

## Switched-Mode Power Supply, 1-Phase

EPSITRON® CLASSIC Power



Similar to picture



- Primary switch mode power supply unit
- Suitable for protection class I equipment
- Natural convection cooling when horizontally mounted
- Enclosed for use in switchgear cabinets
- Integrated TopBoost, enabling secondary-side protection via wire breakers
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950-1

Description	Item No.	Pack. Unit
Switched-mode power supply, 24 VDC / 20 A	787-1634	1

Technical Data	
<b>Input:</b>	
Nominal input voltage $V_{i, \text{nom}}$	100 ... 240 VAC
Input voltage range	85 ... 264 VAC; 120 V ... 372 VDC
Input voltage derating	-1.8 % (< 105 VAC)
Frequency	47 Hz ... 63 Hz; 0 Hz
Input current $I_i$	2.23 A (240 VAC); 5.56 A (100 VAC)
Discharge current	< 1 mA
Inrush current	< 30 A
Mains failure hold-up time	20 ms (230 VAC); 20 ms (100 VAC)
<b>Output:</b>	
Nominal output voltage $V_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	23 ... 28.5 VDC adjustable
Output current $I_o$	20 A at 24 VDC
Factory preset	24 VDC
Adjustment accuracy	< 1 %
Residual ripple	70 mV (peak-to-peak) typ.
Current limitation	$1.1 \times I_o$ typ.
Overload behavior	Constant current
Operational indication	Green LED ( $V_o$ )
Signaling	DC O.K. contact; (Make contact, max. 30 V AC/DC, 1 A)
<b>Efficiency/Power losses:</b>	
Efficiency	92 % typ.
Power loss $P_V$	7.0 W (230 VAC, no load); 40.8 W (230 VAC, nominal load)
Max. power loss $P_V$	68.3 W typ. (100 VAC / 24 VDC, 20 A)
<b>Fuse protection:</b>	
Internal fuse	T 10 A / 250 V
External fuse	Circuit breakers 10 A, 16 A, B or C characteristic; An external DC fuse is required for the DC input voltage

Technical Data	
<b>Environmental Requirements:</b>	
Ambient operating temperature	-25 °C ... +70 °C; Device start at -40 °C (type-tested)
Storage temperature	-25 °C ... +85 °C
Relative humidity	30 % ... 85 % (no condensation permissible)
Derating	-5 %/K (>60 °C, 196 ... 264 VAC); -2.5 %/K (>50 °C, 85 ... 195 VAC)
Degree of pollution	2 (acc. to EN 50178)
Climatic category	3K3 (acc. to EN 60721)
<b>Safety and protection:</b>	
Test voltage PRI-SEC/PRI-GND/SEC-GND	4.2 kV DC kV / 2.2 kV DC kV / 0.7 kV DC
Protection class	Prepared for class I equipment
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage protection	Varistor (input side); internal protective circuit, < 40 VDC (output side in case of an error)
Short circuit protection	yes
No-load proof	yes
Feedback voltage	max. 35 VDC
Parallel operation	yes
Series connection	yes
MTBF	> 500,000 h (acc. to IEC 61709)
<b>Connection and type of mounting:</b>	
Wire connection	Input/Signaling: WAGO 721 Series Output: WAGO 831 Series
Cross sections	Input/Signaling: 0.08 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> / AWG 28 ... 12 Output: 0.5 mm <sup>2</sup> ... 10 mm <sup>2</sup> / AWG 20 ... 8
Strip lengths	Input/Signaling: 8 ... 9 mm / 0.31 ... 0.35 in Output: 13 ... 15 mm / 0.51 ... 0.59 in
Type of mounting	DIN-rail mount (EN 60715)
<b>Dimensions and weight:</b>	
Dimensions (mm) W x H x L	95 x 127 x 170 Length from upper-edge of DIN 35 rail
Weight	1600 g
<b>Standards and approvals:</b>	
Standards/Specifications	EN 60950-1, EN 61204-3, UL 60950-1, UL 508, DNVGL