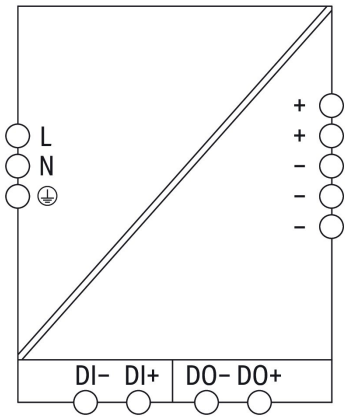
Data Sheet | Item Number: 2787-2154

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	DC 48 V
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)
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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Output

PowerBoost	DC 7.5 A (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_l	≤ 0.8 W (standby); ≤ 1.7 W (no load); ≤ 9 W (230 VAC; nominal load)
Efficiency (typ.)	95.3 %

Circuit protection

Internal fuse	T 6.3 A / 250 VAC
Backup fusing (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 (≤ 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/output/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	2.5 … 1.5 mm² / 12 … 16 AWG
Fine-stranded conductor; with uninsulated ferrule	1.5 … 0.08 mm² / 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

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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
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 9.0	EC002540
ETIM 8.0	EC002540
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	CN
GTIN	4066966121384
Customs tariff number	85044083900

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

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	-	-

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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 2787-2154

Documentation

Manual

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

Bid Text

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

CAD/CAE-Data

CAD data

2D/3D Models 2787-2154

1 Compatible Products

1.1 Product Expansions

1.1.1 Communication module



Item No.: 2789-9023
Communication module; EtherNet/IP; MQTT; 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