

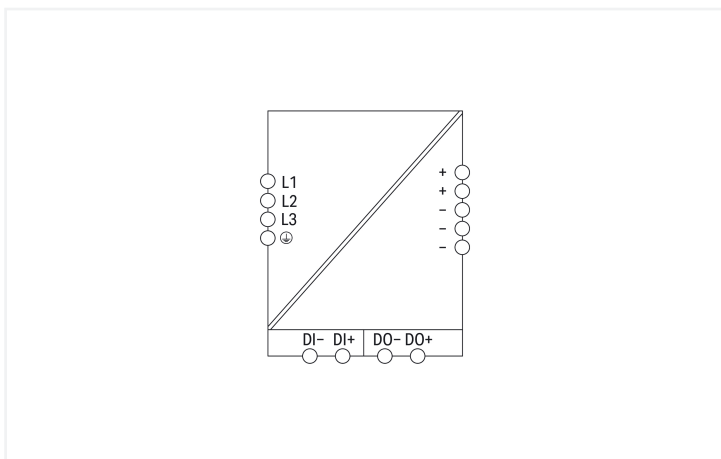
Data Sheet | Item Number: 2787-2347

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 $U_{i\text{nom}}$	3 x 400 ... 500 VAC (connection without neutral conductor)
Input voltage range	3 x 340 ... 550 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	$\leq 3 \times 0.8 \text{ A}$ (400 VAC; 24 VDC / 20 A)

Input	
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 $U_{o, nom}$	24 VDC (SELV)
Output voltage range	24 ... 28 VDC (adjustable)
Default Setting	24 VDC
Nominal output current $I_{o, nom}$	20 A (24 VDC)
Nominal output power	480 W
Deviation	$\leq 1 \%$
Residual ripple	≤ 70 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)
PowerBoost	30 ADC (5 s)
TopBoost	Up to 600 %

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)

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)

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)

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)

Connection Data

Connection 1

Connection type	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 2

Connection type	Output
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 831 Series
Solid conductor	0.5 ... 10 mm ² / 20 ... 8 AWG
Fine-stranded conductor	0.5 ... 10 mm ² / 20 ... 8 AWG
Fine-stranded conductor; with insulated ferrule	0.5 ... 6 mm ²
Fine-stranded conductor; with uninsulated ferrule	0.5 ... 6 mm ²
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
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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
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 SEMI F47 UL 121201 (HazLoc)

Commercial data

PU (SPU)	1 pcs
Packaging type	Box
Country of origin	CN
GTIN	4055143907163
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
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Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03080
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081
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	-	-
MFD for SEMI F47 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	↓

Runtime Software

Firmware			
2787-2347, Stromversorgung; Pro 2	V 0104000 15.10.2021	zip 977.70 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 Cables and connectors

1.2.1.1 Communication cable



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