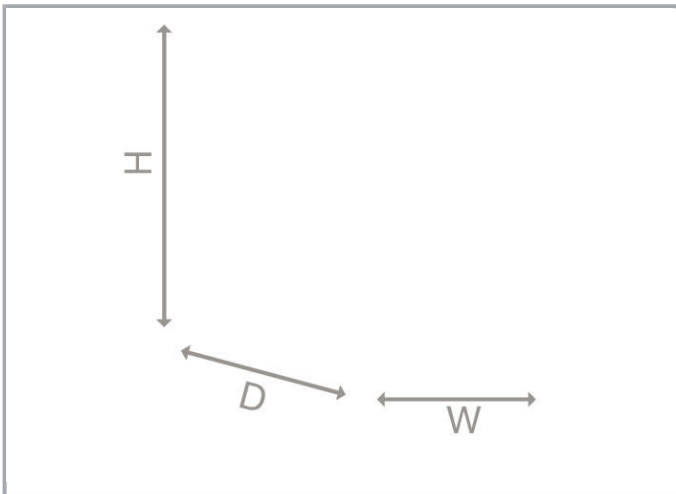
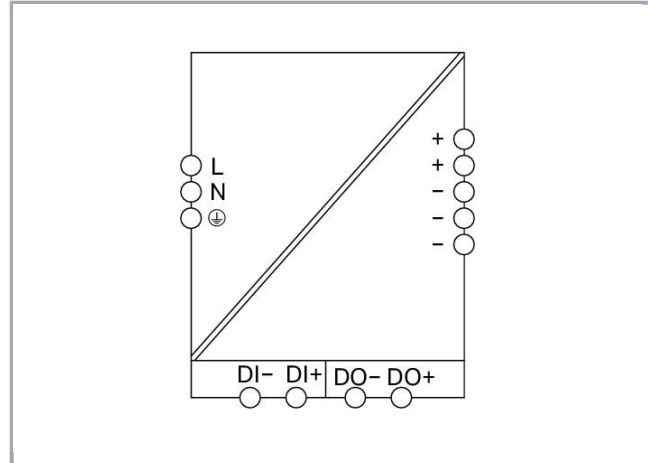


Data sheet | Item number: 2787-2147

Power supply unit; Pro2; 1-phase; 24 VDC output voltage; 20 A output current; TopBoost + PowerBoost; communication capability



www.wago.com/2787-2147



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
- 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/UL 61010
- Marker slot for WAGO marker cards (WMB) and WAGO marking strips

Data

Technical Data

Input

Phases	1
Nominal input voltage $U_{i\text{nom}}$	AC 100 ... 240 V
Input voltage range	AC 90 ... 264 V; DC 130 ... 373 V
Nominal mains frequency range	47 ... 63 Hz; 0 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)
Factory preset	DC 24 V
Nominal output current $I_{o\text{nom}}$	20 A (24 VDC)
Nominal output power	480 W
Adjustment accuracy	≤ 1 %
Residual ripple	≤ 70 mV (peak-to-peak)
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	DC 30 A (5 s)

Signaling and communication

Signaling	Optical status indication (DC OK; load; warning and error states) Digital signal input and output (DI/DO)
Communication	Communication interface, can be used with WAGO USB Communication Cable (750-923) or WAGO IO-Link Communication Module (2789-9080)

Efficiency/Power losses:

Power loss P_v	≤ 1.3 W (stand-by); ≤ 2.6 W (no load); ≤ 24 W (230 VAC; nominal load)
Efficiency (typ.)	95.3 %



Fuse protection:

Internal fuse	T 10 A / 250 VAC
External fuse (required)	an external DC fuse required for DC input voltage
External fuse (recommended)	16 A (for USA/Canada: 15 A)

Safety and protection:

Insulation voltage (PRI-SEC)	DC 3.62 kV
Isolation voltage (PRI-GND)	DC 2.265 kV
Insulation voltage (SEC-GND)	DC 0.708 kV
Insulation voltage (SEC-Signal)	DC 0.708 kV
Protection class	I
Protection class	IP20 (per EN 60529)
Feedback voltage	≤ DC 35 V
Overvoltage category	III (≤ 2000 m a. s.l.); II (> 2000 m a. s.l.)
Transient protection, primary	Yes
Overvoltage protection, secondary	Internal protective circuit ≤ 35 VDC (in case of an error)
Short circuit protection	Yes
No-load proof	Yes
Parallel operation	Yes
Series connection	Yes
MTBF	> 800,000 h (per IEC 61709)

Connection data

Connection type (1)	Input/Signaling
Connection technology	CAGE CLAMP®
WAGO terminal	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 ferrule with plastic collar	0.25 ... 1.5 mm ² / 20 ... 16 AWG
Fine-stranded conductor with ferrule without plastic collar	0.25 ... 2.5 mm ² / 20 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch
Connection type (2)	Output
Connection technology 2	Push-in CAGE CLAMP®
WAGO terminal 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 inch



Geometrical Data

Width	70 mm / 2.756 inch
Height	130 mm / 5.118 inch
Length from upper-edge of DIN-35 rail	130 mm / 5.118 inch
Note on dimensions	Height without connector Height with connector: 169 mm

Mechanical data

Type of mounting	DIN-35 rail (EN 60715)
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Material Data

Weight	1450
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Environmental Requirements

Surrounding air (operating) temperature	-25 ... 70 °C (Device start at -40 °C type-tested)
Surrounding air (storage) temperature	-40 ... 85 °C
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)
Pollution degree	2
Climatic category	3K3 (per EN 60721)
Max. operating altitude	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

Commercial data

Packaging type	BOX
Country of origin	CN
GTIN	4055143878364
Customs Tariff No.	85044082900

Approvals / Certificates

UL-Approvals




Logo	Approval	Additional Approval Text	Certificate name
	UL	UL 61010-2-201	E255817










Underwriters Laboratories Inc.

Compatible products




General accessories












	Item no.: 2789-9080 Communication module; IO-Link; communication capability	www.wago.com/2789-9080
	Item no.: 750-923 Configuration cable; USB connector; Length: 2.5 m; black	www.wago.com/750-923
	Item no.: 750-923/000-001 Configuration cable; USB connector; Length: 5 m	www.wago.com/750-923/000-001

Marking accessories

	Item no.: 2009-110 Marking strips; on reel; not stretchable; plain; snap-on type; white	www.wago.com/2009-110
	Item no.: 2009-115 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; white	www.wago.com/2009-115
	Item no.: 2009-115/000-002 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; yellow	www.wago.com/2009-115/000-002
	Item no.: 2009-115/000-006 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; blue	www.wago.com/2009-115/000-006
	Item no.: 2009-115/000-007 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; gray	www.wago.com/2009-115/000-007
	Item no.: 2009-115/000-012 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; orange	www.wago.com/2009-115/000-012
	Item no.: 2009-115/000-017 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; light green	www.wago.com/2009-115/000-017
	Item no.: 2009-115/000-023 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; green	www.wago.com/2009-115/000-023
	Item no.: 2009-115/000-024 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; violet	www.wago.com/2009-115/000-024

ferrule

	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-201
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
	Item no.: 216-205 Ferrule; Sleeve for 2.08 mm ² / AWG 14; insulated; electro-tin plated; yellow	www.wago.com/216-205
	Item no.: 216-206 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; blue	www.wago.com/216-206
	Item no.: 216-207 Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated; gray	www.wago.com/216-207
	Item no.: 216-208 Ferrule; Sleeve for 6 mm ² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow	www.wago.com/216-208
	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-221
	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-222
	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-223
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-224
	Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	www.wago.com/216-241
	Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	www.wago.com/216-242
	Item no.: 216-243 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	www.wago.com/216-243
	Item no.: 216-244 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	www.wago.com/216-244
	Item no.: 216-246 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	www.wago.com/216-246
	Item no.: 216-262 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	www.wago.com/216-262
	Item no.: 216-263	

	Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	www.wago.com/216-263
	Item no.: 216-264 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	www.wago.com/216-264
	Item no.: 216-266 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	www.wago.com/216-266
	Item no.: 216-267 Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	www.wago.com/216-267
	Item no.: 216-284 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	www.wago.com/216-284
	Item no.: 216-286 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	www.wago.com/216-286
	Item no.: 216-287 Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	www.wago.com/216-287
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-301
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green	www.wago.com/216-302
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-321
	Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green	www.wago.com/216-322
tools		
	Item no.: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft	www.wago.com/210-720
	Item no.: 210-721 Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft	www.wago.com/210-721

Downloads

Documentation

Bid Text

2787-2147	docx	Download
Power supply	23.8 kB	

Instruction Leaflet

WAGO Stromversorgung Pro 2	V 1.0.0	pdf	Download
1-phasig; DC 24 V / 20 A	Sep 9, 2019	4.4 MB	



Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download
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Engineering-Software

Software for Interface-Products

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.	1.0.1.29 Aug 26, 2019	exe 97.4 MB	Download
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WAGO Interface Configuration Software G2 SMALL The full setup only includes the WAGO Interface Configuration Software G2.	1.0.1.29 Aug 26, 2019	exe 13.4 MB	Download
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CAD/CAE-Data

EPLAN

EPLAN Data Portal 2787-2147			Download
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Device Files

Device Description File

Device description files 2787-2147	1.1 Sep 17, 2019	zip 91.4 kB	Download
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Handling Instructions

Product family

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

Subject to changes.