

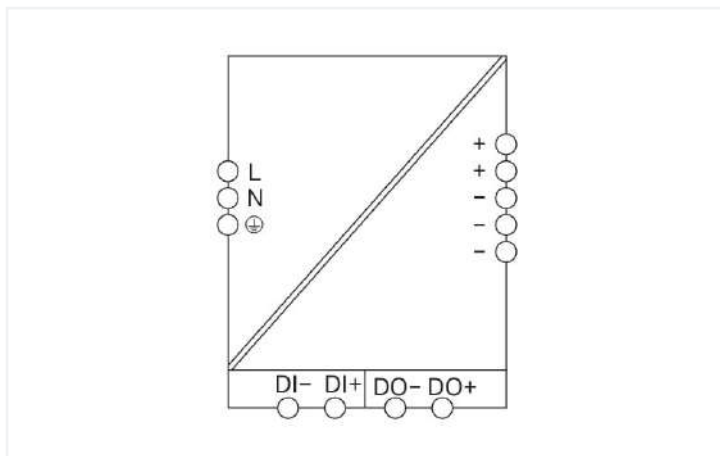
Data Sheet | Item Number: 2787-3448/000-030

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



<https://www.wago.com/2787-3448/000-030>





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 or Modbus RTU
- 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's marking cards (WMB) and WAGO's marking strips
- With integrated decoupling MOSFET for establishing a secure, redundant power supply without additional redundancy modules

Technical data

Input		Output	
Phases	1	Nominal output voltage $U_{o, nom}$	DC 24 V (SELV)
Nominal input voltage $U_{i, nom}$	1 x AC 200 ... 240 V	Output voltage range	DC 24 ... 28 V (adjustable)
Input voltage range	1 x AC 180 ... 264 V	Default setting	DC 24 V
Nominal mains frequency range	50 ... 60 Hz	Nominal output current $I_{o, nom}$	40 A (24 VDC)
Input current I_i	≤ 4.3 A (240 VAC; nominal load); ≤ 5.1 A (200 VAC; nominal load)	Nominal output power	960 W
Inrush current	≤ 10 A (after 1 ms)	Deviation	≤ 1 %
Power factor	≥ 0.98 (240 VAC)	Residual ripple	≤ 70 mV (peak-to-peak)
Power factor correction (PFC)	Active	Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Mains failure hold-up time	≥ 25 ms (230 VAC)	Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
		PowerBoost	DC 60 A (5 s)
		TopBoost	Up to 600 %

Signaling and communication

Signaling	Digital signal input and output (DI/DO) Optical status indication (DC OK; load; warning and error states)
Communication	Modbus RTU (Communication Module 2789-9015) Modbus TCP (2789-9052 Communication Module) USB (750-923 Communication Cable) EtherNet/IP™ (2789-9023 Communication Module) IO-Link (2789-9080 Communication Module)

Efficiency/power losses

Power loss P_i	≤ 1.5 W (standby); ≤ 2.4 W (no load); ≤ 40 W (230 VAC; nominal load)
Efficiency (typ.)	96 % (230 VAC; 40 A; 25 °C); 96.3 % (230 VAC; 30 A; 25 °C)

Circuit protection

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

Safety and protection

Isolation voltage (pri.-sec., AC)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	DC 0.5 kV
Isolation voltage (sec.-signal)	DC 0.5 kV
Protection class	I
Protection type	IP20; per EN 60529
Resistance to reverse feed	\leq DC 35 V
Overvoltage category	III (≤ 2000 m a.s.l.); II (> 2000 m a.s.l.)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit ≤ 35 VDC (in the event of a fault)
Short-circuit-protected	Yes
Open-circuit-proof	Yes
Parallel operation	Yes
Series operation	Yes
MTBF	$> 900,000$ h (per IEC 61709)

Connection data

Connection type 1	Input/signaling
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 721 Series
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm ² / 20 ... 16 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm ² / 20 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Connection type 2	Output
Connection technology 2	Push-in CAGE CLAMP®
WAGO connector 2	WAGO 831 Series
Solid conductor 2	0.5 ... 10 mm ² / 20 ... 8 AWG
Fine-stranded conductor 2	0.5 ... 10 mm ² / 20 ... 8 AWG
Fine-stranded conductor; with insulated ferrule 2	0.5 ... 6 mm ²
Fine-stranded conductor; with uninsulated ferrule 2	0.5 ... 6 mm ²
Strip length 2	13 ... 15 mm / 0.51 ... 0.59 inches

Physical data

Width	120 mm / 4.724 inches
Height	130 mm / 5.118 inches
Depth from upper-edge of DIN-rail	130 mm / 5.118 inches
Note (dimensions)	Height without connector Height with connector: 169 mm

Mechanical data

Mounting type	DIN-35 rail
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Material data

Fire load	0 MJ
Weight	1950 g

Environmental requirements

Ambient temperature (operation)	-25 ... +70 °C (Device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3%/K (> +55°C)
Climatic category	3K3 (per EN 60721)
Operating altitude (max.)	5000 m

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 DNV

Commercial data

PU (SPU)	1 pcs
Country of origin	CN
GTIN	4066966320602
Customs tariff number	85044083900

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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1 Compatible Products

1.1 Optional Accessories

1.1.1 Communication

1.1.1.1 Communication module



Item No.: 2789-9023

Communication module; EtherNet/IP; MQTT; communication capability

1.1.2 Marking

1.1.2.1 Marker carrier



Item No.: 2789-1233

Marker carrier; for WMB or marking strips; Length: 33 mm