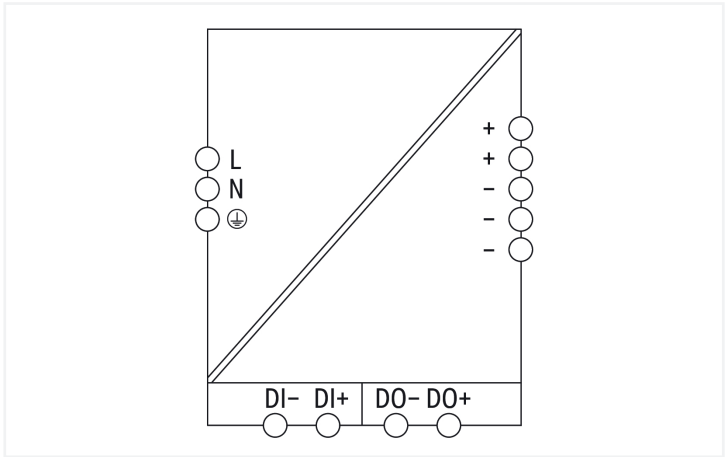




Features:

- 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, EtherNet/IP™, Modbus TCP 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 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

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	DC 24 V
Nominal mains frequency range	50 ... 60 Hz	Nominal output current $I_{o\ nom}$	20 A (24 VDC)
Input current I_i	≤ 2.2 A (240 VAC; nominal load); ≤ 5.9 A (100 VAC; nominal load)	Nominal output power	480 W
Inrush current	≤ 12 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 x $I_{o\ nom}$ (typ.)
Mains failure hold-up time	≥ 24 ms (230 VAC)	Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)



Output	
PowerBoost	DC 30 A (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 _I	≤ 1.3 W (standby); ≤ 2.6 W (no load); ≤ 24 W (230 VAC; nominal load)
Efficiency (typ.)	95.4 % (230 VAC; 20 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)	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 ü. N. N.); II (> 2000 m ü. N. N.)
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 1	Input/signaling	Connection type	Output
Connection technology	CAGE CLAMP®	Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 721 Series	WAGO connector 2	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	0.973 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	-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 ≥ 230 VAC); -5 %/V (U _o > 24 VDC)
Climatic category	3K3 (per EN 60721)
Operating altitude (max.)	5000 m

Standards and specifications	
Conformity marking	CE
Standards/specifications	SEMI F47 EN 61010-1 EN 61010-2-201 EN 61204-3 UL 61010-1 UL 61010-2-201

Commercial data	
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	CN
GTIN	4055143878364
Customs tariff number	85044083900

Product classification	
UNSPSC	39121004
ETIM 9.0	EC002540
ETIM 8.0	EC002540
ECCN	NO US CLASSIFICATION



Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
			Approval	Standard	Certificate Name
Approval	Standard	Certificate Name	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03080	MFD for SEMI F47 WAGO GmbH & Co. KG	-	-
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Approvals for hazardous areas

Approval	Standard	Certificate Name
UL Underwriters Laboratories Inc. (HAZARDOUS LOCA- TIONS)	UL 121201	A-E198726

Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 2787-2147	

Documentation

Manual				Bid Text			
Product Manual Power supply; Pro 2; 1-phase; 24 VDC output voltage; 20 A output current	V 1.2.2 18.02.2022	pdf 8262.81 KB		2787-2147_EUSA	04.07.2019	docx 23.26 KB	
				2787-2147_EUSA	04.07.2019	xml 7.90 KB	
				ausschreiben.de 2787-2147			



Instruction Leaflet			
WAGO Stromversorgung Pro 2	V 1.1.0 26.04.2021	pdf 4461.95 KB	

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 2787-2147	EPLAN Data Portal 2787-2147
	ZUKEN Portal 2787-2147

Runtime Software			
Firmware			
2787-2147, Stromversorgung; Pro 2	V 010513 12.10.2021	zip 1087.36 KB	

1 Compatible Products

1.1 Product Expansions

1.1.1 Communication module

Item No.: 2789-9023 Communication module; EtherNet/IP; MQTT; 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 Cables and connectors

1.2.1.1 Communication cable

Item No.: 750-923/000-001 Configuration cable; USB connector; Length: 5 m

1.2.2 Communication

1.2.2.1 Communication cable

Item No.: 750-923 Configuration cable; USB connector; Length: 2.5 m



1.2.3 Marking

1.2.3.1 Marker



Item No.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.2.3.2 Marker carrier



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

1.2.3.3 Marking strip



Item No.: 2009-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.2.4 Tool

1.2.4.1 Operating tool



Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



Item No.: 210-721
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured