-wire) via RJ-45
Number of devices (max.)	32
Addressing	Via Interface configuration software
Signal processing	
Measurement method	True RMS measurement (measured value acquisition with 8 kHz)
Measured variables (calculated)	Line-to-line voltage; Outputs; Energy sources; Power factors; Mains frequency; Harmonics analysis (up to 41st harmonic); Total harmonic distortion (THD)
Signal form	Any periodic signals (considering the threshold frequencies)
Limit frequency	15.9 kHz
Memory card type	WAGO 758-879/000-3102 (microSD; 2 GB)
Measurement error	
Transmission error (max.)	≤ 0.5 % for current and voltage (of the full scale value)
Supply	
Nominal supply voltage U_s	DC 24 V (SELV)
Supply voltage range	±30 %
Power consumption at nominal supply voltage	≤ 50 mA (+ IDO)
Safety and protection	
Line-to-neutral conductor voltage	AC / DC 600 V
Overvoltage category	III
Pollution degree	2
Safe isolation	Input/supply and communication per EN 61010-1
Requirement (N input)	Shall not be dangerously active
Requirement (ILx input)	Coils/converters with basic insulation
Protection type	IP20
Test voltage	
Test voltage (input/output/supply)	AC 3.51 kV; 50 Hz; 1 min

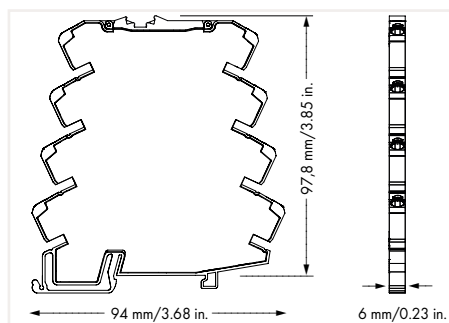
Connection data	
Connection type 1	Voltage
Connection technology 1	Push-in CAGE CLAMP®
WAGO Connector 1	WAGO 804 Series
Solid conductor 1	0.25 ... 2.5 mm ² / 20 ... 12 AWG
Fine-stranded conductor 1	0.25 ... 2.5 mm ² / 22 ... 12 AWG
Strip length 1	10 ... 11 mm / 0.39 ... 0.43 inch
Connection type 2	Current/Power supply/DO
Connection technology 2	Push-in CAGE CLAMP®
WAGO Connector 2t	WAGO 805 Series
Solid conductor 2	0.2 ... 1.5 mm ² / 24 ... 16 AWG
Fine-stranded conductor 2	0.2 ... 1.5 mm ² / 24 ... 16 AWG
Strip length 2	9 ... 10 mm / 0.35 ... 0.39 inch
Connection type 3	Modbus® communication
Pluggable connectors 3	2 x RJ-45 (daisy chain configuration)
Physical data	
Width	72 mm / 2.835 inch
Height from upper-edge of DIN-rail	55 mm / 2.165 inch
Depth	90 mm / 3.54 inch
Mechanical data	
Mounting type	DIN-35 rail
Material data	
Weight	117.6 g
Environmental requirements	
Surrounding air temperature (operation)	-40 ... 70 °C
Surrounding air temperature (storage)	-40 ... 85 °C
Relative humidity	5 ... 95 % (non-condensing)
Standards and specifications	
Conformity marking	CE
EMC immunity to interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-3
Standards/Specifications	EN 61010-1

Current Signal Conditioner; Configurable; with Digital Output 857 Series



Current signal conditioner; Current input signal; Current and voltage output signal; Digital output; Configuration via software; Supply voltage: 24 VDC; 6 mm module width

	Item No.	Pack. Unit
	857-550	1



Short description:

WAGO's current signal conditioner measures both 0–1 A and 0–5 A AC/DC currents, converting the input signal to a standard analog signal at the output.

Features:

- PC configuration interface
- True RMS measurement or arithmetic mean value
- Digital switching output (configurable switching thresholds)
- Switchable filter function
- Calibrated measurement range switching
- Safe 3-way isolation with 2.5 kV test voltage per EN 61140
- Extremely fast response times
- Measurement range overflow indication

Note:

Additional setting options via interface configuration software/app

Configuration	
Configuration options	DIP switch; WAGO interface configuration software; WAGO interface configuration app
Input	
Input signal type	Current
Input signal (current)	0 ... 1 A AC/DC (IN 1); 0 ... 5 A AC/DC (IN 2)
Frequency range	16 ... 400 Hz
Input resistance (current input)	47 mΩ (IN 1); 10 mΩ (IN 2)
Input current (max.)	10 A (IN 1; 5 s); 15 A (IN 2; 5 s)
Response threshold	2 mA (IN 1); 4 mA (IN 2)
Output	
Output signal type	Current; Voltage
Output signal (voltage)	0 ... 5 V; 1 ... 5 V; 0 ... 10 V; 2 ... 10 V
Output signal (current)	0 ... 10 mA; 2 ... 10 mA; 0 ... 20 mA; 4 ... 20 mA
Load impedance (voltage output)	≥ 2 kΩ (temperature range restrictions may occur)
Load impedance (current output)	≤ 600 Ω (temperature range restrictions may occur)
Output – Digital	
Max. switching voltage (DO)	Supply voltage applied
Max. continuous current (DO)	100 mA (no internal restriction)
Number of switching thresholds (DO)	1 (adjustable)
Signal Processing	
Measurement method	True RMS measurement; Arithmetic mean value
Software filter (adjustable)	Moving average value (filter level: 30)
Step response (typ.)	60 ms
Measurement Error	
Transmission error (typ.)	≤ 0.1 % of upper-range value
Transmission error (max.)	≤ 0.4 % of upper-range value
Temperature coefficient	≤ 0.01 %/K
Power Supply	
Nominal supply voltage U_s	24 VDC
Supply voltage range	±30 %
Power consumption at nominal supply voltage	≤ 40 mA (+ IDO)
Safety and Protection	
Test voltage (input/output/supply)	2.5 kVAC; 50 Hz; 1 min
Protection type	IP20
Connection Data	
Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inch
Geometric Data	
Width	6 mm / 0.236 inch
Height from upper-edge of DIN-rail	97.8 mm / 3.85 inch
Depth	94 mm / 3.701 inch
Mechanical Data	
Mounting type	DIN-35 rail
Material Data	
Weight	64 g
Environmental Requirements	
Surrounding air temperature (operation)	–25 °C ... +70 °C (at nominal current)
Surrounding air temperature (storage)	–40 ... +85 °C

Specialty Functions:



Configuration via:



Standards and Specifications

Conformity marking	CE
EMC immunity to interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-4

857-550

DIP Switch Adjustability

= ON Default

DIP Switch S1

Input Signal		Measurement Method	Filter	Output Signal		
1	2	3	4	5	6	
5 A		Mean square value	off			0 ... 20 mA
• 1 A	•	Arithmetic mean value	• active	•		4 ... 20 mA
				•		0 ... 10 V
				•	•	2 ... 10 V
						0 ... 10 mA
					•	2 ... 10 mA
				•		0 ... 5 V
				•	•	1 ... 5 V

Filter:

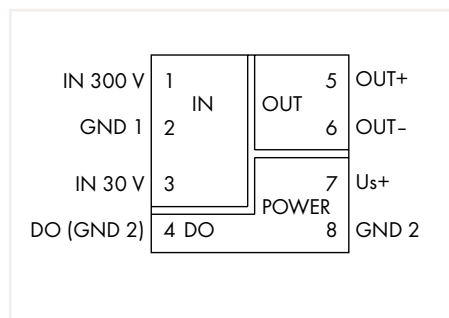
The filter function allows a low-pass filter to be switched on in order to mask or "smooth out" oscillating measured values (e.g., during trailing edge flows).

DIP Switch S1

7	8	Measurement Range Underflow	Measurement Range Overflow	Overcurrent (Input Signal - End Value + 20%)	9	10	Digit Output DO Signaling
		Lower limit of measurement range -5 %*	Upper limit of measurement range +2.5 %*	Upper limit of measurement range +5 %*			DO not active
•		Lower limit of measurement range	Upper limit of measurement range +2.5 %	Upper limit of measurement range +5 %		•	DO U _s + switching
	•	Lower limit of measurement range	Upper limit of measurement range	Lower limit of measurement range	•	•	DO GND switching
	•	Lower limit of measurement range	Upper limit of measurement range	Upper limit of measurement range			*acc. to NAMUR NE 43

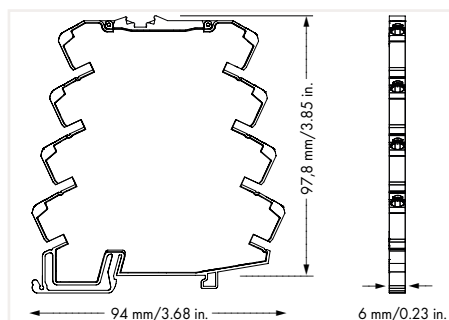
Voltage Signal Conditioner; Configurable; with Digital Output

857 Series



Voltage signal conditioner; Voltage input signal; Current and voltage output signal; Digital output; Configuration via software; Supply voltage: 24 VDC; 6 mm module width

Item No.	Pack. Unit
857-560	1



Short description:

WAGO's voltage signal conditioner measures AC/DC voltages up to 300 V, converting the input signal into a standard analog signal at the output.

Features:

- Two isolated measurement inputs for 30 and 300 V AC/DC
- RMS measurement or arithmetic mean value
- A digital signal output reacts to configured measurement range limits (on/off switching delay and threshold value switch function can be configured with up to two threshold values)
- Switchable filter function
- Safe 3-way isolation with 3 kV test voltage per DIN EN 61010-1

Configuration

Configuration options: DIP switch; WAGO interface configuration software; WAGO interface configuration app

Input

Input signal type	Voltage
Input signal (voltage)	300 V AC/DC (IN 1); 30 V AC/DC (IN 2)
Frequency range	10 ... 100 Hz (AC)
Input resistance (voltage input)	≥ 300 kΩ
Response threshold	300 mV (IN 1); 30 mV (IN 2)
Resolution	30 mV (IN 1); 3 mV (IN 2)

Output

Output signal type	Current; Voltage
Output signal (voltage)	0 ... 5 V; 1 ... 5 V; 0 ... 10 V; 2 ... 10 V (can be inverted, also bipolar)
Output signal (current)	0 ... 10 mA; 2 ... 10 mA; 0 ... 20 mA; 4 ... 20 mA (can be inverted, also bipolar)
Load impedance (voltage output)	≥ 1 kΩ
Load impedance (current output)	≤ 600 Ω

Output – Digital

Max. switching voltage (DO)	Supply voltage applied
Max. continuous current (DO)	100 mA (no internal restriction)
Number of switching thresholds (DO)	1 or 2 (adjustable)
Configurable rise/fall delay time (DO)	0 ... 60 s (via software)

Signal Processing

Measurement method	RMS measurement; Arithmetic mean value
Limit frequency	2 kHz
Software filter (adjustable)	Moving average value (filter level: 30)
Step response (typ.)	30 ms

Measurement Error

Transmission error (max.)	≤ 0.5 % (of the full scale value)
Temperature coefficient	≤ 0.01 %/K

Power Supply

Nominal supply voltage U_s	24 VDC
Supply voltage range	±30 %
Power consumption at nominal supply voltage	≤ 46 mA (+ IDO)

Safety and Protection

Test voltage (input/analog output/supply/service interface)	2.5 kVAC; 50 ... 60 Hz; 1 min
Protection type	IP20

Connection Data

Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inch

Geometric Data

Width	6 mm / 0.236 inch
Height from upper-edge of DIN-rail	97.8 mm / 3.85 inch
Depth	94 mm / 3.701 inch

Mechanical Data

Mounting type	DIN-35 rail
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Material Data

Weight	34 g
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Environmental Requirements

Surrounding air temperature (operation)	-25 °C ... +70 °C (at nominal current)
Surrounding air temperature (storage)	-40 ... +85 °C
Operating altitude (max.)	2000 m

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» Configuration app	Page 327
» Accessories	Page 338

Specialty Functions:



Configuration via:



Standards and Specifications

Conformity marking	CE
EMC immunity to interference	EN 61000-6-2; EN 61326-2-3; EN 50121-3-2
EMC emission of interference	EN 61000-6-3; EN 61326-2-3; EN 50121-3-2
Standards/specifications	EN 61010-1; EN 61373

857-560

DIP Switch Adjustability

● = ON Default

DIP Switch S1

1	2	Input	3	Measurement Method	4	Filter
		300 V		Effective value (RMS)		off
	●	150 V	●	Arithmetic mean value (bipolar output)	●	active
	●	30 V				
	● ●	15 V				

DIP Switch S1

5	6	7	Output Signal Range (Bipolar for Arithmetic Mean Value)
			(+/-) 0 ... 20 mA
	●		4 ... 20 mA
●			(+/-) 0 ... 10 V
● ●			2 ... 10 V
		●	(+/-) 0 ... 10 mA
	● ●		2 ... 10 mA
● ●			(+/-) 0 ... 5 V
● ● ●			1 ... 5 V

DIP Switch S1

8	9	Measurement Range Underflow	Measurement Range Overflow	10	Digital Output DO/ Signaling
		Lower limit of measurement range -5 %*	Upper limit of measurement range +2.5 %*		DO V _s + switching
●		Lower limit of measurement range	Upper limit of measurement range +2.5 %	●	DO GND switching
	●	Lower limit of measurement range	Upper limit of measurement range		
● ●		Lower limit of measurement range	Upper limit of measurement range		

*acc. to NAMUR NE 43

Filter

The filter function allows a low-pass filter to be switched on in order to mask or "smooth out" oscillating measured values (e.g., during trailing edge flows).

Digital Output DO/Signaling

The digital output (DO) signals error messages and can be configured as follows: 24 V → 0 V/0 V → 24 V.

Current Sensor with Bus Connection; in DIN-Rail-Mount Enclosure 789 Series



Current signal conditioner; Current input signal: 140 ADC; Modbus RTU; Supply voltage: 24 VDC; Module width: 35 mm

Item No.	Pack. Unit
789-621	1

Short description:

WAGO's intelligent current sensor monitors solar plants or inverters for DC measurements within a large current measurement range. The sensor is mounted on DIN-35 rail.

Input	
Input signal type	Current
Input signal, current	0 ... 140 ADC
Resolution [bit]	15 bits
Communication	
Communication	Modbus® RTU
Interface	RS-485
Transmission channels	Half duplex; 8-bit data; 1 stop bit
Number of participants (max.)	32
Bus length (max.)	≤ 1200 m
Parity	Even
Baud rate	19.2 kB
Terminating resistor	150 Ω (can be activated via DIP switch 1)
Measurement Error	
Transmission error (typ.)	≤ 0.5 % of upper-range value (0 ... 80 A; at room temperature); ≤ 1 % of upper-range value (80 ... 140 A; at room temperature)
Temperature coefficient	≤ 0.05 %/K (-20 ... +60 °C); ≤ 0.1 %/K (-60 ... +70 °C)
Power Supply	
Supply voltage range	12 ... 34 VDC
Power consumption at nominal supply voltage	≤ 8 mA
Safety and Protection	
Protection type	IP20
Connection Data	
Feedthrough for measurement conductor	15 mm Ø
Connector	RJ-45
Geometric Data	
Width	35 mm / 1.378 inch
Height from upper-edge of DIN-rail	55 mm / 2.165 inch
Depth	90 mm / 3.543 inch
Mechanical Data	
Mounting type	DIN-35 rail
Material Data	
Weight	77.22 g
Environmental Requirements	
Surrounding air temperature (operation)	-20 ... +70 °C
Surrounding air temperature (storage)	-40 ... +85 °C
Standards and Specifications	
Conformity marking	CE
EMC immunity to interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-4
Standards/specifications	DIN EN 50178

Accessories



Interface Module with RJ-45 Connector

Item No.	Pack. Unit
289-965	1



Interface Module with RJ-45 Connector and Shield Clamping Saddle

Color	Item No.	Pack. Unit
white	289-966	1



ETHERNET RJ-45 Connector

Item No.	Pack. Unit
750-975	1

789-621

RJ-45-Connector Pin Assignment:

Pin	Function
1	Ub
2	
3	n.c.
4	A (Data+)
5	B (Data-)
6	n.c.
7	GND
8	

Communication Description:

Modbus® Function	Read Holding Registers (0x03)
Address of Measured Value	0x0004
Data Type Measurement	Integer

Error Numbers

id	Description
01	Illegal Function
03	Illegal Data
101	Overflow (Current > +83 A)
102	Underflow (Current < -3 A)

DIP Switch Adjustability

● = ON

Adress	DIP Switch						Terminating Resistor	DIP Switch 1
	2	3	4	5	6			
1						150 Ohm	●	
2					●			
3				●				
4				●	●			
5			●					
6			●		●			
7			●	●				
8			●	●	●			
9		●						
10		●			●			
11		●		●				
12		●		●	●			
13		●	●					
14		●	●		●			
15		●	●	●				
16		●	●	●	●			
17	●							
18	●						●	
19	●			●				
20	●			●	●			
21	●		●					
22	●		●		●			
23	●		●	●				
24	●		●	●	●			
25	●	●						
26	●	●			●			
27	●	●		●				
28	●	●		●	●			
29	●	●	●					
30	●	●	●		●			
31	●	●	●	●				
32	●	●	●	●	●			

NOTICE:
Only set the Modbus® Adress in the OFF state.

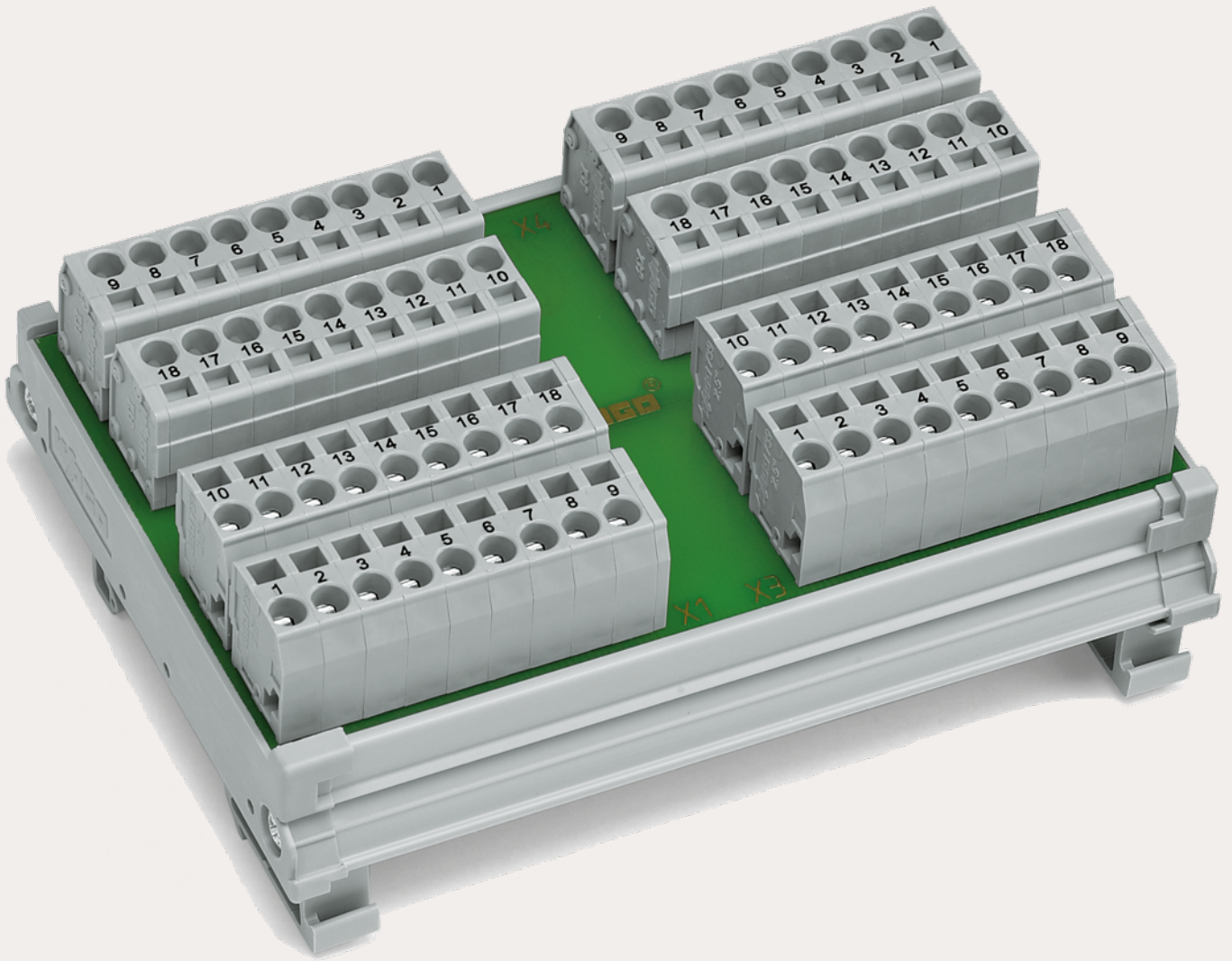
Selection Guide: Current Transformers

The Right Solution for Every Application

Current Transformers 855 Series	Split-Core Current Transformers	Plug-In Current Transformers with CAGE CLAMP® Connection Technology
		
Application	Retrofit	New systems
Coil bobbin	Separable	Closed
Connection technology	Connection cable (color coded)	CAGE CLAMP®
Mounting	Round cable (insulated), copper current bar (insulated)	Round cable, copper current bar, DIN-rail, mounting plate
Compatibility with other WAGO components	750-493, (750-493/000-001) 750-494, (750-494/000-001) 750-495, (750-495/000-001) 857-550, 2857-570/024-001 2857-570/024-005	
Primary rated current	60 ... 1000 A	50 ... 2500 A
Secondary rated current	1 A / 5 A	1 A / 5 A
Accuracy class	0.5; 1 or 3	1 or 3
Surrounding air temperature	-10 ... +55 °C	-5 ... +50 °C
Standards	EN 61869-2	EN 61869-2
Approvals	-	
Connection examples		




* In the measurement range between 0.8 and 32 A and in combination with WAGO's 3-Phase Power Measurement Modules, accuracy class 0.5 per EN 61869-2 is achieved.

Plug-In Current Transformers with <i>picoMAX</i> ® Pluggable Connectors		Rogowski Coils RC 70 / RC 125 / RC 175	Current and Voltage Taps
			
New systems		Retrofit	New systems
Closed		Bayonet connector, separable	Closed
<i>picoMAX</i> ®		Connectiono cable	Push-in CAGE CLAMP®
Round cable, copper current bar, mounting plate		Round cable, copper current bar	Jumper slot of the 285 series 2-Conductor Through Teremin Blocks 285-150, 285-195, 285-1185, 285-141, 285-181, 285-1161
750-493, 750-494 750-495, 857-550, 2857-570/024-001		750-495/000-002 857-552 2857-570/024-000	750-493 750-494 750-495 857-550 2857-570/024-001
32 A	35 / 64 A	Up to 4000 A	150 ... 350 A
320 mA	1 A	22.5 mV/kA	1 A
0.5*	1	0.5	0.5
-10 ... +55 °C		-40 ... +80 °C	-25 ... +70 °C
EN 61869-2		IEC 61010-1 / EN 61869-2	EN 61869-2, EN 60947-7-3, IEC 60068-2-6
-		UL listed	-
			



WAGO Potential Distribution

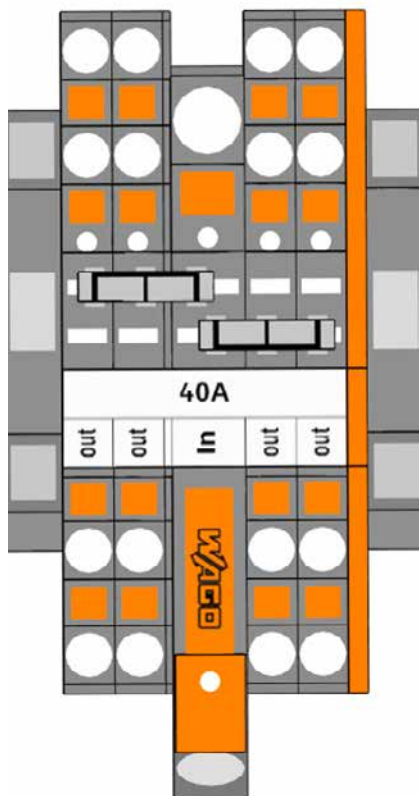
WAGO Potential Distribution

		Page
	Potential Distribution Blocks	222
	Busbar Terminal Blocks 812 Series	225
	DIN-Rail-Mount Potential Distribution Modules 288 / 830 Series	226

WAGO Potential Distribution Blocks

Potential distribution can be seamlessly implemented using WAGO's TOPJOB® S Rail-Mount Terminal Blocks with mixed conductor cross-sections. If required, jumpers can be used to easily provide additional connection points. Some standard setups are shown below. For more information on rail-mount terminal block operation and other accessories, visit www.wago.com.

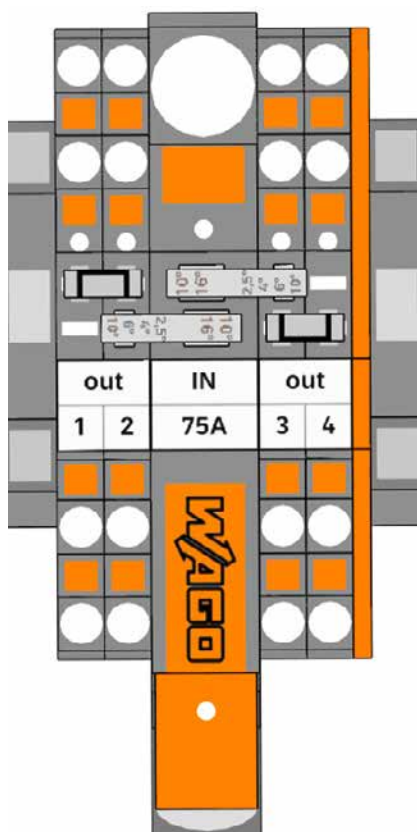
Potential Distribution Blocks; 40 A



Part list:

1x	2-conductor through terminal block; with lever and push-button; 6 mm ² ; with test port; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®	2106-5201
4x	4-conductor through terminal block; with push-button; 2.5 mm ² ; with test port; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®	2202-1401
2x	End and intermediate plate; 0.8 mm thick	2002-1491/2
2x	Push-in type jumper bar; insulated; 3-way; Nominal current 25 A	2002-403

Potential Distribution Blocks; 75 A



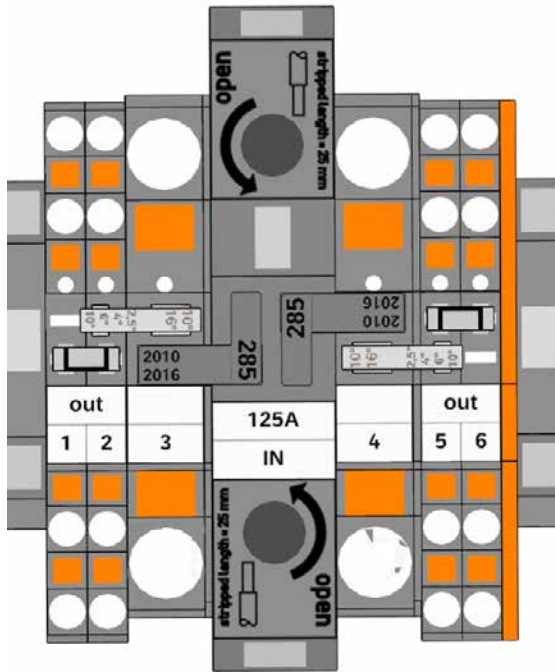
Part list:

1x	2-conductor through terminal block; with lever and push-button; 16 mm ² ; with test port; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®	2116-5201
4x	4-conductor through terminal block; with push-button; 2.5 mm ² ; with test port; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®	2202-1401
1x	End and intermediate plate; 0.8 mm thick	2002-1492
2x	Step-down jumper; insulated; from 16/10 mm ² to 10/6/4/2.5 mm ² ; Nominal current 57 A	2016-499
2x	Push-in type jumper bar; insulated; 3-way; Nominal current 25 A	2002-403

WAGO Potential Distribution Blocks

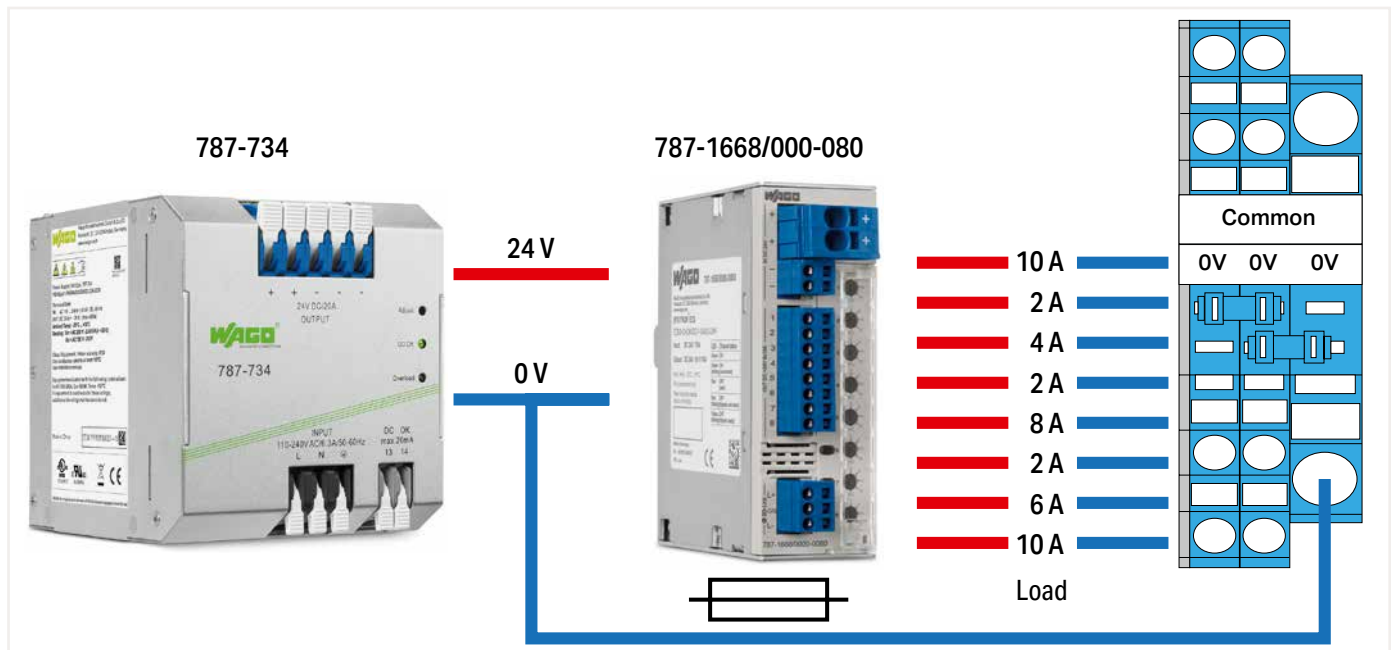
The setups and individual compilations below, e.g., with power supply and ECB can be easily created and documented via WAGO's Smart Designer Configuration Software (available at www.wago.com), and then ordered as a custom rail assembly.

Potential Distribution Blocks; 125 A



Part list:		
1x	2-conductor through terminal block; 35 mm ² ; lateral marker slots; only for DIN 35 x 15 rail; 2.3 mm thick; copper; POWER CAGE CLAMP	285-135
2x	2-conductor through terminal block; with push-button; 10 mm ² ; with test port; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®	2210-1201
4x	4-conductor through terminal block; with push-button; 2.5 mm ² ; with test port; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®	2202-1401
2x	End and intermediate plate; 1 mm thick	2020-1291
1x	End and intermediate plate; 1 mm thick	2020-1492
2x	Step-down jumper; insulated; from 285-13x to 2010 and 2016 Series TOPJOB® S terminal blocks; Nominal current 90 A	285-430
2x	Step-down jumper; insulated; from 16/10 mm ² to 10/6/4/2.5 mm ² ; Nominal current 57 A	2016-499
2x	Push-in type jumper bar; insulated; 3-way; Nominal current 25 A	2002-403

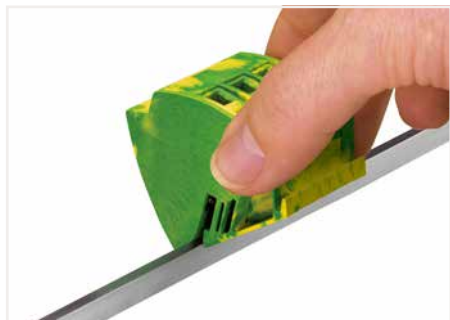
Application example



Busbar Terminal Blocks

812 Series

Description and Installation

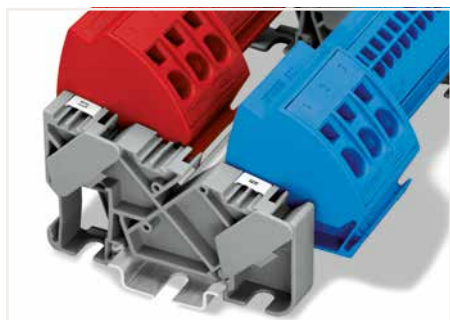


Snapping a ground busbar terminal block onto the N-busbar.



Unlock right and left positions to remove the ground busbar terminal block. Then pull up the block from the busbar.

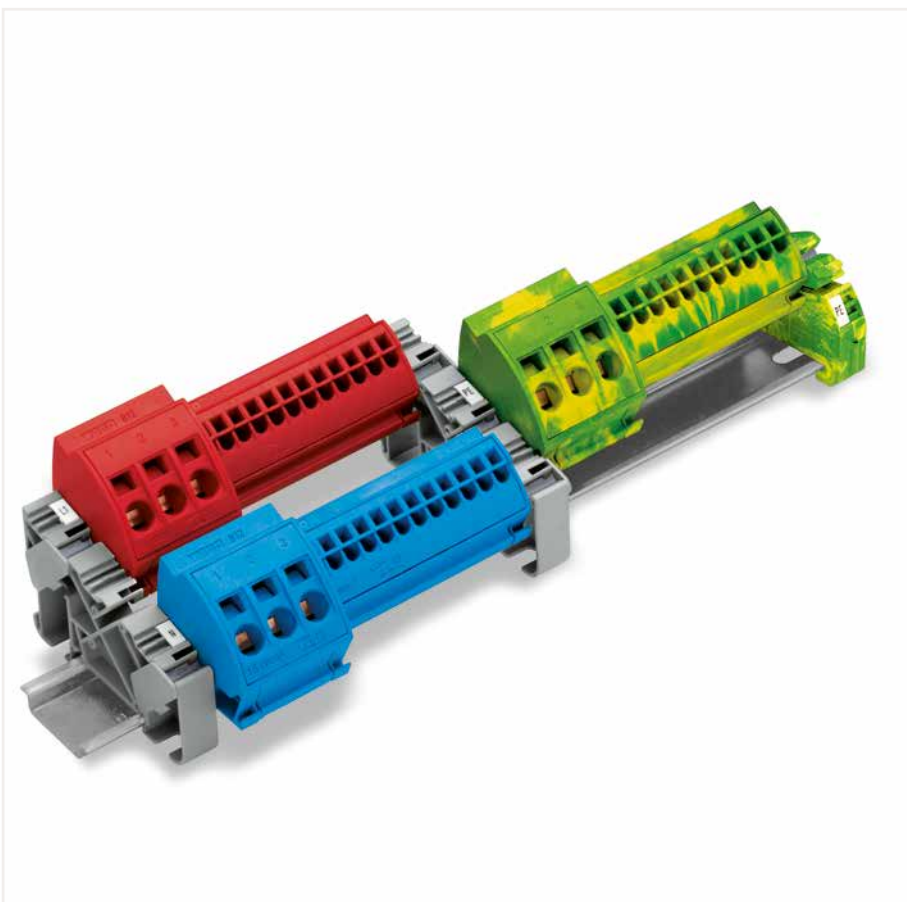
Using the 812 Series Busbar Terminal Blocks in switch-gear cabinets and distribution boards permits simple and safe potential distribution on standard (10 x 3) mm busbars. Tool-free snapping of self-locking busbar terminal blocks onto the busbar enables quick and easy assembly, as well as subsequent extension. The busbar terminal blocks are available in two different versions for conductors ranging from 1.5 to 16 mm² (16–6 AWG). Current carrying capacity: With a maximum total current of 96 A, the clamping units of the busbar terminal block can be loaded with the rated current of the conductor cross sections approved. This only applies when (10 x 3) mm busbars are used.



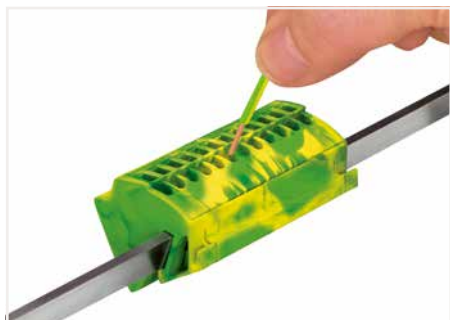
Busbar carrier (812-140):
Offers three receptacles for (10 x 3) mm busbars with locking device for easy mounting of the busbars. The carrier can be snapped onto the DIN-35 rail or screwed on a panel.



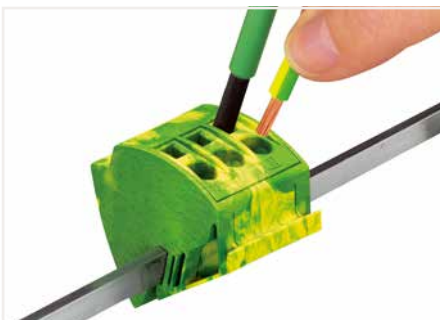
Ground busbar carrier (812-141):
Offers a receptacle with locking device for (10 x 3) mm busbar. Contact between the busbar and rail is made automatically by simply snapping the carrier onto the DIN-35 rail. One end of the busbar is mounted onto the ground busbar carrier, the other end is inserted into the middle position of the insulated busbar carrier.



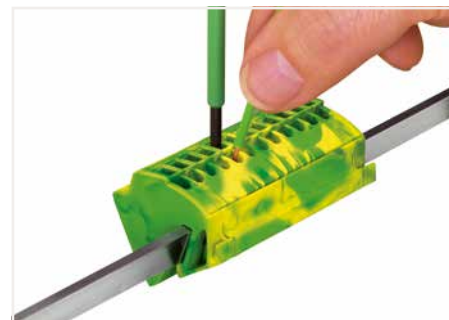
Mixed 4 mm² (12 AWG) and 16 mm² (6 AWG) busbar terminal blocks



Conductor termination (4 mm²/12 AWG):
With Push-in CAGE CLAMP®, solid conductors can be terminated by simply pushing them into the 12 x 4 mm² busbar terminal block, significantly reducing wiring time.



Conductor termination (16 mm²/6 AWG):
Open the clamping unit with an operating tool when terminating solid, stranded and fine-stranded conductors.



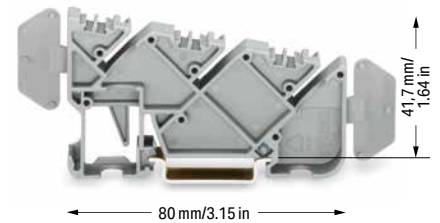
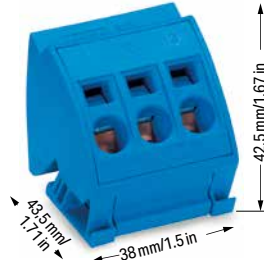
Conductor removal (4 mm²/12 AWG and 16 mm²/6 AWG):
Open the clamping unit using an operating tool.

Busbar Terminal Block 4 mm² and 16 mm²; 812 Series

Technical Data	
0.5 ... 4 mm ²	20 ... 12 AWG
1000 V/6 kV/3	600 V, 20 A
I _N 96 A	600 V, 95 A
Terminal block width: 75 mm / 2.953 inch	
11 mm / 0.43 inch	



Technical Data	
1.5 ... 16 mm ²	14 ... 6 AWG
1000 V/6 kV/3	600 V, 20 A
I _N 96 A	600 V, 95 A
Terminal block width: 38 mm / 1.496 inch	
12 mm / 0.47 inch	



Busbar terminal block 4 mm ² ; with Push-in CAGE CLAMP® connection		
Color	Item No.	Pack. Unit
blue	812-104	10
light gray	812-101	10
dark gray	812-102	10
red	812-103	10

Busbar terminal block 16 mm ² ; with CAGE CLAMP® connection		
Color	Item No.	Pack. Unit
blue	812-114	12
light gray	812-111	12
dark gray	812-112	12
red	812-113	12

Insulated busbar carrier; 12 mm wide		
Color	Item No.	Pack. Unit
gray	812-140	25

Accessories; item-specific		
Busbar; tin-plated; 1000 mm long; Copper (10 x 3) mm		
I _N 140 A	210-133	1



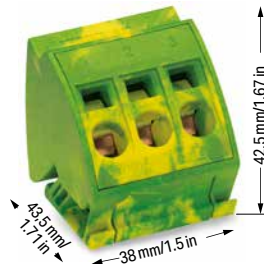
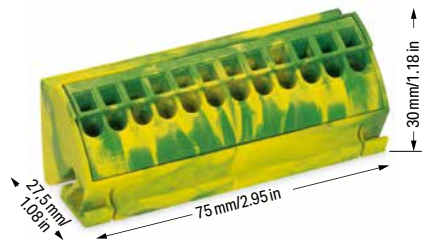
Accessories; item-specific		
Busbar; tin-plated; 1000 mm long; Copper (10 x 3) mm		
I _N 140 A	210-133	1



Finger guard; touch-proof cover protects unused conductor entries



yellow	284-400	100 (25)
--------	---------	----------



Ground busbar terminal block 4 mm ² ; with Push-in CAGE CLAMP® connection		
Color	Item No.	Pack. Unit
green-yellow	812-100	10

Ground busbar terminal block 16 mm ² ; with CAGE CLAMP® connection		
Color	Item No.	Pack. Unit
green-yellow	812-110	12

Ground busbar carrier; with DIN-35 rail contact; 11 mm wide		
Color	Item No.	Pack. Unit
green-yellow	812-141	25

Accessories; item-specific		
Busbar; tin-plated; 1000 mm long; Copper (10 x 3) mm		
I _N 140 A	210-133	1



Accessories; item-specific		
Busbar; tin-plated; 1000 mm long; Copper (10 x 3) mm		
I _N 140 A	210-133	1

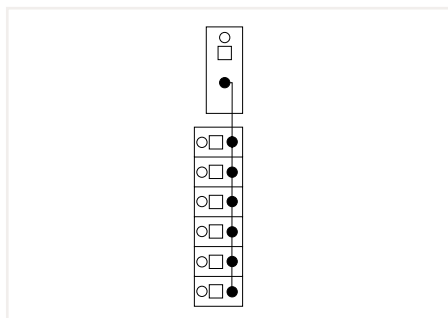


Finger guard; touch-proof cover protects unused conductor entries



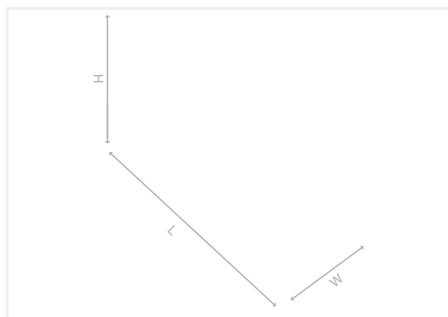
yellow	284-400	100 (25)
--------	---------	----------

Potential Distribution Module 830 Series



Potential Distribution Module; 1 potential;
with 1 input clamping point; Conductor cross section
up to 16 mm²/6 AWG; Lever; with 6 output clamping
points; Conductor cross section up to 2.5 mm²/12 AWG

Color	Item No.	Pack. Unit
gray	830-800/000-312	10
blue	830-800/000-312/ 000-006	10



General Specifications

Operating voltage	≤ 250 VAC/DC
Total current per potential (max.)	65 A
Current per connection (max.)	12 A

Connection Data

Total number of potentials	1
Connection type 1	Input
Connection technology 1	CAGE CLAMP®
Solid conductor 1	1.5 ... 16 mm ² / 16 ... 6 AWG
Fine-stranded conductor 1	1.5 ... 16 mm ² / 16 ... 6 AWG
Strip length 1	12 ... 13 mm / 0.47 ... 0.51 inch
Connection type 2	Output
Connection technology 2	CAGE CLAMP®
Solid conductor 2	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor 2	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip length 2	8 ... 9 mm / 0.31 ... 0.35 inch

Physical Data

Width	21 mm / 0.81 inch
Height from upper-edge of DIN-rail	49 mm / 1.98 inch
Depth	85 mm / 3.35 inch

Mechanical Data

Mounting type	DIN-35 rail
---------------	-------------

Material Data

Weight	57.8 g
--------	--------

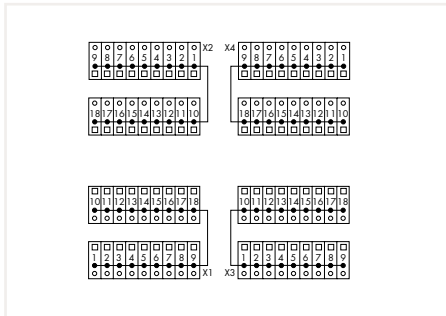
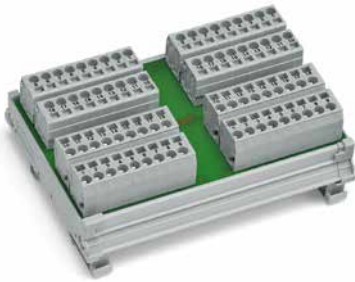
Environmental Requirements

Surrounding air temperature (operation)	-20 ... +50 °C
Relative humidity	95 % (no condensation permissible)

Standards and Specifications

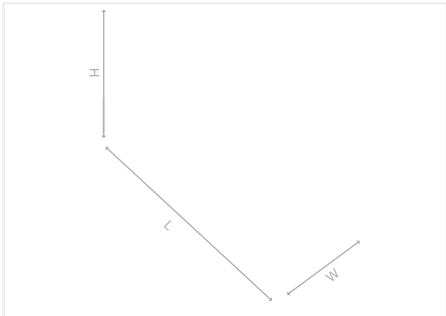
Standards/specifications	cULus 61010-2-201
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Potential Distribution Module 288 Series



Potential Distribution Module; 4 potentials;
each with 18 connection points

	Item No.	Pack. Unit
	288-825	1



General Specifications

Operating voltage	≤ 250 VAC/DC
Total current per potential (max.)	12 A
Current per connection (max.)	12 A

Safety and Protection

Pollution degree	2
Rated voltage	250 V
Rated surge voltage	4 kV

Connection Data

Total number of potentials	4
Connection technology	CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip Length	8 ... 9 mm / 0.31 ... 0.35 inch

Physical Data

Width	115 mm / 4.528 inch
Height from upper-edge of DIN-rail	45 mm / 1.772 inch
Depth	85 mm / 3.346 inch

Mechanical Data

Mounting type	DIN-35 rail
---------------	-------------

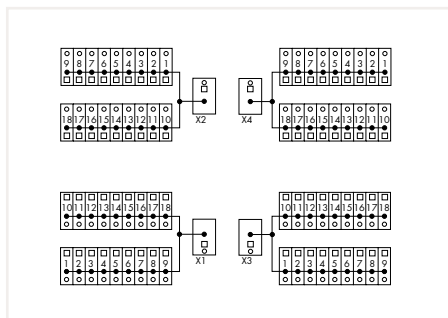
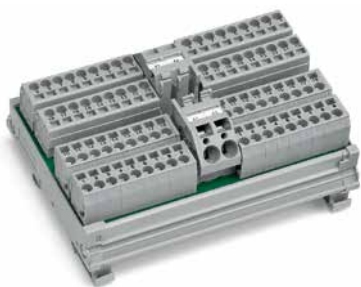
Material Data

Weight	156.6 g
--------	---------

Environmental Requirements

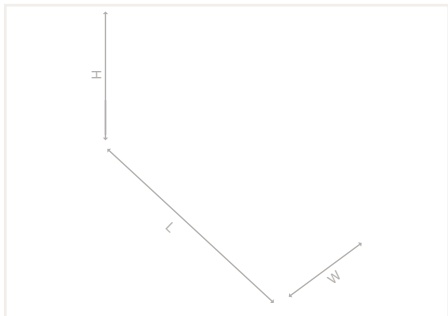
Surrounding air temperature (operation)	-20 ... +50 °C
Surrounding air temperature (storage)	-40 ... +80 °C

Potential Distribution Module 288 Series



Potential Distribution Module; 4 potentials;
each with 19 connection points

Item No.	Pack. Unit
288-837	1



General Specifications

Operating voltage	≤ 250 VAC/DC
Total current per potential (max.)	32 A
Current per connection (max.)	12 A

Safety and Protection

Pollution degree	2
Rated voltage	250 V
Rated surge voltage	4 kV

Connection Data

Total number of potentials	4
Connection type 1	Power supply
Connection technology 1	CAGE CLAMP®
Solid conductor 1	0.2 ... 6 mm ² / 24 ... 10 AWG
Fine-stranded conductor 1	0.2 ... 6 mm ² / 24 ... 10 AWG
Strip length 1	11 ... 12 mm / 0.43 ... 0.47 inch
Connection type 2	Connection points
Connection technology 2	CAGE CLAMP®
Solid conductor 2	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor 2	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip length 2	8 ... 9 mm / 0.31 ... 0.35 inch

Physical Data

Width	115 mm / 4.528 inch
Height from upper-edge of DIN-rail	45 mm / 1.772 inch
Depth	85 mm / 3.346 inch

Mechanical Data

Mounting type	DIN-35 rail
---------------	-------------

Material Data

Weight	178.2 g
--------	---------

Environmental Requirements

Surrounding air temperature (operation)	-20 ... +50 °C
Surrounding air temperature (storage)	-40 ... +80 °C

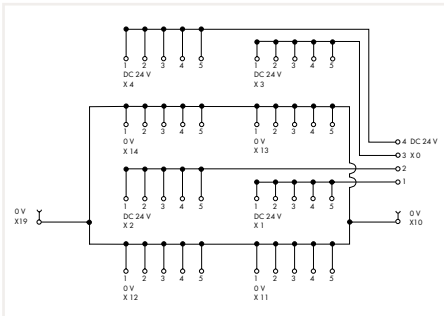
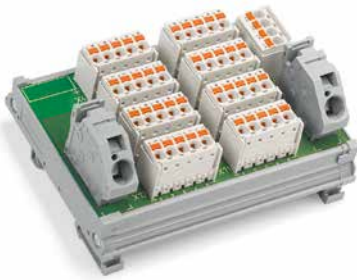
Accessories



Comb-style jumper bar; 2-way

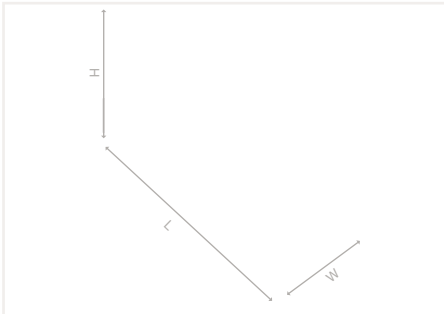
Item No.	Pack. Unit
745-382	250 (50)

Potential Distribution Module 288 Series



Potential Distribution Module; 4 potentials; each with 6 connection points; with 22 ground connection points

Item No.	Pack. Unit
288-870/000-030	1



Features:

- May be used with electronic circuit breakers for 24 and 0 VDC power distribution, as a substitute for rail-mount terminal blocks
- Pre-wiring and electrical isolation of current paths via pluggable *picoMAX*® Female Headers
- Optional coding pins (2092-1610) protect against any inadvertent mixing of female headers
- Optional gripping plates with sliding connector release (2092-1601/002-000 or 2092-1602/002-000) provide conductor strain relief
- 0 V may be supplied to the adjacent modules via comb-style jumper bar (745-682)

General Specifications

Nominal operating voltage	24 VDC
Total current 0 V (max.)	40 A
Total current per potential (max.)	10 A
Current per connection (max.)	10 A

Connection Data

Total number of potentials	4
Connection type 1	Power supply 0 V
Mating direction 1	45°
Connection technology 1	CAGE CLAMP®
Solid conductor 1	0.2 ... 16 mm ² / 24 ... 6 AWG
Fine-stranded conductor 1	0.2 ... 16 mm ² / 24 ... 6 AWG
Strip length 1	12 ... 13 mm / 0.47 ... 0.51 inch
Connection type 2	Power supply 24 V; connection points
Mating direction 2	Vertical
Connection technology 2	Push-in CAGE CLAMP®
Solid conductor 2	0.2 ... 2.5 mm ² / 24 ... 12 AWG
Fine-stranded conductor 2	0.2 ... 2.5 mm ² / 24 ... 12 AWG
Strip length 2	9 ... 10 mm / 0.35 ... 0.39 inch

Physical Data

Width	100 mm / 3.937 inch
Height from upper-edge of DIN-rail	49 mm / 1.929 inch
Depth	85 mm / 3.346 inch

Mechanical Data

Mounting type	DIN-35 rail
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Material Data

Weight	140.4 g
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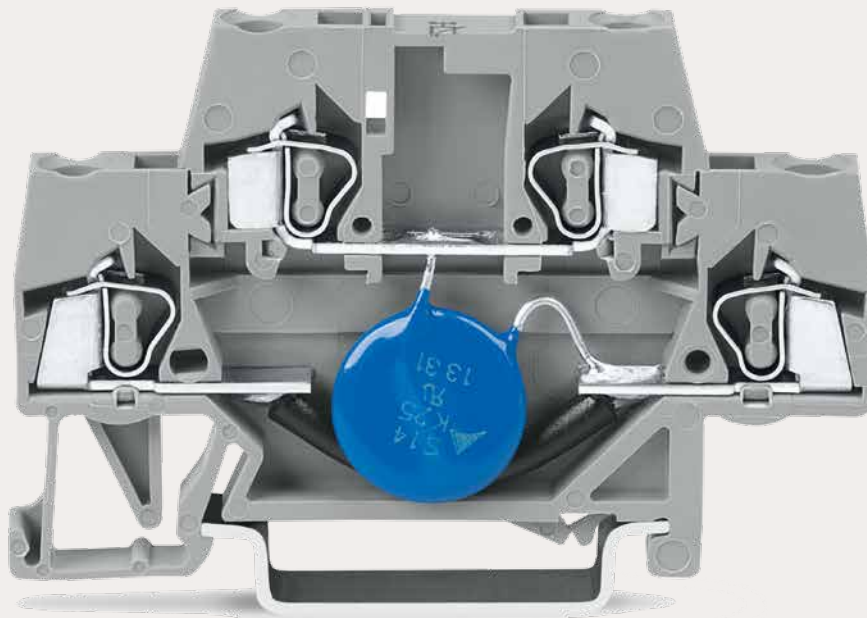
Environmental Requirements

Surrounding air temperature (operation)	-25 ... +70 °C (no condensation)
Surrounding air temperature (storage)	-40 ... +85 °C

Accessories





Comb-style jumper bar; 2-way		Coding pin carrier		Gripping plate with sliding connector release		
Item No.	Pack. Unit	Item No.	Pack. Unit	Description	Item No.	Pack. Unit
745-682	400 (50)	2092-1610	100 (25)	3- to 4-pole	2092-1601/002-000	100 (25)
				5- to 8-pole	2092-1602/002-000	100 (25)



WAGO Overvoltage Protection

WAGO Overvoltage Protection

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Overvoltage Protection

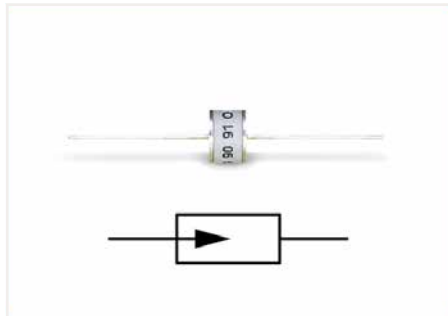
Overvoltage protection for increased safety and longer on-line operation

On-the-line overvoltages cause most operating failures for measuring, control, data and power lines. Failure of electronic and semiconductor components due to surges can cause operating interruptions. The overvoltage (also called transients) can be generated by switching electrical equipment on or off or by lightning discharges. Depending on the application, protective measures for systems and devices can be broken down into:

- Coarse protection
- Medium protection
- Fine protection

The boundaries between these levels of protection may not be sharply defined. To implement the appropriate protection measures, various components are used for discharging transient overvoltage, depending on the protection type. The following components have proven performance in these applications:

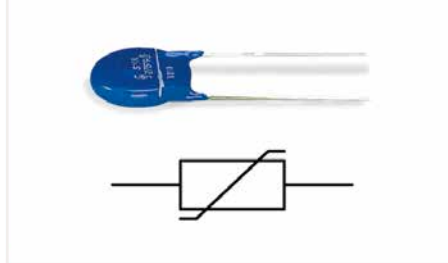
Gas-filled surge arrester



The gas filled surge arrester is comprised of two electrodes in a ceramic or glass tube filled with a pressurized inert gas.

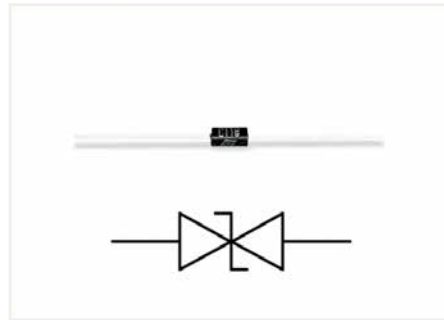
Once the ignition voltage is reached, resistance drops due to ionization and current begins to flow. The resistance of the device drops from high to low as it conducts. The voltage across the device after the arc is struck is typically 10 ... 30 V. Therefore, the current will continue to flow until the voltage drops below this level. As this is not a guaranteed occurrence in typical power situations, a fuse must precede the device to ensure disconnection from the supply. This is always the case if the nominal voltage of the protected network is greater than 12 VDC and the nominal voltage of the power supply and the protected circuit is greater than 100 mA.

Varistor



A varistor is a voltage-dependent resistor, in which the resistance becomes low after their "nominal voltage" is exceeded and for the voltage range above it, and can thus cut off any overvoltages through high discharge currents. Varistors can age with continued surge conduction, resulting in lower impedance even in the lower voltage range. However, this normally only occurs when a varistor frequently discharges transients. In this case, they must be replaced and specific time intervals.

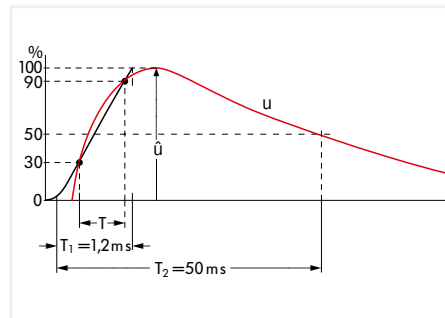
Suppressor Diode



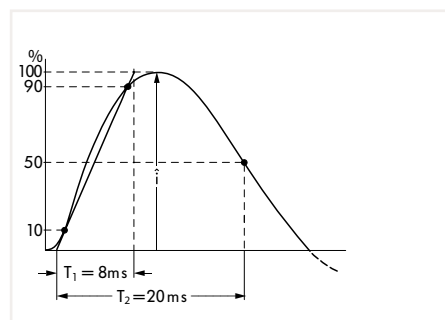
Suppressor diodes have electrical characteristics similar to Zener diodes, but are rated for surge currents. Once the rated breakdown voltage is exceeded (in the non-conductive direction), the diode becomes a conductor. The suppressor diode differs from a Zener in its higher current carrying capability and faster response time (in the picosecond range).

Test Impulse

Surge arresters are subject to standardized test pulses in order to classify capabilities; the effectiveness of protection measures with reference to dissipation capacity and voltage arresting. The form and level of the test pulses are defined by IEC 60060-1 and EN 62475:2010. Preference is given to voltage pulses of 1.2/50 and current pulses of 8/20.



Voltage pulses 1.2/50 per IEC 60060-1



Current pulses 8/20 per EN 62475:2010

Application Recommendations

The advantages of gas-filled surge arresters lie in their high current carrying capacity, making them ideal for coarse protection. One disadvantage, particularly in the medium protection range, is the relatively long response time, as well as the power follow current.

Varistors have a considerably shorter response time; however they also have lower leakage currents. This makes them more suitable for medium protection as they offer limited applications for coarse protection.

If the connection lines of electronic equipment are already "fine" protected, general coarse and medium protection measures are sufficient. If this is not the case, suppressor diodes with a very short response time may be employed as fine protection. WAGO offers a complete range of modular terminal blocks with integrated surge arresters for coarse, medium and fine protection. Depending on the application, one can choose the appropriate type from the previously mentioned surge arresters. These are electrically connected in the modular terminal blocks between the connection point and mounting rail. Snapping the terminal block onto the grounded (earthed) mounting rail automatically ensures the required overvoltage protection.



Double-deck terminal block, with varistor direct connection to DIN-35 rail

Frequently, only one surge arrester is fitted for cost reasons. However, due to the fact that one surge arrester alone cannot optimally ensure several protection functions, combinations are recommended. Care must be taken to ensure that the single-stage protection devices are decoupled sufficiently by inductors or resistors.

Overvoltage Protection

Interference suppression modules are a special category here.

In addition to overvoltage protection, a high frequency interference filter can be added to the circuitry. This filter cannot only protect the equipment from high frequency energy transmitted by connecting wires, but also prevents a transmission of disturbances to the supply lines. The main component of a filter is an LC network, which produces a mismatch between the filter impedance and the impedance of the disturbance path. This reflects any disturbance back to its source.

Definition of Several Important Technical Terms

Nominal Operating Voltage (U_{BN})

The nominal operating voltage corresponds to the voltage which may be permanently connected to the appropriate connection terminals of the overvoltage protection module. Alternating voltages are quoted as effective values.

Max. Operating Voltage (U_{Bmax})

The maximum operating voltage corresponds to the voltage which may be permanently connected to the appropriate connection terminals without the operating properties changing or activating the individual module's protection elements.

Nominal Current (I_N)

The nominal current corresponds to the current which may permanently flow through the connection terminals of the overvoltage protection device.

Nominal Discharge Current (I_{SN})

The nominal discharge current is the maximum value of a current having the 8/20 μ s waveform, which can flow through the surge arrester five times within a time period of 30 seconds (VDE) without destroying it.

Max. Surge Current (I_{Smax})

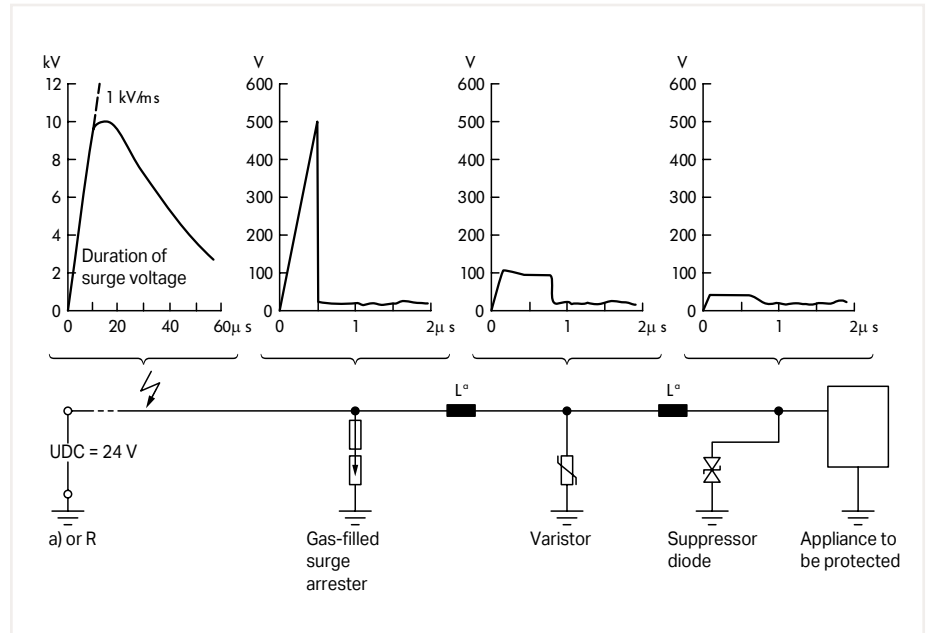
The maximum surge current I_{Smax} defines the maximum value of a current having the 8/20 μ s waveform, which can flow through the surge arrester once without destroying it.

Protection Level (U_p)

The protection level is the value of the residual voltage occurring on the "protected" side of the surge arrester when applying the rated discharge current.

Response Time (t_{resp})

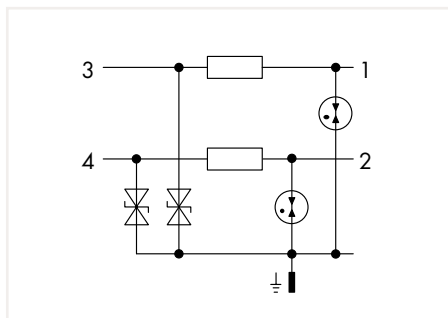
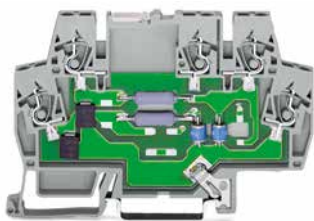
The response time is primarily based on the physical properties of the surge arresters and is dependent upon the wave front duration of the surge voltage. WAGO's data refers to a voltage rise 1kV/ μ s.



Function diagram of a multi-stage surge voltage protection module

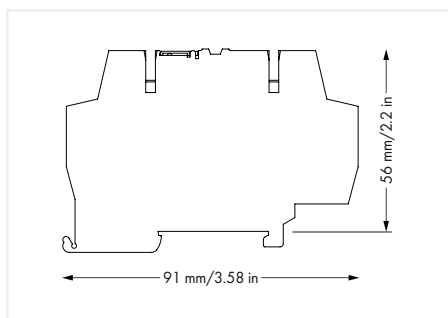
Rail-Mount Terminal Block; with Overvoltage Protection; for DIN-35 Rail

792 Series



Surge Protection Module for Signal Technology;
Nominal voltage: 24 VDC; for 2 signal paths with common
surge arrester; for asymmetric interfaces; 2-stage;
6 mm wide

Nominal Voltage	Item No.	Pack. Unit
24 VDC	792-800	1



Electrical Data

Nominal operating voltage	24 VDC
Maximum continuous operating voltage	23 VAC / 33 VDC
Nominal current	0.5 A
Nominal discharge current I_{SN} (8/20 μ s), line	5 kA
Nominal discharge current I_{SN} (8/20 μ s), total	10 kA
Voltage protection level, line/line (cat. C2 at I_N)	≤ 110 V
Voltage protection level, line/PG (cat. C2 at I_N)	≤ 65 V
Voltage protection level, line/line (cat. C3 at I_N)	≤ 90 V
Voltage protection level, line/PG (cat. C3 at I_N)	≤ 45 V
Response time	≤ 1 ns
Limit frequency (line/line)	6 MHz
Limit frequency (line/protected ground)	6 MHz
Impedance	1.8 Ω
Capacitance (line/line)	≤ 0.5 nF
Capacitance (line/PG)	≤ 1 nF

Safety and Protection

Protection class	IP00
Protection class with end and intermediate plate	IP20

Connection Data

Connection points (number)	5
Connection technology	CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Strip length	5 ... 6 mm / 0.2 ... 0.24 inch

Physical Data

Width	6 mm / 0.236 inch
Height from upper-edge of DIN-rail	56 mm / 2.205 inch
Depth	91 mm / 3.583 inch

Mechanical Data

Mounting type	DIN-35 rail
---------------	-------------

Material Data

Weight	38.8 g
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Environmental Requirements

Surrounding air temperature (operation)	-40 ... +80 °C
Surrounding air temperature (storage)	-40 ... +80 °C

Standards and Specifications

Standards/specifications	IEC 61643-21
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9

Short description:

Surge protection devices for IT systems and devices in the voltage range up to 60 V (except custom solutions, e.g., telephone systems with ringing voltage)

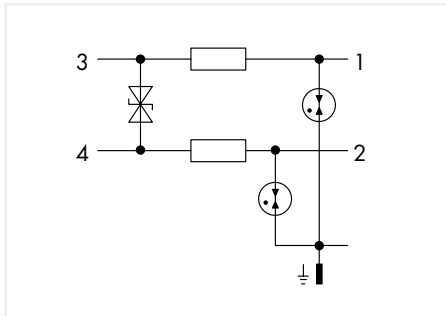
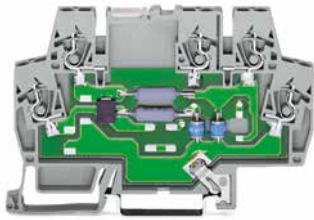
Overvoltage protection is also possible for DIN-35 rail-mount terminal blocks. Multi-stage surge arresters in rail-mount terminal blocks (792-80x Series) of just 6 mm width ensure cost-effective protection for control and bus technology (e.g., LON® network, PROFIBUS network, binary signals).

Features:

- Protect your system against overvoltage
- Slim, space-saving design
- Control operational costs by preventing expensive, unplanned downtime
- High operational reliability and system uptime

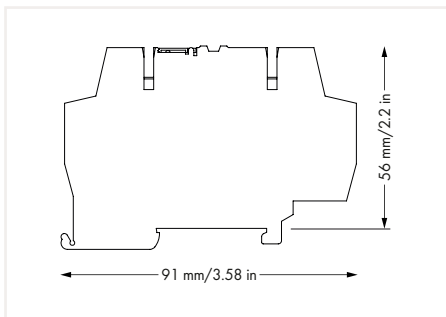
Rail-Mount Terminal Block; with Overvoltage Protection; for DIN-35 Rail

792 Series



Surge Protection Module for Signal Technology;
Nominal voltage: 24 VDC; for 2 signal paths with common surge arrester; for symmetric interfaces; 2-stage; 6 mm wide

Nominal Voltage	Item No.	Pack. Unit
24 VDC	792-801	1



Short description:

Surge protection devices for IT systems and devices in the voltage range up to 60 V (except custom solutions, e.g., telephone systems with ringing voltage)

Overvoltage protection is also possible for DIN-35 rail-mount terminal blocks. Multi-stage surge arresters in rail-mount terminal blocks (792-80x Series) of just 6 mm width ensure cost-effective protection for control and bus technology (e.g., LON® network, PROFIBUS network, binary signals).

Features:

- Protect your system against overvoltage
- Slim, space-saving design
- Control operational costs by preventing expensive, unplanned downtime
- High operational reliability and system uptime

Electrical Data

Nominal operating voltage	24 VDC
Maximum continuous operating voltage	23 VAC / 33 VDC
Nominal current	0.5 A
Nominal discharge current I_{SN} (8/20 μ s), line	5 kA
Nominal discharge current I_{SN} (8/20 μ s), total	10 kA
Voltage protection level, line/line (cat. C2 at I_N)	≤ 50 V
Voltage protection level, line/PG (cat. C2 at I_N)	≤ 750 V
Voltage protection level, line/line (cat. C3 at I_N)	≤ 45 V
Voltage protection level, line/PG (cat. C3 at I_N)	≤ 650 V
Response time	≤ 100 ns
Limit frequency	6 MHz
Limit frequency (line/protected ground)	6 MHz
Impedance	1.8 Ω
Capacitance (line/line)	≤ 10 nF
Capacitance (line/PG)	≤ 5 nF

Safety and Protection

Protection class	IP00
Protection class with end and intermediate plate	IP20

Connection Data

Connection points (number)	5
Connection technology	CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Strip length	5 ... 6 mm / 0.2 ... 0.24 inch

Physical Data

Width	6 mm / 0.236 inch
Height from upper-edge of DIN-rail	56 mm / 2.205 inch
Depth	91 mm / 3.583 inch

Mechanical Data

Mounting type	DIN-35 rail
---------------	-------------

Material Data

Weight	38.7 g
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Environmental Requirements

Surrounding air temperature (operation)	-40 ... +80 °C
Surrounding air temperature (storage)	-40 ... +80 °C

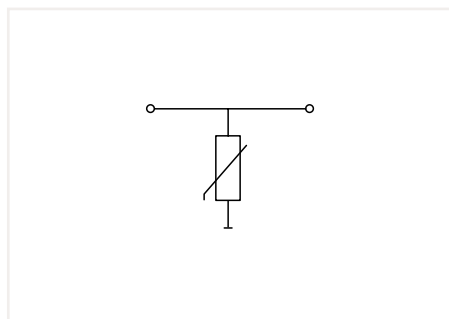
Standards and Specifications

Standards/specifications	IEC 61643-21
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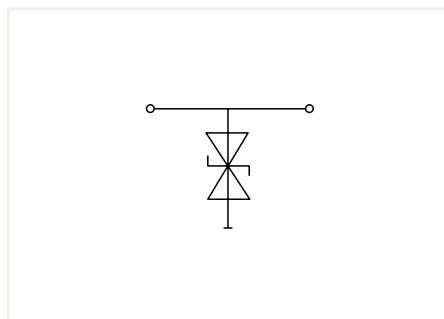
Component Terminal Block; with Surge Arrester; for DIN-35 Rail 280 Series

Image	Description	Nominal operating voltage	Item No.	Pack. Unit	
	Component terminal block; double-deck; with varistor; with direct connection to DIN-35 rail	DC 24 V	280-502/281-609	50	
		DC 48 V	280-502/281-610	50	
		DC 60 V	280-502/281-611	50	
		DC 110 V	280-502/281-612	50	
		AC 24 V	280-502/281-613	50	
		AC 115 V	280-502/281-614	50	
	Component terminal block; double-deck; with direct connection to DIN-35 rail				
	with P6KE36C TVS diode	DC 24 V	280-502/281-602	50	
	with P6KE68C TVS diode	DC 48 V	280-502/281-603	50	
	with P6KE91C TVS diode	DC 60 V	280-502/281-604	50	
	with BZW06-B TVS diode	DC 110 V	280-502/281-605	50	
	with BZW06-40B TVS diode	AC 24 V	280-502/281-606	50	
	with BZW06-B TVS diode	AC 115 V	280-502/281-607	50	
with BZW06-B TVS diode	AC 230 V	280-502/281-608	50		
	Component terminal block; double-deck; with varistor; with end plate; with direct connection to DIN-35 rail	DC 24 V	280-502/281-582	25	
		DC 48 V	280-502/281-583	25	
		DC 60 V	280-502/281-584	25	
		DC 110 V	280-502/281-585	25	
		AC 24 V	280-502/281-586	25	
		AC 115 V	280-502/281-587	25	
		AC 230 V	280-502/281-588	25	
	Component terminal block; double-deck; with end plate; with direct connection to DIN-35 rail				
		with 1.5KE33C TVS diode	DC 24 V	280-502/281-589	25
		with 1.5KE62C TVS diode	DC 48 V	280-502/281-590	25
		with 1.5KE82C TVS diode	DC 60 V	280-502/281-591	25
		with 1.5KE150C TVS diode	DC 110 V	280-502/281-592	25
		with 1.5KE39CA TVS diode	AC 24 V	280-502/281-593	25
		with 1.5KE-C TVS diode	AC 115 V	280-502/281-594	25
with 1.5KE-C TVS diode	AC 230 V	280-502/281-595	25		
	Component terminal block; double-deck; with Gas-Filled Surge Arrester; with end plate; with direct connection to DIN-35 rail	AC/DC 24 V	280-503/281-579	25	
		AC/DC 115 V	280-503/281-580	25	
		AC/DC 230 V	280-503/281-581	25	

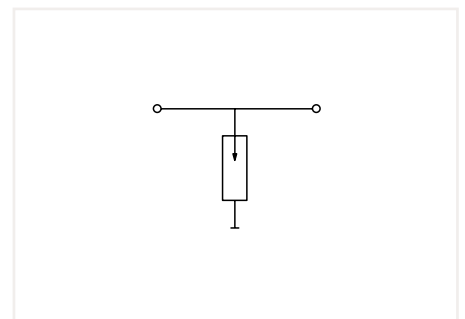
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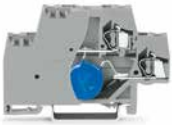

Component Terminal Block with Varistor

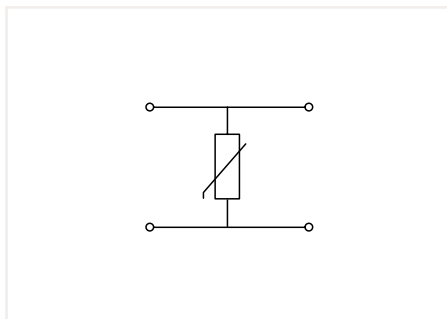


Component Terminal Block with TVS Diode

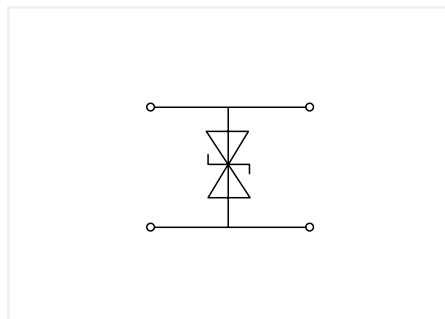


Component Terminal Block with Gas-Filled Surge Arrester

Image	Description	Nominal operating voltage	Item No.	Pack. Unit
	Component terminal block; double-deck; with varistor; with end plate	DC 24 V	280-504/281-582	25
		DC 48 V	280-504/281-583	25
		DC 60 V	280-504/281-584	25
		DC 110 V	280-504/281-585	25
		AC 24 V	280-504/281-586	25
		AC 115 V	280-504/281-587	25
		AC 230 V	280-504/281-588	25
	Component terminal block; double-deck; with end plate			
	with 1.5KE33C TVS diode	DC 24 V	280-944/281-589	25
	with 1.5KE62C TVS diode	DC 48 V	280-944/281-590	25
	with 1.5KE82C TVS diode	DC 60 V	280-944/281-591	25
	with 1.5KE150C TVS diode	DC 110 V	280-944/281-592	25
	with 1.5KE39CA TVS diode	AC 24 V	280-944/281-593	25
	with 1.5KE-C TVS diode	AC 115 V	280-944/281-594	25
with 1.5KE-C TVS diode	AC 230 V	280-944/281-595	25	



Component Terminal Block with Varistor












Component Terminal Block with TVS Diode

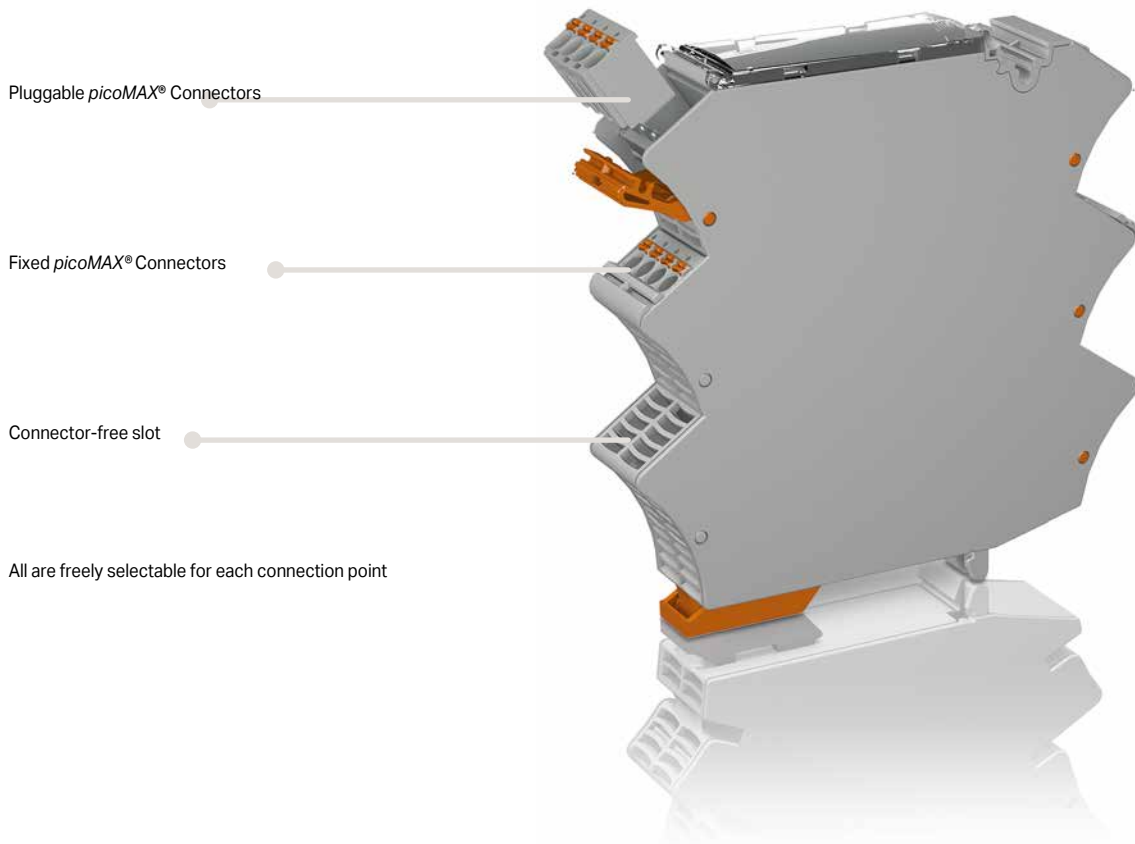


WAGO Accessories and WAGO Tools

WAGO Accessories and WAGO Tools

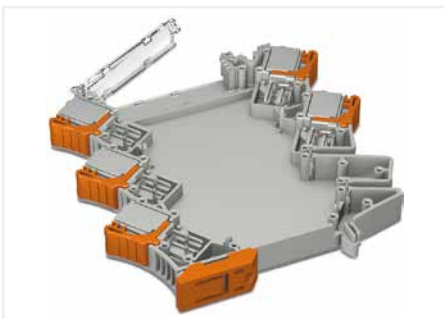
		Page
	Empty Housings; 2857 Series 2857 Series	240
	DIN-Rails 209 / 210 / 282 Series	242
	End Stops 249 Series	244
	Operating Tools 210 / 2009 Series	245
	Thermal Transfer Printer Smart Printer 258 Series	246
	Marking 2009 Series	248
	Wall mount adapter 787 Series	249
	DIN-rail adapters 787 Series	250
	Communication cables 787 Series	252

Modular Empty Housings Overview and Configuration 2857 Series

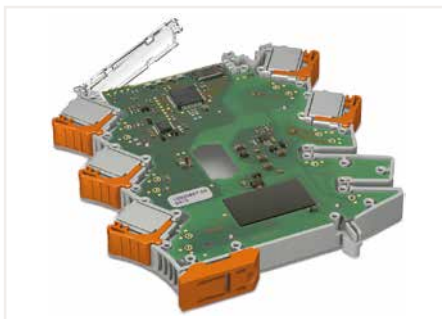


Supplied as a pre-assembled unit:

10



1. Pre-assembled unit










2. Insert and solder the PCB.



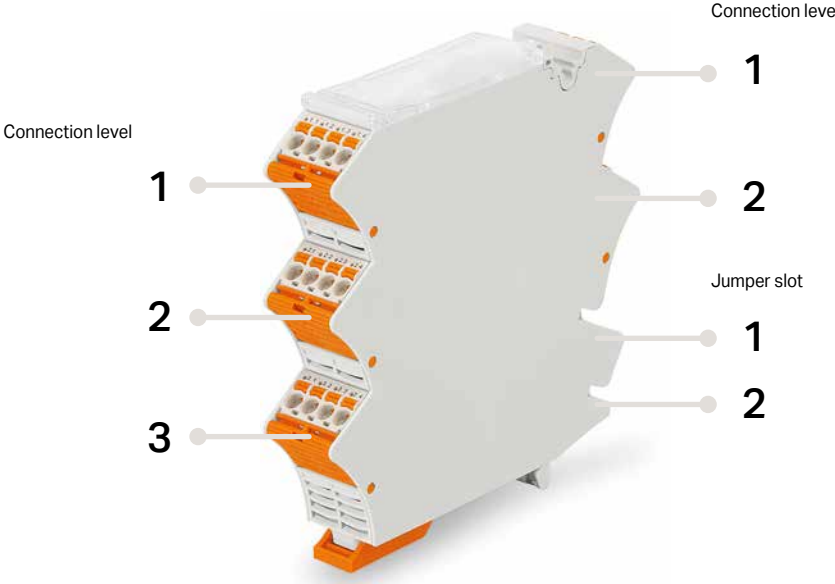
3. Snap on the side wall.

Housing configuration:

Housing width: 12.5 mm	 2857-101	 2857-102	 2857-103	-
Housing width: 22.5 mm	 2857-121	 2857-122	 2857-123	 2857-124
Connection levels	2-2	3-2	3-3	1-1
Jumper slots	2-2	0-2	0-0	2-2

Mixed configuration (fixed/removable/empty slot) upon request!

Example of connection level and jumper slot assignment:

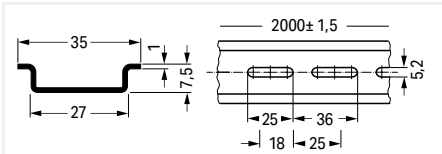


Connection levels	3-2
Jumper slots	0-2

DIN-Rail; Rail End Cap; Angled Support Bracket and Collective Jumper Carrier



Dimensions in mm



Steel DIN-rail; I_N 76 A (based on 1 m length); 35 x 7.5 mm; 1 mm thick; 2 m long; per EN 60715

	Item No.	Pack. Unit
unslotted	210-113	10 (1)

Hole width: 25 mm; Hole spacing: 36 mm

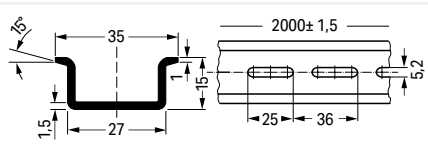
slotted	210-112	10 (1)
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Hole width: 18 mm; Hole spacing: 25 mm

slotted	210-115	1
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Dimensions in mm

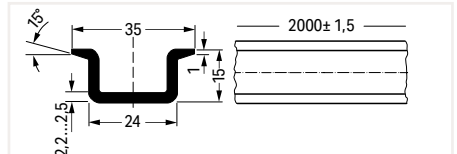


Steel DIN-rail; I_N 125 A (based on 1 m length); 35 x 15 mm; 1.5 mm thick; 2 m long; similar to EN 60715

	Item No.	Pack. Unit
unslotted	210-114	10 (1)
slotted	210-197	10 (1)



Dimensions in mm

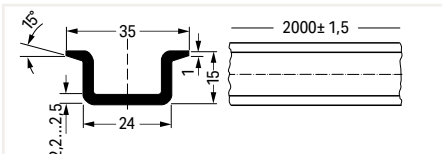


Steel DIN-rail; I_N 125 A (based on 1 m length); 35 x 15 mm; 2.3 mm thick; 2 m long; per EN 60715

	Item No.	Pack. Unit
unslotted	210-118	10 (1)



Dimensions in mm

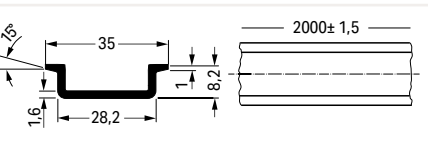


Copper DIN-rail; I_N 309 A (based on 1 m length); 35 x 15 mm; 2.3 mm thick; 2 m long; per EN 60715

	Item No.	Pack. Unit
unslotted	210-198	10 (1)



Dimensions in mm



Aluminum DIN-rail; I_N 76 A (based on 1 m length); 35 x 8.2 mm; 1.6 mm thick; 2 m long; similar to EN 60715

	Item No.	Pack. Unit
unslotted	210-196	20 (1)



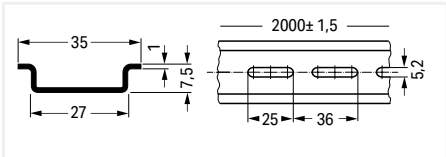
Rail end cap; for DIN-35 rail (7.5 mm high)

Color	Item No.	Pack. Unit
○ gray	209-109	50 (25)

10



Dimensions in mm

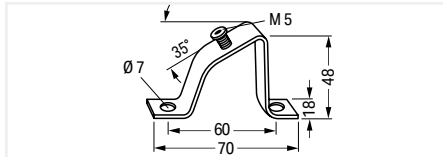


Steel DIN-rail; I_n 76 A (based on 1 m length); 35 x 7.5 mm; 1 mm thick; 2 m long; per EN 60715

	Item No.	Pack. Unit
unslotted	210-505	1
slotted	210-504	1



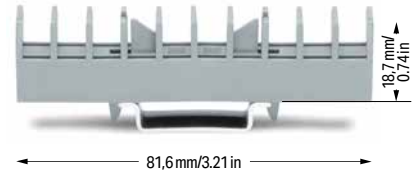
Dimensions in mm



Angled support bracket; without screw

	Item No.	Pack. Unit
	210-148	10

Screw M5 x 8		
	210-149	100 (20)

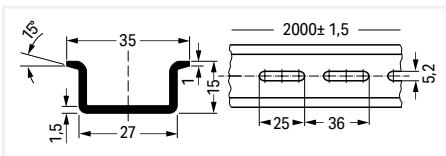


Collective jumper carrier; for DIN-35 rail; compatible with jumpers for transverse switching terminal block (282-811) and longitudinal switching disconnect terminal block (282-821)
The collective carrier can be snapped onto DIN-35 rails. It stores jumpers during maintenance.

Color	Item No.	Pack. Unit
○ gray	282-369	25



Dimensions in mm

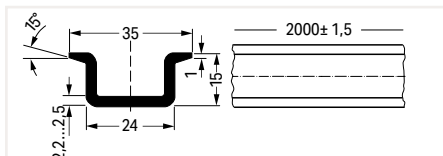


Steel DIN-rail; I_n 125 A (based on 1 m length); 35 x 15 mm; 1.5 mm thick; 2 m long; per EN 60715

	Item No.	Pack. Unit
unslotted	210-506	1
slotted	210-508	1



Dimensions in mm



Carrier rail; plastic
Not suited for use with ground terminal blocks!

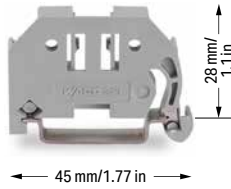
	Item No.	Pack. Unit
	210-509	10 (1)



Collective carrier for adjacent jumpers; for DIN-35 rail; for adjacent jumpers (279 to 284 Series); for banana plugs (215 Series)
The collective carrier can be snapped onto DIN-35 rails. It stores adjacent jumpers and banana plugs during maintenance.

Color	Item No.	Pack. Unit
○ gray	209-100	50 (25)

Screwless End Stop; for DIN-35 Rail 249 Series



Screwless end stop; for DIN-35 rail; 6 mm wide

Color	Item No.	Pack. Unit
○ gray	249-116	100 (25)

Screwless end stop; for DIN-35 rail; 10 mm wide

○ gray	249-117	50 (25)
--------	---------	---------



Simply snap on – that's it!



Simply snap on – that's it!



Screwless end stop; for DIN-35 rail; 14 mm wide

Color	Item No.	Pack. Unit
○ gray	249-197	10



Simply snap on – that's it!



Removing an end stop from the DIN-rail.

Snap on – that's it! Assembling the WAGO Screwless End Stop is as simple and quick as snapping a rail-mount terminal block onto the rail.

Tool free!

A tool-free design allows rail-mount terminal blocks to be safely and economically secured against any movement on all DIN-35 rails per DIN EN 60715 (35 x 7.5 mm; 35 x 15 mm).

Screwless!

The "secret" to a perfect fit lies in the two small clamping plates which keep the end stop in position, even if the rails are mounted vertically.

Simply snap on – that's it!

In addition, costs are significantly reduced when using large numbers of end stops.

Additional benefit: Three marker slots for all WAGO Rail-Mount Terminal Block Marking Systems and one snap-in hole for WAGO's adjustable height group marker carriers offer individual marking options.

Operating Tool



Operating tool with a partially insulated shaft; Type 1, (2.5 x 0.4) mm blade		
Item No.	Pack. Unit	
210-719	50 (1)	



Operating tool; Blades: 3.5 mm and 2.5 mm; for installation terminal blocks (TOPJOB® S)		
Item No.	Pack. Unit	
2009-309	50 (1)	



Operating tool with a partially insulated shaft; Type 1; (2.5 x 0.4) mm blade; short		
Item No.	Pack. Unit	
210-647	50 (1)	

Operating tool with a partially insulated shaft; Type 2, (3.5 x 0.5) mm blade		
210-720	50 (1)	

Operating tool; Blades: 3.5 mm and 5.5 mm; for installation terminal blocks (TOPJOB® S)		
2009-310	50 (1)	

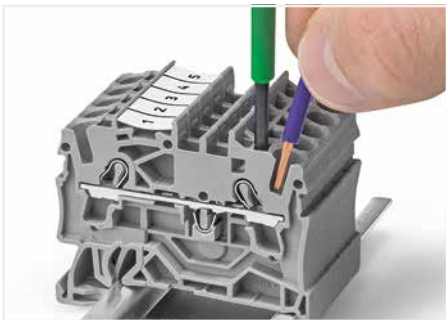
Operating tool with a partially insulated shaft; (2.5 x 0.4) mm blade; short; angled		
210-648	50 (1)	

Operating tool with a partially insulated shaft; Type 3, (5.5 x 0.8) mm blade		
210-721	25 (1)	

Operating tool with a partially insulated shaft; (3.5 x 0.5) mm blade; short		
210-657	50 (1)	

Set of operating tools with a partially insulated shaft; Type 1, (2.5 x 0.4) mm blade; Type 2, (3.5 x 0.5) mm blade; Type 3, (5.5 x 0.8) mm blade		
210-722	1	

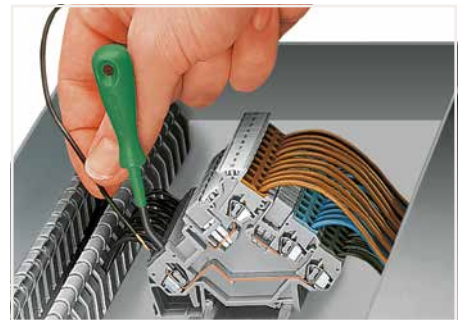
Operating tool with a partially insulated shaft; (3.5 x 0.5) mm blade; short; angled		
210-658	50 (1)	



The blade of this operating tool with a partially insulated shaft is ideal for operating front-entry terminal blocks.



Open the clamping unit using an operating tool.



This operating tool with blade dimensions per DIN 5264 is ideal for front-entry sensor/actuator terminal blocks (280 Series).



Set of operating tools in a box (210-722)

Thermal Transfer Printer Smart Printer



Open the printer.



Printer – open



Accessories for unwinding material



Insert the ink ribbon.



Prepare the marking material.



10



Insert and secure the appropriate roller into the printer.



Printer has several interfaces:
USB, ETHERNET, serial COM port



Fast, cost-effective and easy to use –
printing WMB Inline markers via Smart Printer

Thermal Transfer Printer and Cutter Smart Printer



Smart Printer; WMB Inline markers; Marking strips; Conductor markers and labels; Resolution: 300 dpi

Item No.	Pack. Unit
258-5000	1

Smart Printer

includes:

- Power supply and cable
- USB cable
- 1 x marking strip reel (2009-110)
- 1 x WMB Inline marker reel (2009-115)
- 2 x roller (258-5006 + 258-5007)
- 1 x reel holder
- 1 x ink ribbon (258-5005)

Technical Data

Printing method	Thermal transfer
Print head	Glass layer, spring-mounted
Print speed (max.)	127 mm/s (WAGO recommends 50.8 mm/s)
Print width (max.)	47 mm
Print length (max.)	762 mm
Print resolution	300 dpi (12 pixels/mm)
See-through/reflective sensor	Yes, centrally mounted
Operating display	Color TFT LCD with navigation button
Memory	8 MB Flash, 16 MB SDRAM
Interfaces	USB, RS-232, ETHERNET 10/100 Mbps, USB Host
Operating voltage	100 ... 240 VAC, 50 ... 60 Hz (automatic adjustment)
Dimensions (mm) W x H x D	135 x 175 x 245
Weight	2000 g (without printing material)
Operating temperature	5 ... 40 °C (41 ... 104 °F)
Storage temperature	-20 ... 50 °C (-4 ... 122 °F)
Safety approvals	CE (EMC)
Ink ribbon (see also Full Line Catalog, Volume 6, Marking)	External roll diameter: 40 mm; Internal core diameter: 12.7 mm (0.5 inch); Max. length: 110 m; Max. width: 58 mm



Cutter for Smart Printer; for marking strips only; not suitable for WMB Inline markers

Item No.	Pack. Unit
258-5030	1

Hardware requirements:

- Printer model: Smart Printer
- From manufacturing month/year: 0814 – August 2014
- Firmware version: 1.UW7i
- Printer driver: Version 7.4.2

Software requirements:

- Smart Script: Version 3.88.9.0 or higher
- WAGO printer settings: Version 2.4.0.0 or higher

Approved print material to be cut:

- Marking strips: 2009-110, 709-177, 709-178, 757-901/000-005
- Self-adhesive marking strips: 210-702, 210-870 ... -877
- Cable tie markers: 211-835 ... -836, 211-836/000-002
- Self-laminating labels: 211-855 ... -857
- Conductor markers for thread-on mounting: 211-861 ... -863
- Type labels: 210-801 ... -804, 210-812
- Continuous labels: 210-831 ... -834
- Label for circuit identification: 210-813

Dimensions of printing materials:

- Width (max.): 46 mm
- Thickness (max.): 250 µm

Technical Data

Width	60 mm
Height	107 mm
Depth	131 mm
Weight	1050 g

Marking System

Terminal Block Width: 3.5 mm, 4 ... 4.2 mm and from 5 mm



Use		
Marker width	Can be snapped onto the following terminal block series	
	for continuous marking	that will be separated
3.5 mm	2000, 2020	-
4 ... 4.2 mm	279, 2001	-
5 ... 5.2 mm	270, 280, 780, 869, 870, 880, 2002, 2003, 2022	Terminal blocks with spacing > 5 ... 5.2 mm

WMB Inline; plain; 2.300 WMB markers (3.5 mm)/reel		
Color	3.5 mm Item No.	Pack. Unit
○ white	2009-113	1

WMB Inline; plain; 2.000 WMB markers (4 mm)/reel; stretchable 4 ... 4.2 mm		
Color	4 ... 4.2 mm Item No.	Pack. Unit
○ white	2009-114	1

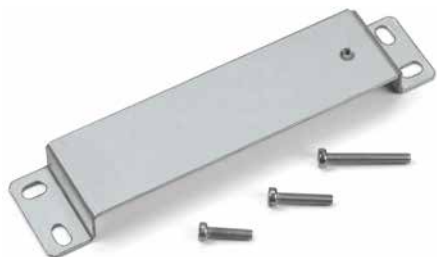
WMB Inline; plain; 1.500 WMB markers (5 mm)/reel; stretchable 5 ... 5.2 mm		
Color	5 ... 5.2 mm Item No.	Pack. Unit
○ white	2009-115	1



Use		
	Can be snapped onto the following terminal block series	
	2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2010, 2016, 2020, 2022	

Marking strip; plain; 11 mm wide; 50 m reel		
Color	Item No.	Pack. Unit
○ white	2009-110	1

Wall-Mount Adapter 787 Series



Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	35 x 15 x 158.5
Mounting type	Mounting holes: 4 slots, 5.3 mm x 9 mm; Mounting hole spacing: 143 mm x 19.5 mm
Mounting type	Wall-mount
Material	Sheet steel; galvanized
Weight	100 g

Wall-Mount Adapter; for screw mounting 787-8xx devices on a mounting plate or wall without DIN-35 rail

Item No.	Pack. Unit
787-895	5

The wall-mount adapter replaces the rail support of the 787-8xx device.
The adapter is secured to the 787-8xx device via the provided screws.



DIN-Rail Adapter 787 Series



Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	35 x 136.5 x 15.5
Mounting type	Slide both single parts into the guide slot and then screw
Mounting type	DIN-35 rail (EN 60715)
Material	Sheet steel; galvanized
Weight	81 g

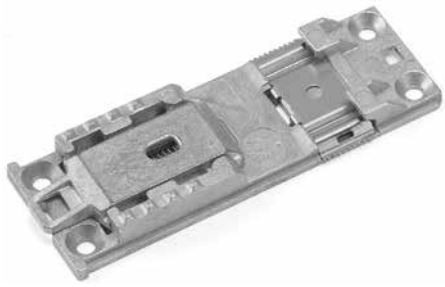
DIN-Rail Adapter; secures 787-8xx devices to a DIN-35 rail

	Item No.	Pack. Unit
	787-896	1

WAGO's 787-896 DIN-Rail Adapter allows both vertical and horizontal mounting of 787-8xx devices.

Mounting the adapter to the device is performed by sliding both single parts into the guide slots of the cooling element and then screwing, allowing the position to be easily changed.

DIN-Rail Adapter 787 Series



Geometric Data/Mechanical Data/Material Data

Width x height x depth (mm)	37 x 102.5 x 10.5
Mounting type	Press the adapter into the guide slot
Mounting type	DIN-35 rail (EN 60715)
Material	Zinc die-cast
Weight	96 g

DIN-Rail Adapter; made of zinc die-cast; secures 787-8xx devices to a DIN-34 rail

	Item No.	Pack. Unit
	787-897	1

WAGO's 787-897 DIN-Rail Adapter allows horizontal mounting of 787-8xx devices. Mounting the adapter to the device is performed by sliding both single parts into the guide slots of the cooling element and then screwing, allowing the position to be easily changed.

Communication Cable; with RS-232 Interface

787 Series



Similar to pictured device

RS-232 Communication Cable; 1.8 m long		
for	Item No.	Pack. Unit
787-8xx	787-890	1

This communication cable is used for configuration and visualization via PC or controller. It is suitable for all 787-8xx Series devices equipped with an RS-232 serial interface. Download the corresponding PC software for all 787 Series devices at www.wago.com/epsitron.

Function modules for communication with the WAGO-I/O-SYSTEM 750 and other control systems are also available.

Note:
The 787-890 Communication Cable is not electrically isolated.

Signaling and Communication

Signaling	1 x RS-232 cable
Communication	RS-232 interface

Safety and Protection/Environmental Requirements

Protection type	IP20 (per EN 60529)
Surrounding air temperature (operation)	-10 ... +70 °C

Connection Data

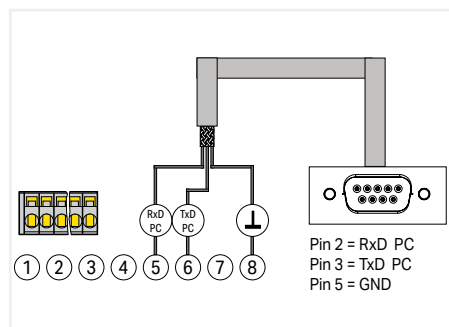
Module side (787-8xx)	1 x 8-pole female connector (734-108) with strain relief
PC/controller side	1 x 9 pole D-sub socket
Cable type	3 x 0.34 mm ² ; shielded

Geometric Data/Mechanical Data/Material Data

Cable length	1.8 m
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Material Data

Weight	113 g
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Communication Cable; with RS-232 Interface 787 Series



Similar to pictured device

RS-232 Communication Cable; 1.8 m long;
for 787-1675

for	Item No.	Pack. Unit
787-1675	787-892	1

This communication cable is used for configuration and visualization via PC or controller.
The communication cable is suitable for 787-1675. Download the corresponding PC software for all 787 Series devices at www.wago.com/epsitron.

Function modules for communication with the WAGO-I/O-SYSTEM 750 and other control systems are also available.

Note:
The 787-892 Communication Cable is not electrically isolated.

Signaling and Communication	
Signaling	1 x RS-232 cable
Communication	RS-232 interface
Safety and Protection/Environmental Requirements	
Protection type	IP20 (per EN 60529)
Surrounding air temperature (operation)	-10 ... +70 °C
Connection Data	
Module side (787-1675)	1 x 4-pole female connector (734-104) with strain relief
PC/controller side	1 x 9 pole D-sub socket
Cable type	3 x 0.34 mm ² ; shielded
Geometric Data/Mechanical Data/Material Data	
Cable length	1.8 m
Material Data	
Weight	97 g



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Indexes and Addresses

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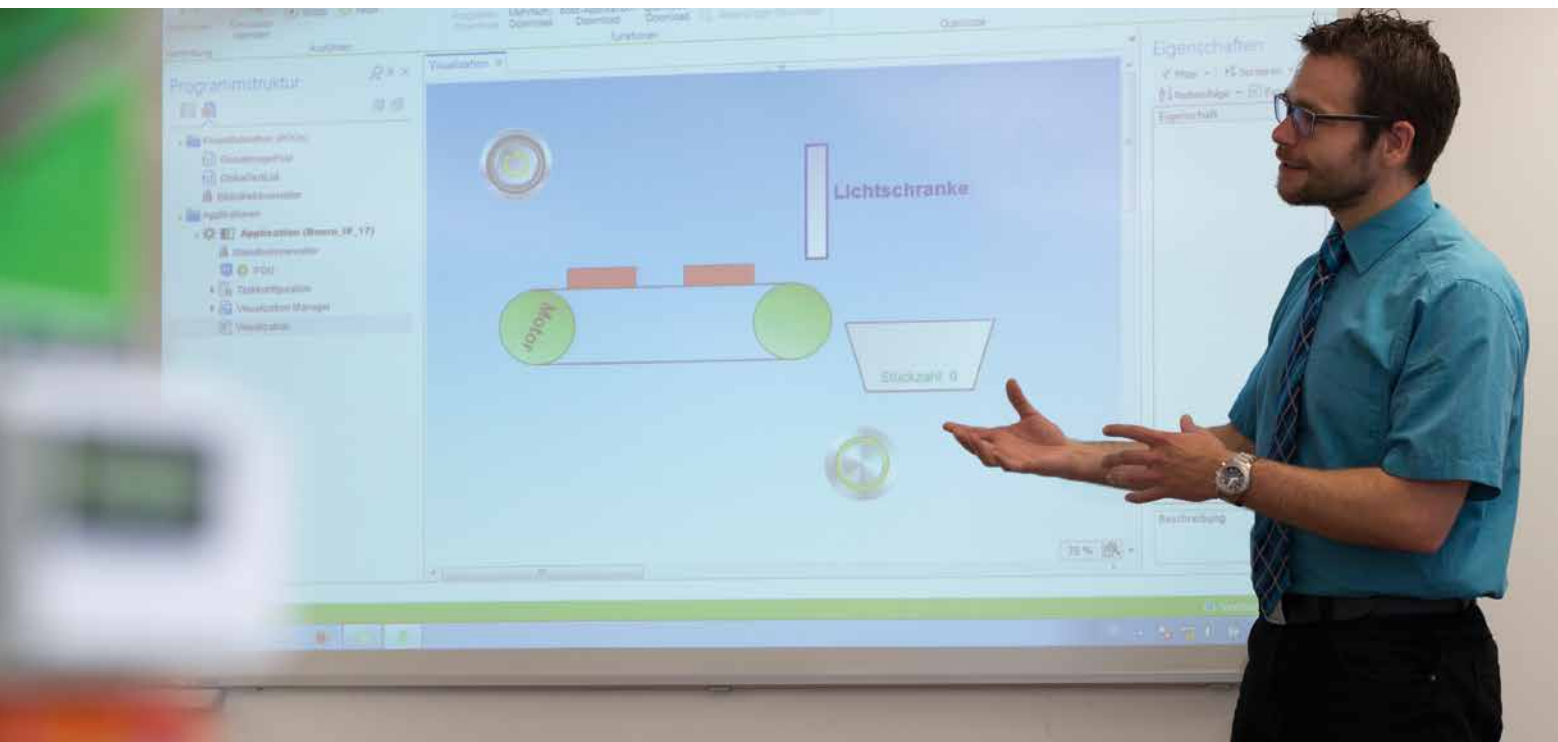
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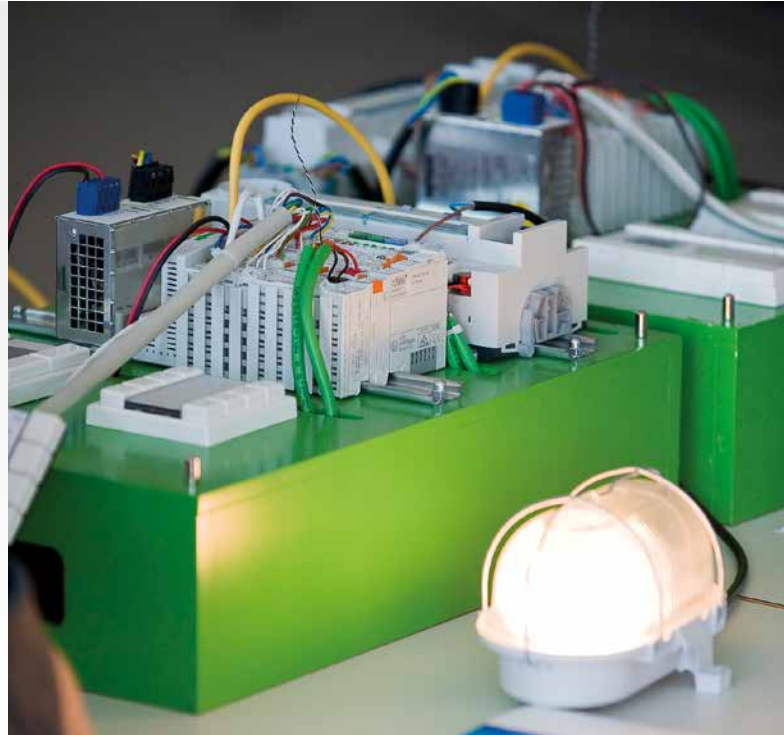
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