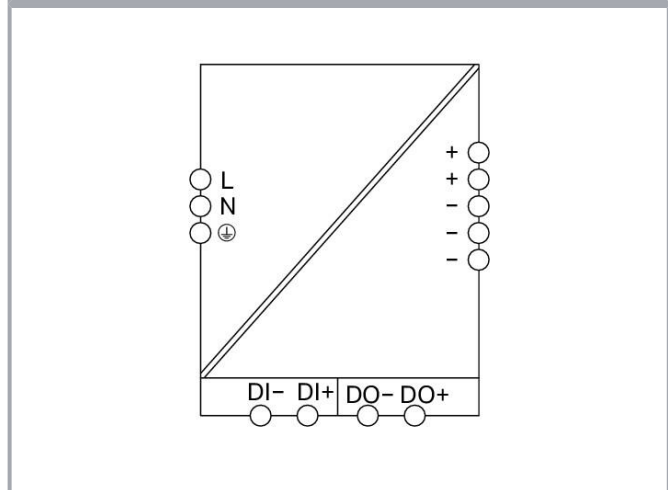


Data sheet | Item number: 2787-2147

Power supply; Pro 2; 1-phase; 24 VDC output voltage; 20 A output current;
TopBoost + PowerBoost; communication capability



www.wago.com/2787-2147



Subject to changes. Please also observe the further product documentation!

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Phone: +49571 887-0 | Fax: +49571 887-169
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Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.

Item description

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

Data

Technical data

Input

Phases	1
Nominal input voltage $U_{i\text{nom}}$	1 x AC 100 ... 240 V
Input voltage range	1 x AC 90 ... 264 V; DC 130 ... 240 V
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	≤ 2.2 A (240 VAC; Nominal load); ≤ 5.9 A (100 VAC; Nominal load)
Inrush current	≤ 12 A (after 1 ms)
Power factor	≥ 0.98 (240 VAC)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 24 ms (230 VAC)

Output

Nominal output voltage $U_{o\text{nom}}$	DC 24 V (SELV)
Output voltage range	DC 24 ... 28 V (adjustable)
Nominal output current $I_{o\text{nom}}$	20 A (24 VDC)
Nominal output power	480 W
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	1.1 x $I_{o\text{nom}}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other

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overload behaviors can be set)

PowerBoost	DC 30 A (5 s)
TopBoost	Up to 600 %

Signaling and Communication

Signaling	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

Power loss P_I	≤ 1.3 W (standby); ≤ 2.6 W (no load); ≤ 24 W (230 VAC; nominal load)
Efficiency (typ.)	95.4 % (230 VAC; 20 A; 25 °C)

Circuit protection

Internal fuse	T 10 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)

Safety and protection

Isolation voltage (pri.-sec., AC)	3,510 V
Isolation voltage (pri.-PE, AC)	2,200 V
Isolation voltage (sec.-PE)	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	$> 800,000$ h (per IEC 61709)

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Connection data

Connection type 1	Input/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	0.25 ... 1.5 mm ² / 20 ... 16 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm ² / 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 ² / 20 ... 8 AWG
Fine-stranded conductor 2	0.5 ... 10 mm ² / 20 ... 8 AWG
Fine-stranded conductor; with insulated ferrule 2	0.5 ... 6 mm ²
Fine-stranded conductor; with uninsulated ferrule 2	0.5 ... 6 mm ²
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	0.797 MJ
Weight	1450 g

Environmental requirements

Ambient temperature (operation)	-25 ... +70 °C (Device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C

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Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-1 %/V (> +40 °C and $U_i < 100$ VAC); -3 %/K (> +55 °C and $U_i < 230$ VAC); -3 %/K (> +60 °C and $U_i \geq 230$ VAC); -5 %/V ($U_o > 24$ VDC)
Operating altitude (max.)	5000 m

Standards and specifications

Conformity marking	CE
Standards/specifications	SEMI F47 EN 61010-2-201 EN 61204-3 UL 61010-1 UL 61010-2-201

Commercial data


ETIM 8.0	EC002540
ETIM 7.0	EC002540
PU (SPU)	1 pcs
Packaging type	box
Country of origin	CN
GTIN	4055143878364
Customs tariff number	85044083900

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc.	UL 61010-2-201	E255817

Declarations of conformity and manufacturer's declarations


Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

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UK-Declaration of Conformity
WAGO GmbH & Co. KG





Approvals for hazardous areas

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	A- E198726


Optional accessories

Communication

Communication module


	Item no.: 2789-9080 Communication module; IO-Link; communication capability	www.wago.com/2789-9080
	Item no.: 2789-9015 Communication module; Modbus RTU; RJ45; communication capability	www.wago.com/2789-9015
	Item no.: 2789-9052 Communication module; Modbus TCP; communication capability	www.wago.com/2789-9052
	Item no.: 2789-9023 Communication module; EtherNet/IP; communication capability	www.wago.com/2789-9023

Communication cable

	Item no.: 750-923 Configuration cable; USB connector; Length: 2.5 m	www.wago.com/750-923
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Marking accessories

Marking strip

	Item no.: 2009-110 Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white	www.wago.com/2009-110
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Subject to changes. Please also observe the further product documentation!

Marker carrier



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

www.wago.com/2789-1233

Marker



Item no.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

www.wago.com/2009-115

Cables and pluggable connectors

Communication cable



Item no.: 750-923/000-001
Configuration cable; USB connector; Length: 5 m

www.wago.com/750-923/000-001

Tool

Operating tool



Item no.: 210-721
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

www.wago.com/210-721



Item no.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

www.wago.com/210-720

Downloads

Documentation

Manual

Product Manual Power supply; Pro 2; 1-phase; 24 VDC output voltage; 20 A output current	V 1.0.0 2022 Jul 20	pdf 8.5 MB	Download
TopBoost + PowerBoost; communication capability			

Bid Text

2787-2147_EUSA docx - Datei	2019 Jul 4	docx 23.8 kB	Download
2787-2147_EUSA X81 - Datei	2019 Jul 4	xml 8.1 kB	Download
ausschreiben.de 2787-2147		URL	Download

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Instruction Leaflet

WAGO Stromversorgung Pro 2 1-phase; DC 24 V / 20 A	V 1.1.0 2021 Apr 26	pdf 4.6 MB	Download
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Additional Information

Disposal and Recycling Electrical and electronic equipment, Batteries, Packaging	V 1.1.0 2022 Aug 18	pdf 2.2 MB	Download
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Engineering-Software

Configuration and Commissioning Software

WAGO Interface Configuration Software G2 FULL The full setup, in addition to the WAGO Interface Configuration Software G2, includes the installation for the Microsoft .NET Framework.	1.00.10.01 2022 Jan 20	exe 114.9 MB	Download
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WAGO Interface Configuration Software G2 SMALL The full setup only includes the WAGO Interface Configuration Software G2.	1.00.10.01 2022 Jan 20	exe 31.0 MB	Download
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WAGO IO-Link Configurator

WAGO IO-Link Configurator WAGO IO-Link Configurator allows configuration, parameterization, operation and monitoring of WAGO IO-Link Masters in the WAGO I/O System 750 and WAGO I/O System Field, and especially of the WAGO IO-Link devices connected to them.	V5.1.1-6618 2022 Feb 16	ZIP 91.8 MB	Download
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Additionally, WAGO IO-Link Configurator can be used for complete configuration and operation of all IO-Link devices of third-party manufacturers, as long as they comply with the IO-Link specification. A product's process data can be visualized graphically and stored in trend curves. Up to eight elements can be selected for visualization, and the data can be recorded for up to 24 hours.

Device description files for the IO-Link Masters (IOLM) or IO-Link Devices (IODD) can be used to integrate new devices into the tool at any time. Convenient access to the IO-Link user organization's IODDfinder is available for the IODDs. This allows automated, selective download of IODDs when integrating new IO-Link devices. An integrated IODD viewer allows detailed insight into the IODD device description.

WAGO IO-Link Configurator can be used either as a standalone program or integrated into engineering systems with a TCI interface and WAGO-I/O-CHECK.

IO-Link Configurator can also be used to integrate the IO-Link Master (750-657) of the WAGO I/O System 750 Series and to access all the configurator's functions. This is made possible by the WAGO I/O System 750 IO-Link Adapter, which can be retrofitted. The WAGO I/O System 750 IO-Link Adapter requires the current version of WAGO IO-Link Configurator and a current version of WAGO-I/O-CHECK.

In addition, the download file contains the device descriptions for the respective fieldbus systems of the WAGO I/O System Field modules. These are pre-installed in the Configurator setup.

The WAGO IO-Link Configurator license is assigned to the specific PC on which it is installed (a workstation license).

Register now and test our engineering software for 30 days at no cost.

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Runtime Software

Firmware

2787-2147, Stromversorgung; Pro 2	V 010513	zip	Download
WAGO_FW2787-2147_V010513_W	2021 Oct 12	1.1 MB	

CAD/CAE-Data

CAE data

EPLAN Data Portal 2787-2147	URL	Download
ZUKEN Portal 2787-2147	URL	Download

CAD data

2D/3D Models 2787-2147	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2787-2147	URL	Download
Power supply; Pro 2; 1-phase; 24 VDC output voltage; 20 A output current; TopBoost + PowerBoost; communication capability		

Installation Notes

Product family

Pro 2
[Show all products from the family](#)

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