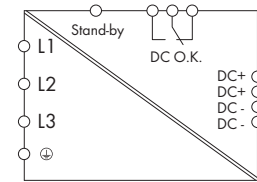


Switched-Mode Power Supply, 3-Phase

EPSITRON® PRO Power



- Primary switch mode power supply unit with PowerBoost and TopBoost
- Stand-by input for switching off the output and minimizing power consumption
- DC OK contact for output monitoring
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Enclosed for use in switchgear cabinets
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950-1

Description	Item No.	Pack. Unit
Switched-mode power supply, 24 V DC / 20 A	787-842	1

Technical Data	
Environmental requirements:	
Ambient operating temperature	-25 °C ... +70 °C
Storage temperature	-25 °C ... +85 °C
Rel. humidity	5 % ... 96 % (no condensation permissible)
Derating	-3 % / K (> 50 °C)
Degree of pollution	2 (acc. to EN 50178)
Climatic category	3K3 (acc. to EN 60721)
Safety and protection:	
Test voltage pri.-sec./ pri.-gr. / sec.-gr.	4.2 kV DC / 2.2 kV DC / 0.7 kV DC
Protection class	I
Degree of protection	IP20 acc. to EN 60529
Overvoltage category	II
Overvoltage protection	Via varistor at primary circuit
Short circuit protection	Yes
No-load proof	Yes
Feedback voltage	Max. 35 VDC
Parallel operation	Yes
Series connection	Yes
MTBF	> 500000 h (acc. to IEC 61709)
Connection and type of mounting:	
Wire connection	Input: WAGO 231 Series Output: WAGO 831 Series
Cross sections	Input: 0.08 mm ² ... 2.5 mm ² / 28 ... 12 AWG Output: 0.5 mm ² ... 10 mm ² / 20 ... 8 AWG
Strip lengths	Input: 8 ... 9 mm / 0.31 ... 0.35 in. Output: 13 ... 15 mm / 0.51 ... 0.59 in.
Type of mounting	DIN-rail mounting (EN 60715) in 2 positions
Dimensions and weight:	
Dimensions (mm) W x H x L	77 x 171 x 179 Length from upper-edge of DIN 35 rail
Weight	1300 g
Standards and approvals:	
Standards/specifications	EN 60950, EN 61204-3, EN 61558-2-16, UL 60950, UL 508

Technical Data	
Input:	
Nominal input voltage $V_{i\text{nom}}$	3x (2x) 400 ... 500 VAC
Input voltage range	340 ... 550 VAC; 480 ... 780 VDC
Frequency	50 Hz ... 60 Hz
Input current I_i	3 x 1.0 A at 340 VAC and 20 ADC
Discharge current	1 mA typ.
Inrush current	< 30 A
Mains failure hold-up time	13 ms typ. at 3 x 400 VAC
Output:	
Nominal output voltage $V_{o\text{nom}}$	24 VDC (SELV)
Output voltage range	22.8 ... 28.8 VDC adjustable
Output current I_o	20 A at 24 VDC
PowerBoost	40 ADC (for 4 s); 30 ADC (for 16 s)
TopBoost	80 ADC (for 50 ms)
Factory preset	24 VDC
Adjustment accuracy	1%
Residual ripple	< 70 mV (peak-to-peak)
Current limitation	1.1 x I_o typ.
Overload behavior	Constant current
Operational indication	LED green (DC OK), LED red (error)
Efficiency / power losses:	
Efficiency	92.9 % typ.
Power loss P_V	8.3 W (stand-by) / 34.1 W (rated load)
Fuse protection:	
Internal fuse	3 x T 2.5 A / 250 V
External fuse	3 x circuit breakers 6 A, 10 A, 16 A, B or C characteristic; or motor circuit breakers, setpoint: 2.5 A, setting range: 2.5 ... 4.0 A; an external DC fuse is required for the DC input voltage