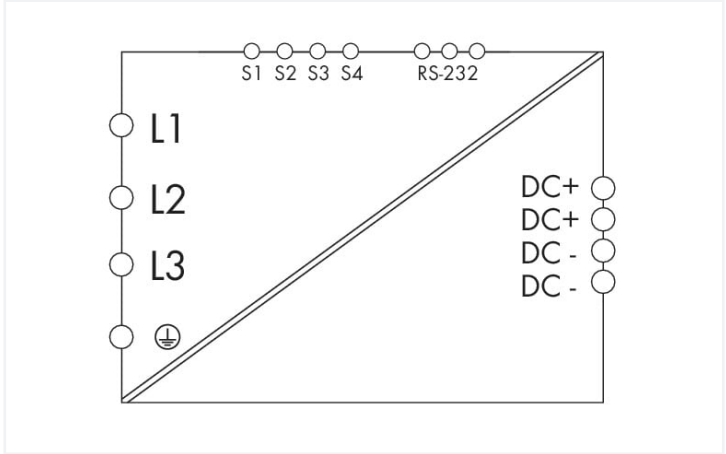


Data Sheet | Item Number: 787-854

Switched-mode power supply; Pro; 3-phase; 24 VDC output voltage; 40 A output current; TopBoost + PowerBoost; LineMonitor; DC OK signal; 2,50 mm²

<https://www.wago.com/787-854>



Features:

- Switched-mode power supply with PowerBoost and TopBoost
- 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
- LineMonitor for parameter setting and monitoring
- RS-232 serial interface
- Four signal outputs

Technical data

Input	
Phases	2 / 3
Nominal input voltage $U_{i\,nom}$	(2 / 3) x AC 400 ... 500 V
Input voltage range	(2 / 3) x AC 340 ... 550 V; DC 480 ... 780 V
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	$\leq 3 \times 2 \text{ A}$ (340 VAC)
Discharge current	$\leq 1 \text{ mA}$
Inrush current	$\leq 30 \text{ A}$
Power factor correction (PFC)	Passive (adjustable via software/display)
Mains failure hold-up time	$\geq 15 \text{ ms}$ (3 x 400 VAC)

Output	
Nominal output voltage $U_{o\,nom}$	DC 24 V (SELV)
Output voltage range	DC 22.8 ... 28.8 V (adjustable)
Default setting	DC 24 V
Nominal output current $I_{o\,nom}$	40 A (24 VDC)
Nominal output power	960 W
Deviation	$\leq 1 \%$
Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o\,nom}$ (typ.)
Overload behavior	adjustable (constant current/fuse mode)
PowerBoost	DC 60 A (4 s); DC 50 A (16 s)
TopBoost	DC 100 A (50 ms)

Signaling and communication	
Signaling	1 x LED DC OK (green) 1 x Warning LED (yellow) 1 x Error LED (red) LCD 4 x Signal output (24 VDC; max. 25 mA) 1 x RS-232 interface
Operation status indicator	Green LED (DC OK) Yellow LED (warning) Red LED (error)
Communication	RS-232 serial interface

Efficiency/power losses	
Power loss P_i	$\leq 7 \text{ W}$; $\leq 61.5 \text{ W}$ (nominal load)
Efficiency (typ.)	93.6 %



Circuit protection	
Internal fuse	3 x T 3.2 A / 440 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	3 x Circuit breaker: 6 A, 10 A, 16 A; Trip-ping characteristic: B or C Alternative: motor circuit breaker; Set-point: 3.2 A; Setting range: 2.5 ... 4 A

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; 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	> 500,000 h (per IEC 61709)

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	128 mm / 5.039 inches
Height	171 mm / 6.732 inches
Depth from upper-edge of DIN-rail	205 mm / 8.071 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 ... +55 °C (Device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-5 %/K (> 45 °C)
Climatic category	3K3 (per EN 60721)

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 ELECTRONIC)
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 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454909895
Customs tariff number	85044083900

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption



Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungs- stelle	TP TC 004/2011,TP TC 020/2011	EAC RU C-DE.AM02. B.00089_19
UL Underwriters Laboratories Inc.	UL 508	E255817
UL Underwriters Laboratories Inc.	UL 60950-1	E255815

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 787-854



Documentation

Bid Text			
787-854	04.07.2019	xml 7.75 KB	
787-854	04.07.2019	docx 20.94 KB	

Instruction Leaflet			
Primär getaktete Stromversorgungen PRO		pdf 513.14 KB	

CAD/CAE-Data

CAD data
2D/3D Models 787-854



CAE data			
EPLAN Data Portal 787-854			
WSCAD Universe 787-854			
ZUKEN Portal 787-854			



Engineering-Software				
Configuration and Commissioning Software			Software for Interface-Products	
WAGO Line Length Calculation	1.3.5 09.12.2019	exe 329.50 KB	↓	
WAGO Software 759-851	1.4.5 11.11.2009	zip 823.13 KB	↓	
WAGO Software 759-850	1.10.16 24.05.2011	zip 520.23 KB	↓	

Libraries				
Library				
Anbindung Stromversorgungen Serie 787	1.3.0 14.05.2014	zip 549.48 KB	↓	

1 Compatible Products
1.1 Optional Accessories
1.1.1 Cables and connectors
1.1.1.1 Communication cable



Item No.: [787-890](#)
RS-232 communication cable; Length 1.8 m

1.1.1.2 Connecting cable



Item No.: [761-9005](#)
USB adapter; with 1m connection cable

1.1.2 Marking
1.1.2.1 Marker



Item No.: [2009-145](#)
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



Item No.: [248-501](#)
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



Item No.: [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



Item No.: [793-501](#)
WMB marking card; as card; not stretchable; plain; snap-on type; white



Item No.: [2009-115](#)
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.1.2.2 Marking strip



Item No.: 2009-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white



Item No.: 210-831
Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white



Item No.: 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



Item No.: 787-897
Carrier rail adapter made of zinc die-cast; for mounting 787-8xx devices to a DIN 35 rail



Item No.: 787-896
Carrier rail adapter; for mounting 787-8xx devices to a DIN 35 rail

1.1.3.2 Wall-mount adapter



Item No.: 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



Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



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