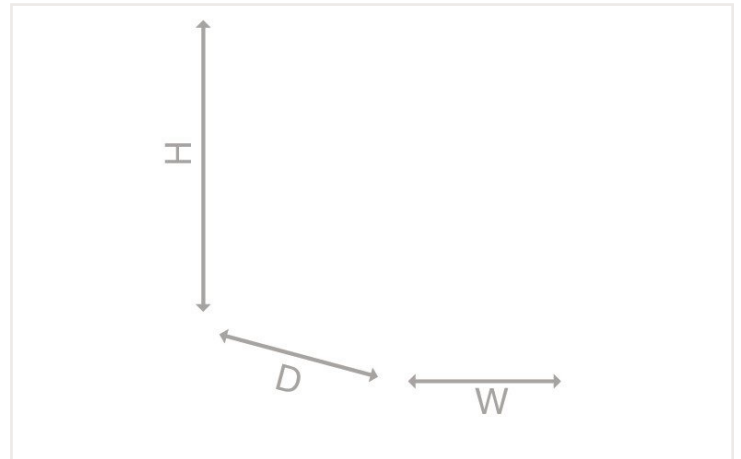
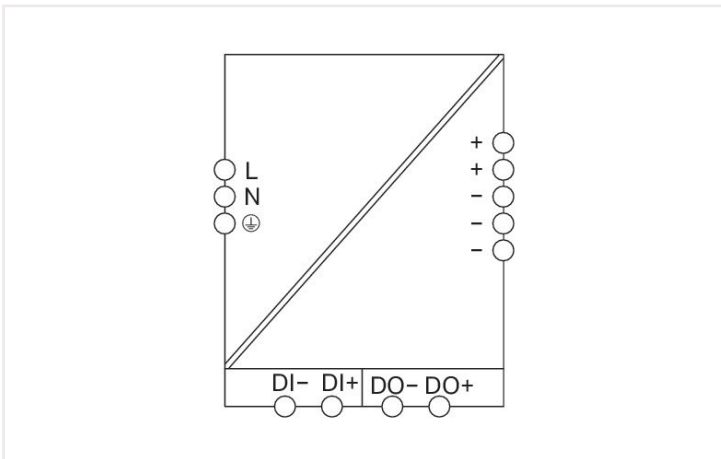


Data sheet | Item number: 2787-2144

Power supply; Pro 2; 1-phase; 24 VDC output voltage; 5 A output current; TopBoost + PowerBoost; communication capability



<https://www.wago.com/2787-2144>



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		Output	
Input		Nominal output voltage $U_{o, nom}$	DC 24 V (SELV)
Phases	1	Output voltage range	DC 24 ... 28 V (adjustable)
Nominal input voltage $U_{i, nom}$	1 x AC 100 ... 240 V	Default setting	DC 24 V
Input voltage range	1 x AC 90 ... 264 V; DC 130 ... 240 V	Nominal output current $I_{o, nom}$	5 A (24 VDC)
Nominal mains frequency range	50 ... 60 Hz	Nominal output power	120 W
Input current I_i	≤ 1 A (240 VAC; nominal load); ≤ 1.8 A (100 VAC; nominal load)	Deviation	≤ 1 %
Inrush current	≤ 9 A (after 1 ms)	Residual ripple	≤ 70 mV (Peak-to-peak)
Power factor correction (PFC)	active	Current limitation	1.1 x $I_{o, nom}$ (typ.)
Mains failure hold-up time	≥ 20 ms (230 VAC)	Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)

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)
Communication	Communication interface, can be used with WAGO USB Communication Cable (750-923) or IO-Link Communication Module (2789-9080), Modbus RTU Communication Module (2789-9015) or Modbus TCP Communication Module (2789-9052)

Efficiency/power losses

Power loss P_1	≤ 1 W (Standby); ≤ 2 W (No load); ≤ 10 W (230 VAC; nominal load)
Efficiency (typ.)	93.8 % (230 VAC; 5 A; 25 °C)

Circuit protection

Internal fuse	T 6.3 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)	3510 V
Isolation voltage (pri.-PE, AC)	2200 V
Isolation voltage (sec.-PE)	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
Overtoltage category	III (≤ 2000 m a. s.l.); II (
Pollution degree	2
Transient suppression (primary)	Yes
Overtoltage 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

Connection data

Connection type 1	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 / 1.378 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 at U_N)	-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	See instruction leaflet
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

Commercial data

ETIM 8.0	EC002540
ETIM 7.0	EC002540
PU (SPU)	1 Stück
Packaging type	Box
Country of origin	CN
GTIN	4055143907415
Customs tariff number	85044082900

Approvals and certificates

General approvals



Approval	Standard	Certificate name
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	A-E198726

Downloads


Environmental Product Compliance

Compliance Search


Environmental Product
Compliance 2787-2144

Documentation

Manual

Product Manual Power supply; Pro 2; 1-phase; 24 VDC output voltage; 5 A output current	V 1.2.2 18.02.2022	pdf 7997.98 KB	
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Bid Text

2787-2144_EUSA	04.07.2019	docx 23.34 KB	
2787-2144_EUSA	04.07.2019	xml 7.90 KB	
ausschreiben.de 2787-2144			

Instruction Leaflet


WAGO Pro 2 Power Supplies	V 1.1.0 26.04.2021	pdf 4445.43 KB	
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CAD/CAE-Data

CAD data


2D/3D Models 2787-2144	
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CAE data

EPLAN Data Portal 2787-2144	
ZUKEN Portal 2787-2144	


Engineering-Software

Software for Interface-Products

WAGO Interface Configuration Software G2 FULL	1.0.8.6 20.01.2022	exe 111289.67 KB	
WAGO Interface Configuration Software G2 SMALL	1.0.8.6 20.01.2022	exe 29307.84 KB	

Runtime Software

Firmware

2787-2144, Stromversorgung; Pro 2	V 010513 13.10.2021	zip 1087.50 KB	
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Libraries

Device Description File			
Device description files	1.1	zip	
IODD 2787-2144		90.84 KB	

1 Compatible products

1.1 Optional accessories

1.1.1 Cables and connectors

1.1.1.1 Communication cable



Item no.: 750-923

Configuration cable; USB connector;
Length: 2.5 m

Item no.: 750-923/000-001

Configuration cable; USB connector;
Length: 5 m

1.1.2 Communication

1.1.2.1 Communication module



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

1.1.3 Ferrule

1.1.3.1 Ferrule



Item no.: 216-301

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

Item no.: 216-321

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

Item no.: 216-302

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise

Item no.: 216-322

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item no.: 216-241

Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white

Item no.: 216-201

Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white

Item no.: 216-221

Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white

Item no.: 216-242

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item no.: 216-262

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

Item no.: 216-202

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray

Item no.: 216-222

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray

Item no.: 216-243

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item no.: 216-263

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

Item no.: 216-203

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red

Item no.: 216-223

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red

Item no.: 216-204

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black

1.1.3.1 Ferrule



Item no.: 216-224

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black

Item no.: 216-244

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black

Item no.: 216-264

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black

Item no.: 216-284

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black

1.1.4 Marking

1.1.4.1 Marker



Item no.: 2009-115

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.1.4.2 Marking strip



Item no.: 2009-110

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.1.5 Tool

1.1.5.1 Operating tool



Item no.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



Item no.: 210-721

Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured