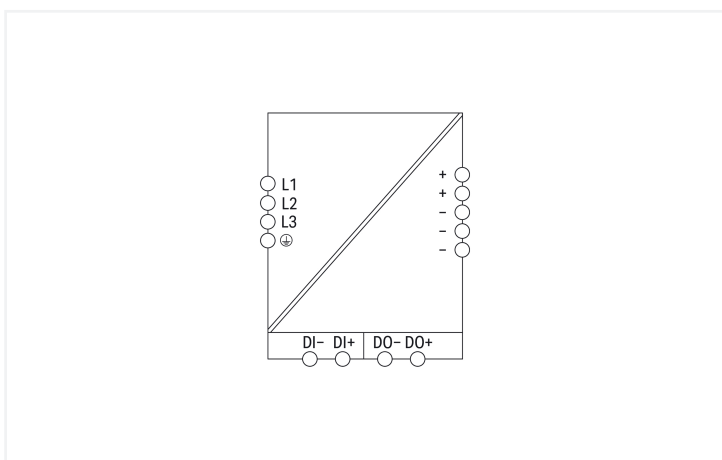


Data Sheet | Item Number: 2787-2358

Power supply; Pro 2; 3-phase; 48 VDC output voltage; 20 A output current; Top-Boost + PowerBoost; communication capability

<https://www.wago.com/2787-2358>



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	$\leq 3 \times 1.6 \text{ A}$ (400 VAC; 48 VDC / 20 A)
Inrush current	$\leq 15 \text{ A}$ (after 1 ms)
Power factor correction (PFC)	Active

Input	
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)

Output	
Nominal output voltage $U_{o, nom}$	48 VDC (SELV)
Output voltage range	48 ... 56 VDC (adjustable)
Default Setting	48 VDC
Nominal output current $I_{o, nom}$	20 A (48 VDC)
Nominal output power	960 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	
Efficiency (typ.)	96 %

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
Overvoltage category	III (≤ 2000 m a.s.l.); II (> 2000 m a.s.l.)
Pollution degree	2
Transient suppression (primary)	Yes
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 mm ² / 28 ... 12 AWG	Solid conductor	0.5 ... 10 mm ² / 20 ... 8 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG	Fine-stranded conductor	0.5 ... 10 mm ² / 20 ... 8 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm ² / 20 ... 16 AWG	Fine-stranded conductor; with insulated ferrule	0.5 ... 6 mm ²
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm ² / 20 ... 14 AWG	Fine-stranded conductor; with uninsulated ferrule	0.5 ... 6 mm ²
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches	Strip length	13 ... 15 mm / 0.51 ... 0.59 inches

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	2 x T 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)

Physical data

Width	120 mm / 4.724 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	2000 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	4066966155891
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 **Declarations of conformity and manufacturer's declarations**



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	UL-US-2145771-0

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
MFD for SEMI F47 WAGO GmbH & Co. KG	-	-
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 2787-2358	↓
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Documentation

Manual

Product Manual Power supply; Pro 2; 3-phase; 48 VDC output voltage; 20 A output current;	V 1.0.1 15.02.2022	pdf 8766.01 KB	↓
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Bid Text

2787-2358	11.05.2022	xml 9.23 KB	↓
2787-2358	11.05.2022	docx 35.69 KB	↓

Instruction Leaflet

Power supply; Pro 2; 3-phase; 48 VDC output voltage; 20 A output current;	V 1.0.0 16.12.2021	pdf 4471.35 KB	
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CAD/CAE-Data

CAD data

2D/3D Models 2787-2358	
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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 Marking

1.2.1.1 Marker carrier



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