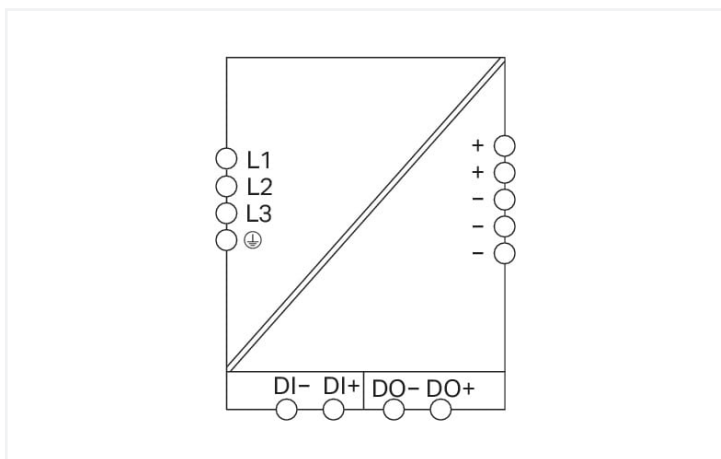


# Data Sheet | Item Number: 2787-2357

Power supply; Pro 2; 3-phase; 48 VDC output voltage; 10 A output current; Top-Boost + PowerBoost; communication capability

<https://www.wago.com/2787-2357>



## 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; 48 VDC / 10 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 48 V (SELV)
Default setting	DC 48 V
Nominal output current $I_{o,nom}$	10 A (48 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)
PowerBoost	DC 15 A (5 s)

## Output

TopBoost	Up to 600 %
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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 (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 $P_1$	$\leq 3.6$ W (standby); $\leq 4.4$ W (No load); $\leq 21$ W (nominal load)
Efficiency (typ.)	95 %

## Circuit protection

Internal fuse	3 x T 3.15 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
Overvoltage category	III ( $\leq 2000$ 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	$> 900,000$ 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 <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm <sup>2</sup> / 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 <sup>2</sup> / 20 ... 8 AWG
Fine-stranded conductor 2	0.5 ... 10 mm <sup>2</sup> / 20 ... 8 AWG
Fine-stranded conductor; with insulated ferrule 2	0.5 ... 6 mm <sup>2</sup>
Fine-stranded conductor; with uninsulated ferrule 2	0.5 ... 6 mm <sup>2</sup>
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
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

### Commercial data

ETIM 8.0	EC002540
ETIM 7.0	EC002540
PU (SPU)	1 pcs
Country of origin	CN
GTIN	4066966155877
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	UL-US-2131634-0

**Declarations of conformity and manufacturer's declarations**

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
MFD with product reference 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 2787-2357 <a href="#">↓</a>

**Documentation**

Manual			
Product Manual Power supply; Pro 2; 3-phase; 48 VDC output voltage; 10 A output current;	V 1.0.1 15.02.2022	pdf 8454.96 KB	<a href="#">↓</a>

Bid Text			
2787-2357	11.05.2022	xml 9.43 KB	<a href="#">↓</a>
2787-2357	11.05.2022	docx 31.88 KB	<a href="#">↓</a>

Instruction Leaflet			
Power supply; Pro 2; 3-phase; 48 VDC output voltage; 10 A output current;	V 1.0.0 16.12.2021	pdf 4475.45 KB	<a href="#">↓</a>

## CAD/CAE-Data

### CAD data

2D/3D Models  
2787-2357



## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Communication

##### 1.1.1.1 Communication module



**Item No.: 2789-9023**

Communication module; EtherNet/IP;  
MQTT; communication capability



**Item No.: 2789-9080**

Communication module; IO-Link; commu-  
nication 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