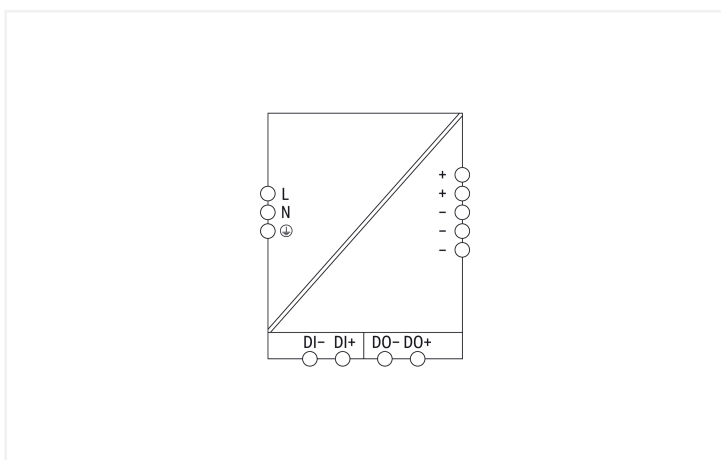


Data Sheet | Item Number: 2787-2154

Power supply; Pro 2; 1-phase; 48 VDC output voltage; 2.5 A output current; Top-Boost + PowerBoost; communication capability

<https://www.wago.com/2787-2154>



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	1
Nominal input voltage $U_{i,nom}$	1 x 100 ... 240 VAC
Input voltage range	1 x 90 ... 264 VAC
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	≤ 1.3 A (240 VAC; nominal load)
Inrush current	≤ 11 A (after 1 ms)
Power factor correction (PFC)	Active

Output	
Nominal output voltage $U_{o,nom}$	48 VDC (SELV)
Output voltage range	48 ... 56 VDC (adjustable)
Default Setting	48 VDC
Nominal output current $I_{o,nom}$	2.5 A (48 VDC)
Nominal output power	120 W
Deviation	≤ 1 %
Residual ripple	≤ 70 mV (peak-to-peak)

Output

Current limitation	$1.1 \times I_{o\text{ nom}}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	7.5 ADC (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)
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)

Efficiency/Power Losses

Power loss P_1	$\leq 0.8 \text{ W}$ (standby); $\leq 1.7 \text{ W}$ (no load); $\leq 9 \text{ W}$ (230 VAC; nominal load)
Efficiency (typ.)	95.3 %

Circuit Protection

Internal fuse	T 6.3 A / 250 VAC
Backup fuse (recommended)	16 A (for USA/Canada: 15 A)

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 ($\leq 2000 \text{ m a.s.l.}$); II ($> 2000 \text{ m a.s.l.}$)
Pollution degree	2
Transient suppression (primary)	Yes
Short-circuit-protected	Yes
Open-circuit-proof	Yes
Parallel operation	Yes
Series operation	Yes
MTBF	$> 900,000 \text{ h}$ (per IEC 61709)

Connection Data

Connection 1

Connection type	Input/output/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	2.5 ... 1.5 mm ² / 12 ... 16 AWG
Fine-stranded conductor; with uninsulated ferrule	1.5 ... 0.08 mm ² / 16 ... 28 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches

Physical data

Width	35 mm / 1.38 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
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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
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	4066966121384
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	Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03080	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081	MFD for SEMI F47 WAGO GmbH & Co. KG	-	-
UL Underwriters Laboratories Inc.	UL 61010-2-201	E255817			

Approvals for hazardous areas

Approval	Standard	Certificate Name
UL Underwriters Laboratories Inc. (HAZARDOUS LOCA- TIONS)	UL 121201	E198726

Downloads


Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 2787-2154	↓

Documentation

Manual				Bid Text			
Product Manual Power supply; Pro 2; 1-phase; 48 VDC output voltage; 2.5 A output current;	V 1.0.2 18.02.2022	pdf 8064.47 KB	↓	2787-2154	11.05.2022	docx 32.35 KB	↓
				2787-2154	11.05.2022	xml 8.72 KB	↓

Instruction Leaflet

Power supply; Pro 2; 1-phase; 48 VDC output voltage; 2.5 A output current;	V 1.0.0 03.05.2021	pdf 4297.35 KB	
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CAD/CAE-Data

CAD data

2D/3D Models 2787-2154	
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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