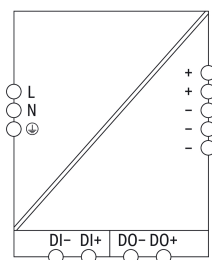


Data Sheet | Item Number: 2787-3146/000-030

Switched-mode power supply; Pro 2; 1-phase; 24 VDC output voltage; 10 A output current; TopBoost + PowerBoost; communication capability; Redundancy

<https://www.wago.com/2787-3146/000-030>



Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input/output, optical status indication and function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for parallel and series operation
- Self-cooling via natural convection in horizontal mounting position
- Pluggable connection technology



- Electrically isolate output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and marking strips
- Integrated decoupling MOSFET enables secure, redundant power supply without additional redundancy modules

Technical data			
Input		Output	
Phases	1	Nominal output voltage $U_{o\,nom}$	24 VDC (SELV)
Nominal input voltage $U_{i\,nom}$	1 x 100 ... 240 VAC	Output voltage range	24 ... 28 VDC (adjustable)
Input voltage range	1 x 90 ... 264 VAC	Default Setting	24 VDC
Nominal mains frequency range	50 ... 60 Hz	Nominal output current $I_{o\,nom}$	10 A (24 VDC)
Input current I_i	≤ 1.2 A (240 VAC; nominal load); ≤ 2.7 A (100 VAC; nominal load)	Nominal output power	240 W
Inrush current	after 1 ms	Deviation	≤ 1 %
Power factor correction (PFC)	Active	Residual ripple	≤ 70 mV (peak-to-peak)
Mains failure hold-up time	≥ 25 ms (230 VAC)	Current limitation	$1.1 \times I_{o\,nom}$ (typ.)
		Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
		PowerBoost	15 ADC (5 s)
		TopBoost	Up to 600 %

Signaling and Communication		Efficiency/Power Losses	
Signaling	Optical status indication (DC OK; load; warning and error states) Digital signal input and output (DI/DO)	Power loss P_i	≤ 1 W (standby); ≤ 2.2 W (no load); ≤ 12 W (230 VAC; nominal load)
Communications	USB (750-923 Communication Cable) EtherNet/IP™ (2789-9023 Communication Module) IO-Link (2789-9080 Communication Module) Modbus RTU (Communication Module 2789-9015) Modbus TCP (2789-9052 Communication Module)	Efficiency (typ.)	94 % (230 VAC; 10 A; 25 °C)

Circuit Protection	
Internal fuse	T 6.3 A / 250 VAC
Backup fuse (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)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class	I
Protection type	IP20; per EN 60529
Resistance to reverse feed	≤ 35 VDC
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	$> 1,200,000$ h (per IEC 61709)



Connection Data

Connection 1	
Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 721 Series
Solid conductor	0.08 ... 2.5 mm² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm² / 28 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm² / 20 ... 16 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm² / 20 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches

Physical data

Width	50 mm / 1.969 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: 166 mm

Mechanical data

Mounting type	DIN-35 rail
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Material data

Fire load	0 MJ
Weight	1050 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 and U _i < 230 VAC); -3 %/K (> 60 °C and U _i ≥ 230 VAC)
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 UL 121201 (HazLoc) SEMI F47



Commercial data	
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	CN
GTIN	4066966845907
Customs tariff number	85044083900

Product Classification	
UNSPSC	39121004
ETIM 9.0	EC002540
ETIM 10.0	EC002540
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption

Downloads

Documentation

Instruction Leaflet			
Stromversorgung; Pro 2; 1-phasig;	V 1.0.0 24.09.2024	pdf 2749.55 KB	

1 Compatible Products

1.1 Product Expansions

1.1.1 Communication Module

Item No.: 2789-9023 Communication module; EtherNet/IP; MQTT Pub/Sub; communication capability	Item No.: 2789-9080 Communication module; IO-Link; communication capability	Item No.: 2789-9015 Communication module; Modbus RTU; RJ45; communication capability	Item No.: 2789-9052 Communication module; Modbus TCP; communication capability

1.2 Optional Accessories

1.2.1 Marking

1.2.1.1 Marker carrier

Item No.: 2789-1233 Marker carrier; for WMB or marking strips; Length: 33 mm