Data Sheet | Item Number: 2787-2344

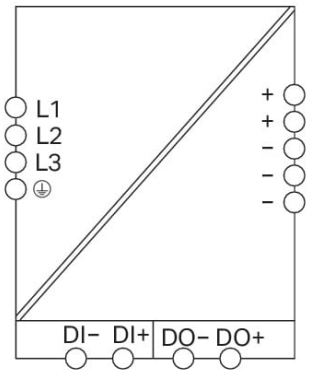
Power supply; Pro 2; 3-phase; 24 VDC output voltage; 5 A output current; TopBoost + PowerBoost; communication capability

https://www.wago.com/2787-2344









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	≤ 3 x 0.4 A (400 VAC; 24 VDC / 5 A)
Inrush current	≤ 15 A (after 1 ms)
Power factor correction (PFC)	active
Mains failure hold-up time	≥ 20 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 $I_{o\,nom}$	5 A (24 VDC)
Nominal output power	120 W
Deviation	≤ 1 %
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	1.1 x $I_{o\,nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)

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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

Efficiency (typ.)	92.5 % (230 VAC; 5 A; 25 °C)

Circuit protection

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
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	> 1,400,000 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 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
Connection type 2	Output
Connection technology 2	Push-in CAGE CLAMP®
WAGO connector 2	WAGO 831 Series
Solid conductor 2	0.5 … 10 mm² / 20 … 8 AWG
Fine-stranded conductor 2	0.5 … 10 mm² / 20 … 8 AWG
Fine-stranded conductor; with insulated ferrule 2	0.5 … 6 mm²
Fine-stranded conductor; with uninsulated ferrule 2	0.5 … 6 mm²
Strip length 2	13 … 15 mm / 0.51 … 0.59 inches

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Physical data

Width	40 mm / 1.57 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

Material data

Fire load	0 MJ
Weight	650 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	4066966137828
Customs tariff number	85044083900

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

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General approvals

Approval	Standard	Certificate Name
UL Underwriters Laboratories Inc.	UL 61010-2-201	UL-US-2219523-0

Declarations of conformity and manufacturer's declarations

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

Approvals for hazardous areas

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

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2787-2344

Documentation

Manual

Product Manual Power supply; Pro 2; 3-phase; 24 VDC output voltage; 5 A output current	V 1.0.1 15.02.2022	pdf 8129.21 KB	

Bid Text

2787-2344	11.05.2022	xml 9.25 KB	
2787-2344	11.05.2022	docx 35.49 KB	

Instruction Leaflet

Stromversorgung Pro 2	V 1.1.0 03.03.2022	pdf 4607.98 KB	

CAD/CAE-Data

CAD data

2D/3D Models 2787-2344

CAE data

EPLAN Data Portal 2787-2344

1 Compatible Products

1.1 Optional Accessories

Continued on next page

1.1.1 Communication

1.1.1.1 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

1.1.2 Marking

1.1.2.1 Marker carrier

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