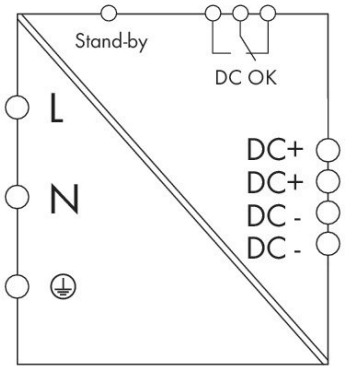
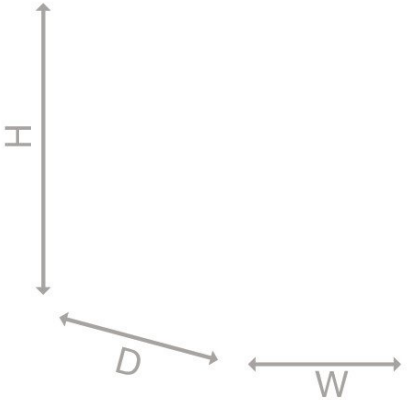
|: 787-834

Switched-mode power supply; Pro; 1-phase; 24 VDC output voltage; 20 A output current; TopBoost + PowerBoost; DC OK contact; 2,50 mm²

https://www.wago.com/787-834





Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Technical data

Input

Phases	1
Nominal input voltage $U_{i\,nom}$	1 x AC 100 … 240 V
Input voltage range	1 x AC 85 … 264 V; DC 120 … 300 V
Input voltage derating	-1.5 %/V (
Nominal mains frequency range	50 … 60 Hz; 0 Hz
Input current I_i	≤ 2.3 A (230 VAC; 20 ADC)
Discharge current	≤ 1 mA
Inrush current	≤ 8 A (active power factor correction (PFC))
Power factor correction (PFC)	active
Mains failure hold-up time	≥ 25 ms (230 VAC)

Output

Nominal output voltage $U_{o\,nom}$	DC 24 V (SELV)
Output voltage range	DC 22 … 29.5 V (adjustable)
Default setting	DC 24 V
Nominal output current $I_{o\,nom}$	20 A (24 VDC)
Nominal output power	480 W
Deviation	≤ 1 %
Residual ripple	≤ 70 mV (Peak-to-peak)
Current limitation	1.1 x $I_{o\,nom}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Constant current mode
PowerBoost	DC 30 A (4 s); DC 25 A (8 s)
TopBoost	DC 80 A (25 ms)

Signaling and communication

Signaling	1 x LED DC OK (green) 1 x Error LED (red) 1 x Stand-by input 1 x DC OK relay contact (changeover contact)
Operation status indicator	Green LED (DC OK) Red LED (error)

Efficiency/power losses

Power loss P_l	≤ 0.8 W (Standby); ≤ 4.8 W (No load); ≤ 43.2 W (Nominal load)
Efficiency (typ.)	91 %

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	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and protection

Isolation voltage (pri.-sec.)	DC 4.242 kV
Isolation voltage (pri.-PE)	DC 2.2 kV
Isolation voltage (sec.-PE)	DC 0.7 kV
Protection class	I
Protection type	IP20
Note on protection type	per EN 60529
Resistance to reverse feed	≤ DC 35 V
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected	Yes
Open-circuit-proof	Yes
Parallel operation	Yes
Series operation	Yes
MTBF	

Connection data

Connection type 1	Input
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 231 Series
Solid conductor	0.08 … 2.5 mm² / 28 … 12 AWG
Fine-stranded conductor	0.08 … 2.5 mm² / 28 … 12 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 mm² / 20 … 8 AWG
Fine-stranded conductor 2	0.5 … 10 mm² / 20 … 8 AWG
Strip length 2	13 … 15 mm / 0.51 … 0.59 inches
Connection type 3	Signaling
Connection technology 3	CAGE CLAMP®
WAGO connector 3	WAGO 733 Series
Solid conductor 3	0.08 … 0.5 mm² / 28 … 20 AWG
Fine-stranded conductor 3	0.08 … 0.5 mm² / 28 … 20 AWG
Strip length 3	5 … 6 mm / 0.2 … 0.24 inches

Physical data

Width	97 mm / 3.819 inches
Height	171 mm / 6.732 inches
Depth from upper-edge of DIN-rail	187 mm / 7.362 inches
Note (dimensions)	Height with connector

Mechanical data

Mounting type	DIN-35 rail

Material data

Fire load	0 MJ
Weight	2300 g

Environmental requirements

Ambient temperature (operation)	-25 … +70 °C (Device starts at −40 °C (type-tested))
Surrounding air temperature (storage)	-25 … +85 °C
Relative humidity	5 … 96 % (no condensation permissible)
Derating	-3 %/K (

Standards and specifications

Conformity marking	CE
Standards/specifications	EN 61010-1 EN 61010-2-201 EN 61204-3 EN 61558-2-16 UL 60950 UL 508

Commercial data

Product Group	6 (Interface Electronics)
eCl@ss 10.0	27-04-07-01
eCl@ss 9.0	27-04-07-01
ETIM 8.0	EC002540
ETIM 7.0	EC002540
PU (SPU)	1 Stück
Packaging type	Box
Country of origin VKOrg Germany	DE
GTIN	4050821085225
Customs tariff number VKOrg Germany	85044082900

Approvals and certificates

Country specific Approvals

EAC Brjansker Zertifizierungs-stelle	TP TC 004/2011,TP TC 020/2011	EAC RU C-DE.AM02.B.00089_19

UL-Approvals

UL Underwriters Laboratories Inc.	UL 508	E255817
UL Underwriters Laboratories Inc.	UL 60950-1	E255815

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 787-834	

Documentation

Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 259.56 KB	

Bid Text

787-834	04.07.2019	docx 22.26 KB	
787-834	04.07.2019	xml 7.25 KB	

Instruction Leaflet

Primär getaktete Stromversorgungen PRO	pdf 247.20 KB	

CAD/CAE-Data

CAD data

2D/3D Models 787-834

CAE data

EPLAN Data Portal 787-834
WSCAD Universe 787-834
ZUKEN Portal 787-834

Engineering-Software

Configuration and Commissioning Software

WAGO Line Length Calculation	1.3.5 09.12.2019	exe 329.50 KB	

1 Compatible products

1.1 Optional accessories

1.1.1 Ferrule

1.1.1.1 Ferrule

: 216-301
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

: 216-321
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

: 216-302
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise

: 216-322
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise

: 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

: 216-201
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white

: 216-221
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white

: 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

: 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

: 216-202
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray

: 216-222
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray

: 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

: 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

: 216-203
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red

: 216-223
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red

: 216-204
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black

: 216-224
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black

: 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

: 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

: 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

: 216-205
Ferrule; Sleeve for 2.08 mm² / AWG 14; insulated; electro-tin plated; yellow

: 216-206
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; blue

: 216-246
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

: 216-266
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

: 216-286
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

: 216-267
Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

: 216-287
Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

: 216-207
Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; gray

: 216-208
Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow

: 216-288
Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow

1.1.2 Marking

1.1.2.1 Marker

: 2009-145
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

: 248-501
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

: 793-5501
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white

: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type; white

: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.1.2.2 Marking strip

: 2009-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

: 210-831
Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white

: 210-832
Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white

1.1.3 Mounting adapter

1.1.3.1 DIN-rail adapter

: 787-897
Carrier rail adapter made of zinc die-cast; for mounting 787-8xx devices to a DIN 35 rail

: 787-896
Carrier rail adapter; for mounting 787-8xx devices to a DIN 35 rail

1.1.3.2 Wall-mount adapter

: 787-895
Mounting carrier; for screw fixing of 787-8xx devices on mounting plate or wall without DIN 35 rail

1.1.4 Tool

1.1.4.1 Operating tool

: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

: 210-721
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

: 210-769
SCREWDRIVER; green