

# Power supply · regulated, 240 W

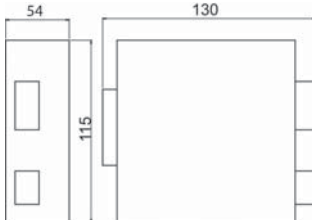
## Switchmode power supplies, PFC, 1/2/3-phase

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

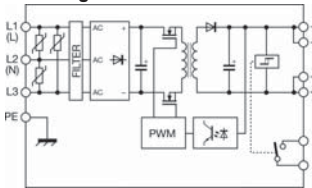
Output: 24 V, adjustable



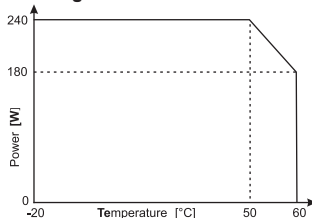
### Dimensions



### PIN assignment

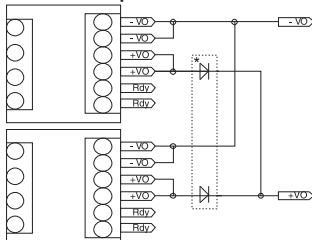


### Derating



### Output characteristics

#### Redundant operation



\* Redundant Module 722987

Description	Part-No.	Type	PU
<b>Screw terminal, pluggable</b>			
Output voltage/current	DC 24 V/ 10 A	722996	CPSB-123-240-24
<b>Input</b>			
<b>CPSB-123-240-24</b>			
Nominal voltage	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	1-1/2-phase @ AC 220 V: 2.2 A, 1-1/2-phase @ AC 500 V: 1.1 A 3-phase @ AC 220 V: 1.5 A, 3-phase @ AC 500 V: 0.8 A		
Inrush current	<20 A (AC 230 V), <40 A (AC 500 V)		
Internal fuse	–		
External fuse	Automatic: D 4 A, C 6 A / safety fuse: T 6.3 A (required)		
Power Factor Correction P.F.C.	>0.60 @ AC 230 V, >0.5 @ AC 400 V		
<b>Output</b>			
Rated voltage output	DC 24 V		
Rated current output	10 A		
Max. output current	>15 A, 5 s		
Short-circuit current	38 A, 5 s		
Voltage trim range	23-27,5 V		
Accuracy	–		
Line regulation	–		
Load regulation	<1 %		
Rise time	14 ms (5–95 %) @ 400 V		
Temperature coefficient	–		
Ripple & Noise	<100 mV pp		
Hold up time	>15 ms (AC 230 V), >100 ms (AC 500 V)		
Status indication DC ON LED green	≥21.6 V		
Status indication DC LOW LED red	≤21.6 V		
Parallel/redundant operation	yes/with external decoupling diode		
Efficiency	>91 % @ AC 230 V, >92% @ AC 400 V		
Low power loss	<24 W @ AC 230 V, <21 W @ AC 400 V		
Rated over load protection	yes		
Over voltage protection	> DC 33 V		
Short circuit characteristics	Hiccup-mode		
<b>General</b>			
Switching frequency	–		
Insulation voltage input/output	AC 3.0 kV <sub>eff</sub>		
Insulation voltage input / ground	AC 2.0 kV <sub>eff</sub>		
Insulation voltage output / ground	AC 0.5 kV <sub>eff</sub>		
Insulation resistance at DC 500 V	– MΩ		
Operation temperature range	-20 °C – 60 °C (overtemperature protection)		
Derating	-6 W/°C from +50 °C		
Storage temperature range	-25 °C – 85 °C		
M.T.B.F.	>500000 h to SN29500 / >150000 h to MIL standard HDBK 217F		
Relative humidity	20–90% RH, non-condensing		
Dimensions (w × h × d) in mm	54.0 × 130.0 × 115.0		
Cooling	Air convection 20 mm clearance right/left, 50 mm clearance up/down		
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: ±1.6 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)		
Application height	2000 m		
Installation position	vertical		
Protection class	IP 20 (IEC529, EN60529)		
IP rating	I (SELV, PELV)		
Overtoltage category	II (IEC 664-1)		
Pollution degree	2		
Weight (kg/piece)	0.650		
Termination	Screw terminal: 0.2–2.5 mm <sup>2</sup> (AWG 30–12) - pluggable		
Approvals	UL, cUL: UL 508, IEC 60950 CE: EN 60950, EN 61000-6-2 (2005), EN 60100-6-4 (2007), EN 61000-4-2/3/4/5/6/11, EN 61000-5-5 EN 55011 (conducted emission class B, radiated emission class A)		
<b>Monitoring</b>			
DC ON Control (Rdy)	Change over contact		
Switching voltage	DC 30 V		
Switching current	DC 1 A		
Switching capacity	30 W		
Insulation voltage	AC 500 V		