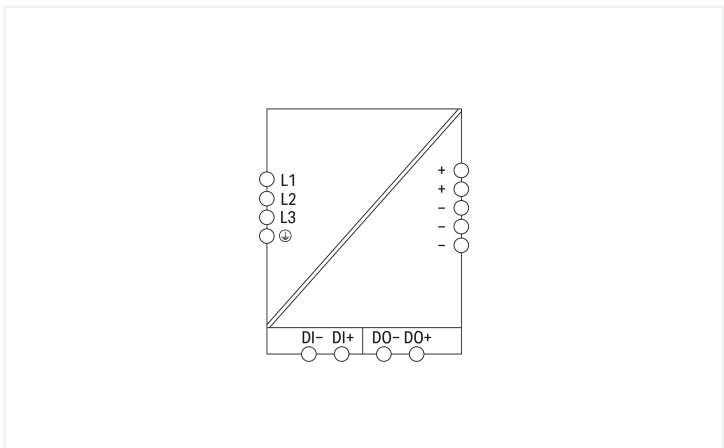






Features:

- 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 to establish a safe, redundant power supply without additional redundancy modules

Technical data			
Input		Output	
Phases	3	Nominal output voltage $U_{o\,nom}$	24 VDC (SELV)
Nominal input voltage $U_{i\,nom}$	3 x 400 ... 500 VAC (connection without neutral conductor)	Output voltage range	24 ... 28 VDC (adjustable)
Input voltage range	3 x 340 ... 550 VAC	Default Setting	24 VDC
Nominal mains frequency range	50 ... 60 Hz	Nominal output current $I_{o\,nom}$	20 A (24 VDC)
Input current I_i	$\leq 3 \times 0.8 \text{ A}$ (400 VAC; 24 VDC / 20 A)	Nominal output power	480 W
Inrush current	after 1 ms	Deviation	$\leq 1 \%$
Power factor correction (PFC)	Active	Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 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	30 ADC (5 s)
		TopBoost	Up to 600 %

Signaling and Communication	
Signaling	Optical status indication (DC OK; load; warning and error states) Digital signal input and output (DI/DO)
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/Power Losses	
Power loss P_l	$\leq 3.6 \text{ W}$ (standby); $\leq 4.4 \text{ W}$ (no load); $\leq 21 \text{ W}$ (400 VAC; nominal load)
Efficiency (typ.)	95.9 % (400 VAC; 20 A; 25 °C)

Circuit Protection	
Internal fuse	3 x T 2.5 A / 500 VAC
Pre-fuse (required)	An external DC fuse is required for the DC input voltage.
Backup fuse (recommended)	3 x 16 A (for USA/Canada: 3 x 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	> 800,000 h (per IEC 61709)

Connection Data			
Connection 1		Connection 2	
Connection type	Input/signaling	Connection type	Output
Connection technology	CAGE CLAMP®	Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 721 Series	WAGO connector	WAGO 831 Series
Solid conductor	0.08 ... 2.5 mm² / 28 ... 12 AWG	Solid conductor	0.5 ... 10 mm² / 20 ... 8 AWG
Fine-stranded conductor	0.08 ... 2.5 mm² / 28 ... 12 AWG	Fine-stranded conductor	0.5 ... 10 mm² / 20 ... 8 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm² / 20 ... 16 AWG	Fine-stranded conductor; with insulated ferrule	0.5 ... 6 mm²
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm² / 20 ... 14 AWG	Fine-stranded conductor; with uninsulated ferrule	0.5 ... 6 mm²
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches	Strip length	13 ... 15 mm / 0.51 ... 0.59 inches

Physical data	
Width	70 mm / 2.756 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

Material data	
Fire load	0 MJ
Weight	1450 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	See instruction leaflet
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)

Commercial data	
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	CN
GTIN	4066966320299
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; Redundanz; 3-phasig; V 1.0.0 24.09.2024

pdf 2895.65 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

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