

# Power supply · regulated, 480 W

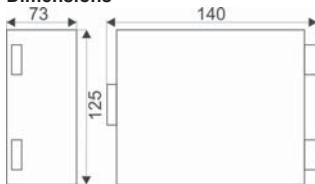
## Switchmode power supplies, PFC, 1/2/3-phase

**Input:** wide-range input AC 187–550 V, DC 250–725 V (UL: DC 300–500 V)

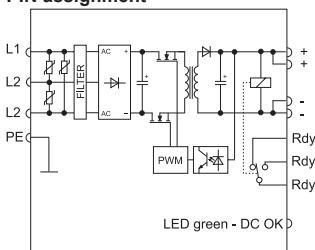
**Output:** 24 V, adjustable



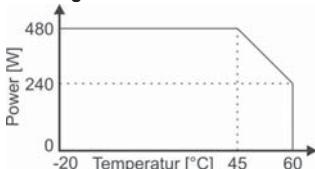
### Dimensions



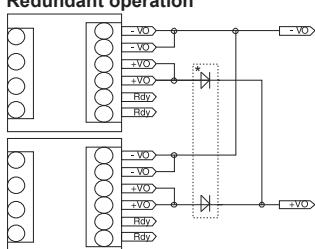
### PIN assignment



### Derating



### Redundant operation



\* Redundant Module 722987

Description	Part-No.	Type	PU
<b>Screw terminal, pluggable</b>			
Output voltage/current	DC 24 V; 20 A	722801	CPSB-123-480-24
			1
<b>Input</b>		<b>CPSB-123-480-24</b>	
Nominal voltage		One-, two- and three-phase AC 200-500 V	
Operation voltage range		AC 187–550 V / DC 250–725 V (UL: DC 300–500 V)	
Line frequency		47 – 63 Hz	
Rated current		1-2-phase @ AC 200 V: 2,9 A / 1-2-phase @ AC 500 V: 1,3 A 3-phase @ AC 200 V: 1,8 A / 3-phase @ AC 500 V: 0,8 A	
Inrush current		$U_i = \text{AC } 230 \text{ V: } <20 \text{ A} / U_i = \text{AC } 400 \text{ V: } <40 \text{ A}$	
Internal fuse		–	
External fuse		Automatic: C 6 A, oder D 4 A (required)	
Power Factor Correction P.F.C.		$U_i = \text{AC } 230 \text{ V: } <0.95 \text{ A} / U_i = \text{AC } 400 \text{ V: } <0.92 \text{ A}$	
<b>Output</b>			
Rated voltage output		DC 24 V	
Rated current output		20 A	
Max. output current		28 A, 5 s	
Short-circuit current		50 A	
Voltage trim range		23-27,5 V	
Load regulation		<1 %	
Rise time		–	
Temperature coefficient		–	
Ripple & Noise		$\leq 100 \text{ mV pp}$	
Hold up time		>20 ms	
Status indication DC ON LED green		$\geq 21.6 \text{ V}$	
Status indication DC LOW LED red		$I_{out} > 1.1 I_N$	
Parallel/redundant operation		yes/via external decoupling diode	
Efficiency		>92 %	
Low power loss		<21 W	
Over voltage protection		<DC 33 V	
Overtemperature protection		yes	
Short circuit characteristics		Hiccup-mode	
<b>General</b>			
Insulation voltage input/output		DC 4,2 kV	
Insulation voltage input / ground		DC 2.2 kV	
Insulation voltage output / ground		DC 0.75 kV	
Operation temperature range		-20 °C – 60 °C (derating)	
Derating		<45 °C: -16 W/°C	
Storage temperature range		-25 °C – 85 °C	
M.T.B.F.		>500000 h to SN29500 / >150000 h to MIL standard HDBK 217F	
Dimensions (w × h × d) in mm		73.0 × 125.0 × 140.0	
Cooling		Natural air cooling	
Housing material		Aluminum	
Shock resistance		30 g 6 ms, 20 g 11 ms, 3 shocks / direction, 18 shocks in total, IEC60068-2-27:2008	
Vibration resistance		5 – 17.8 Hz: $\pm 1.6 \text{ mm}$ , 17.8 – 500 Hz: 2 g 2 hours / axes X,Y,Z, IEC 60068-2-6:2007	
Field installation		rail TS 35 (EN 50022)	
Installation position		vertical	
Protection class		IP 20 (IEC529, EN60529)	
Overvoltage category		II	
Pollution degree		2	
Weight (kg/piece)		1.000	
Termination		Screw terminal: 0.2–2.5 mm <sup>2</sup> (AWG 24–12) - pluggable	
Approvals		UL, cUL: UL 508C, IEC 950, EN 60950 CE: EN 61000-6-2, EN 61000-6-4, EN 55011, EN 6100-4-2 CE: EN 61000-4-3/4//5/6/11	
<b>Monitoring</b>			
DC ON Control (Rdy)		Normally open	
Switching voltage		AC/DC 30 V	
Switching current		AC/DC 1 A	
Switching capacity		30 VA / 30 W	
Insulation voltage		AC 500 V	