

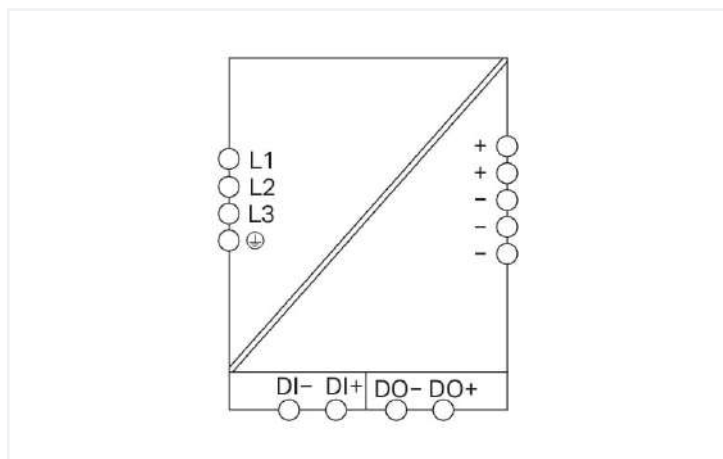
Data Sheet | Item Number: 2787-2347

Power supply; Pro 2; 3-phase; 24 VDC output voltage; 20 A output current; Top-Boost + PowerBoost; communication capability

<https://www.wago.com/2787-2347>



Similar to illustration



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

Phases	3
Nominal input voltage $U_{i, nom}$	3 x AC 400 ... 500 V (connection without neutral conductor)
Input voltage range	3 x AC 340 ... 550 V
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 3 \times 0.8 \text{ A}$ (400 VAC; 24 VDC / 20 A)
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 $U_{o, nom}$	DC 24 V (SELV)
Output voltage range	DC 24 ... 28 V (adjustable)
Default setting	DC 24 V
Nominal output current $I_{o, nom}$	20 A (24 VDC)
Nominal output power	480 W
Deviation	$\leq 1 \%$
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
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)
Communication	USB (Communication Cable 750-923) Ethernet/IP (Communication Module 2789-9023) IO-Link (Communication Module 2789-9080) Modbus RTU (Communication Module 2789-9015) Modbus TCP (Communication Module 2789-9052)

Efficiency/power losses

Power loss P_1	≤ 3.6 W (standby); ≤ 4.4 W (no load); ≤ 21 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
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (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)	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	$> 800,000$ 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	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
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Material data

Fire load	0 MJ
Weight	1400 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
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 SEMI F47

Commercial data

ETIM 8.0	EC002540
ETIM 7.0	EC002540
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	CN
GTIN	4055143907163
Customs tariff number	85044083900

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
UL Underwriters Laboratories Inc.	UL 61010-2-201	E255817

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for hazardous areas



Approval	Standard	Certificate Name
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 2787-2347 ↓

Documentation

Manual			
Product Manual Power Supply; Pro 2; 3-phase; DC 24 V; 20 A	V 1.1.0 15.02.2022	pdf 8406.49 KB	↓

Bid Text			
2787-2347_EUSA	04.07.2019	docx 23.09 KB	↓
2787-2347_EUSA	04.07.2019	xml 7.92 KB	↓

Instruction Leaflet			
WAGO Stromversorgung Pro 2	V 1.1.0 26.04.2021	pdf 4607.34 KB	↓

CAD/CAE-Data

CAD data	
2D/3D Models 2787-2347	↓

CAE data	
EPLAN Data Portal 2787-2347	↓
ZUKEN Portal 2787-2347	↓

Engineering-Software

Configuration and Commissioning Software			
WAGO Interface Configuration Software G2 FULL	1.00.10.01 20.01.2022	exe 112213.07 KB	
WAGO Interface Configuration Software G2 SMALL	1.00.10.01 20.01.2022	exe 30238.22 KB	

Runtime Software

Firmware			
2787-2347, Stromversorgung; Pro 2	V 0104000 15.10.2021	zip 977.70 KB	

1 Compatible Products

1.1 Optional Accessories

1.1.1 Cables and connectors

1.1.1.1 Communication cable



[Item No.: 750-923/000-001](#)
Configuration cable; USB connector;
Length: 5 m

1.1.2 Communication

1.1.2.1 Communication cable



[Item No.: 750-923](#)
Configuration cable; USB connector;
Length: 2.5 m

1.1.2.2 Communication module



[Item No.: 2789-9023](#)
Communication module; EtherNet/IP;
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

1.1.3 Marking

1.1.3.1 Marker



Item No.: 2009-115

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.1.3.2 Marker carrier



Item No.: 2789-1233

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

1.1.3.3 Marking strip



Item No.: 2009-110

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.1.4 Tool

1.1.4.1 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