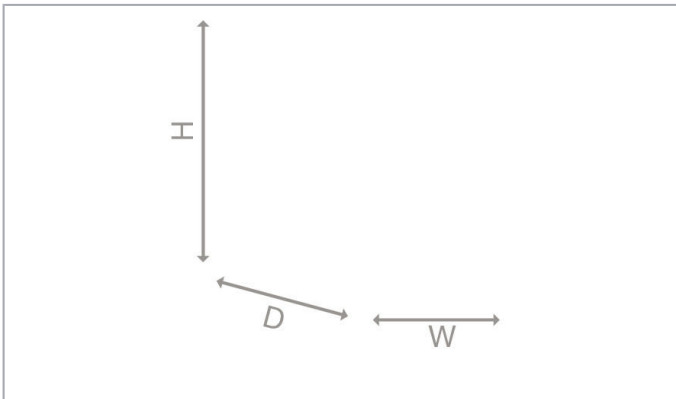
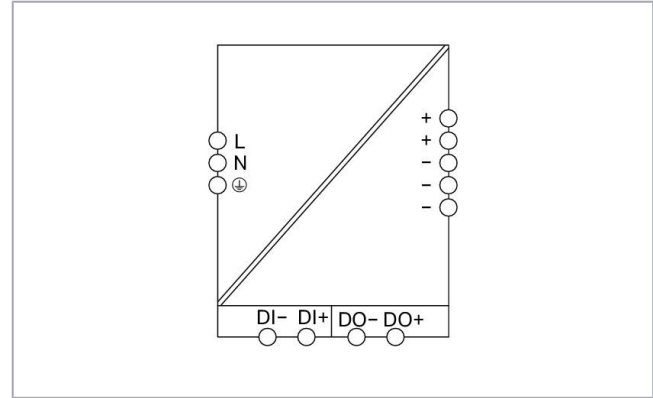


## Data sheet | Item number: 2787-2147

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



[www.wago.com/2787-2147](http://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 or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted

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

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- 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 $I_i$	$\leq 2.2$ A (240 VAC; Nominal load); $\leq 5.9$ A (100 VAC; Nominal load)
Inrush current	$\leq 12$ A (after 1 ms)
Power factor	$\geq 0.98$ (240 VAC)
Power factor correction (PFC)	Active
Mains failure hold-up time	$\geq 24$ ms (230 VAC)

#### Output

Nominal output voltage $U_{o\text{ nom}}$	DC 24 V (SELV)
Output voltage range	DC 24 ... 28 V (adjustable)
Default setting	DC 24 V
Nominal output current $I_{o\text{ nom}}$	20 A (24 VDC)
Nominal output power	480 W
Control deviation	$\leq 1$ %
Residual ripple	$\leq 70$ 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 IO-Link Communication Module

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

## Efficiency/power losses

Power loss $P_i$	$\leq 1.3$ W (Stand-by); $\leq 2.6$ W (No load); $\leq 24$ W (230 VAC; Nominal load)
Efficiency (typ.)	95.4 % (230 VAC; 20 ADC; 25 °C)

## Circuit protection

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

## Safety and protection

Isolationsspannung (Pri.-Sek., AC)	3,510 V
Isolationsspannung (Pri.-PE, AC)	2,200 V
Isolation voltage (Sec.-GND)	DC 0.5 kV
Isolation voltage (Sec.-Signal)	DC 0.5 kV
Protection class	I
Protection type	IP20 (per EN 60529)
Resistance to reverse feed	$\leq$ DC 35 V
Overvoltage category	III ( $\leq 2000$ m a. s.l.); II ( $> 2000$ m a. s.l.)
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit $\leq 35$ 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)

## 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

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



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 inch
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 inch

### Physical data

Width	70 mm / 2.756 inch
Height	130 mm / 5.118 inch
Depth from upper edge of DIN-rail	130 mm / 5.118 inch
Note (dimensions)	Height without connector Height with connector: 169 mm

### Mechanical data

Mounting type	DIN-35 rail (EN 60715)
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### Material Data

Weight	1450 g
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### Environmental Requirements

Surrounding air temperature (operation)	-25 ... 70 °C (Device starts at -40 °C (type-tested))
Surrounding air temperature (storage)	-40 ... 85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-1 %/V (> +40 °C and U <sub>i</sub> < 100 VAC); -3 %/K (> +55 °C and U <sub>i</sub> < 230 VAC); -3 %/K (> +60 °C and U <sub>i</sub> ≥ 230 VAC); -5 %/V (U <sub>o</sub> > 24 VDC)
Pollution degree	2
Climatic category	3K3 (per EN 60721)
Operating altitude (max.)	5000 m

### Standards and specifications

Conformity marking	CE
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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 number	85044082900

## Approvals / Certificates



### UL-Approvals

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

## Counterpart

## Compatible products

### ferrule

	<b>Item no.: 216-201</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white	<a href="http://www.wago.com/216-201">www.wago.com/216-201</a>
	<b>Item no.: 216-202</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray	<a href="http://www.wago.com/216-202">www.wago.com/216-202</a>
	<b>Item no.: 216-203</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red	<a href="http://www.wago.com/216-203">www.wago.com/216-203</a>
	<b>Item no.: 216-204</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black	<a href="http://www.wago.com/216-204">www.wago.com/216-204</a>
	<b>Item no.: 216-205</b> Ferrule; Sleeve for 2.08 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; yellow	<a href="http://www.wago.com/216-205">www.wago.com/216-205</a>
	<b>Item no.: 216-206</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; blue	<a href="http://www.wago.com/216-206">www.wago.com/216-206</a>

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**Item no.: 216-207**Ferrule; Sleeve for 4 mm<sup>2</sup> / AWG 12; insulated; electro-tin plated; gray[www.wago.com/216-207](http://www.wago.com/216-207)**Item no.: 216-208**Ferrule; Sleeve for 6 mm<sup>2</sup> / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow[www.wago.com/216-208](http://www.wago.com/216-208)**Item no.: 216-221**Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white[www.wago.com/216-221](http://www.wago.com/216-221)**Item no.: 216-222**Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray[www.wago.com/216-222](http://www.wago.com/216-222)**Item no.: 216-223**Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red[www.wago.com/216-223](http://www.wago.com/216-223)**Item no.: 216-224**Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black[www.wago.com/216-224](http://www.wago.com/216-224)**Item no.: 216-241**Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white[www.wago.com/216-241](http://www.wago.com/216-241)**Item no.: 216-242**Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray[www.wago.com/216-242](http://www.wago.com/216-242)**Item no.: 216-243**Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red[www.wago.com/216-243](http://www.wago.com/216-243)**Item no.: 216-244**Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black[www.wago.com/216-244](http://www.wago.com/216-244)**Item no.: 216-246**Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue[www.wago.com/216-246](http://www.wago.com/216-246)**Item no.: 216-262**Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray[www.wago.com/216-262](http://www.wago.com/216-262)**Item no.: 216-263**Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red[www.wago.com/216-263](http://www.wago.com/216-263)**Item no.: 216-264**Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black[www.wago.com/216-264](http://www.wago.com/216-264)**Item no.: 216-266**Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue[www.wago.com/216-266](http://www.wago.com/216-266)**Item no.: 216-267**Ferrule; Sleeve for 4 mm<sup>2</sup> / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; [www.wago.com/216-267](http://www.wago.com/216-267)

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	acc. to DIN 46228, Part 4/09.90; gray	
	<b>Item no.: 216-284</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	<a href="http://www.wago.com/216-284">www.wago.com/216-284</a>
	<b>Item no.: 216-286</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	<a href="http://www.wago.com/216-286">www.wago.com/216-286</a>
	<b>Item no.: 216-287</b> Ferrule; Sleeve for 4 mm <sup>2</sup> / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	<a href="http://www.wago.com/216-287">www.wago.com/216-287</a>
	<b>Item no.: 216-301</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow	<a href="http://www.wago.com/216-301">www.wago.com/216-301</a>
	<b>Item no.: 216-302</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; green	<a href="http://www.wago.com/216-302">www.wago.com/216-302</a>
	<b>Item no.: 216-321</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow	<a href="http://www.wago.com/216-321">www.wago.com/216-321</a>
	<b>Item no.: 216-322</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; green	<a href="http://www.wago.com/216-322">www.wago.com/216-322</a>
<b>Marking accessories</b>		
	<b>Item no.: 2009-110</b> Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white	<a href="http://www.wago.com/2009-110">www.wago.com/2009-110</a>
	<b>Item no.: 2009-115</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	<a href="http://www.wago.com/2009-115">www.wago.com/2009-115</a>
	<b>Item no.: 2009-115/000-002</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow	<a href="http://www.wago.com/2009-115/000-002">www.wago.com/2009-115/000-002</a>
	<b>Item no.: 2009-115/000-006</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue	<a href="http://www.wago.com/2009-115/000-006">www.wago.com/2009-115/000-006</a>
	<b>Item no.: 2009-115/000-007</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray	<a href="http://www.wago.com/2009-115/000-007">www.wago.com/2009-115/000-007</a>
	<b>Item no.: 2009-115/000-012</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange	<a href="http://www.wago.com/2009-115/000-012">www.wago.com/2009-115/000-012</a>
	<b>Item no.: 2009-115/000-017</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green	<a href="http://www.wago.com/2009-115/000-017">www.wago.com/2009-115/000-017</a>



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	<b>Item no.: 2009-115/000-023</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green	<a href="http://www.wago.com/2009-115/000-023">www.wago.com/2009-115/000-023</a>
	<b>Item no.: 2009-115/000-024</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet	<a href="http://www.wago.com/2009-115/000-024">www.wago.com/2009-115/000-024</a>

**General accessories**

	<b>Item no.: 2789-9015</b> Communication module; Modbus RTU; RJ45; communication capability	<a href="http://www.wago.com/2789-9015">www.wago.com/2789-9015</a>
	<b>Item no.: 2789-9080</b> Communication module; IO-Link; communication capability	<a href="http://www.wago.com/2789-9080">www.wago.com/2789-9080</a>
	<b>Item no.: 750-923</b> Configuration cable; USB connector; Length: 2.5 m; black	<a href="http://www.wago.com/750-923">www.wago.com/750-923</a>
	<b>Item no.: 750-923/000-001</b> Configuration cable; USB connector; Length: 5 m	<a href="http://www.wago.com/750-923/000-001">www.wago.com/750-923/000-001</a>

**tools**

	<b>Item no.: 210-720</b> Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured	<a href="http://www.wago.com/210-720">www.wago.com/210-720</a>
	<b>Item no.: 210-721</b> Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured	<a href="http://www.wago.com/210-721">www.wago.com/210-721</a>

**Downloads**

**Documentation**

**Manual**

Power supply; Pro 2; 1-phase; 24 VDC output voltage; 20 A output current TopBoost + PowerBoost; communication capability	V 1.0.0 24-Sep-2020	pdf 6.3 MB	Download
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**Bid Text**

2787-2147_EUSA GAEB docx - Datei	04-Jul-2019	docx 23.8 kB	Download
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**Instruction Leaflet**

WAGO Stromversorgung Pro 2	V 1.0.0 09-Sep-2019	pdf 4.4 MB	Download
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1-phasig; DC 24 V / 20 A

### 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.	1.0.2.12 14-Sep-2020	exe 113.1 MB	Download
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WAGO Interface Configuration Software G2 SMALL The full setup only includes the WAGO Interface Configuration Software G2.	1.0.2.12 14-Sep-2020	exe 29.1 MB	Download
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### Runtime Software

#### Firmware

Firmware: 2787-2147 Power supply; Pro 2; 1-phase; 24 VDC output voltage; 20 A output current; TopBoost + PowerBoost; communication capability	V010204 09-Oct-2019	zip 87.1 kB	Download
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### CAD/CAE-Data

#### CAE data

EPLAN Data Portal 2787-2147		URL	Download
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ZUKEN Portal 2787-2147		URL	Download
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#### CAD data

2D/3D Models 2787-2147		URL	Download
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### Device Files

#### Device Description File

Device description files 2787-2147	1.1 17-Sep-2019	zip 91.4 kB	Download
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## Installation Notes

## Product family

Pro 2

[Show all products from the family](#)

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