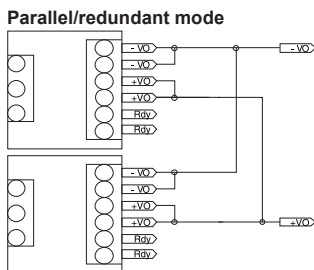
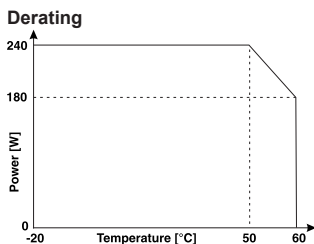
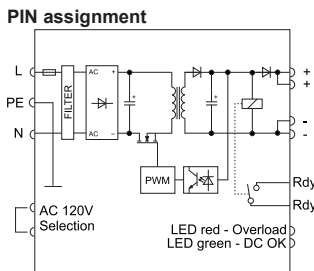
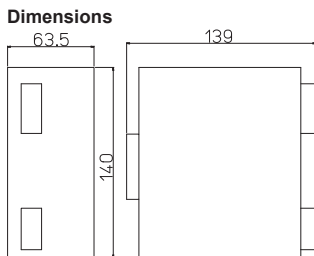


# Power supply · regulated, 240 W

**Primary switchmode power supply, PFC, Single-phase**  
**Input: AC 90–132 V, AC 185–264 V, DC 300–350 V**  
**Output: 24 V, adjustable**



Description	Part-No.	Type	PU	
<b>Screw terminal, pluggable</b>				
Output voltage/current	DC 24 V; 10 A	722785	CPSB1-240-24R	1
	DC 48 V; 5 A	722786	CPSB1-240-48R	1

Input	CPSB1-240-24R	CPSB1-240-48R
Nominal voltage	AC 120 / 230 V (manual)	
Operation voltage range	AC 90–132 V, AC 185–264 V, DC 300–370 V	
Line frequency	47 – 63 Hz	
Rated current	U <sub>I</sub> = AC 115 V: 3.5 A / U <sub>I</sub> = AC 230 V: 1.8 A	
Inrush current	U <sub>I</sub> = AC 115 V: 30 A / U <sub>I</sub> = AC 230 V: 35 A	
Internal fuse	T6, 3 A / AC 250 V	
External fuse	Mini-circuit breaker: C 10 A	
Power Factor Correction P.F.C.	>0.6	

Output	CPSB1-240-24R	CPSB1-240-48R
Rated voltage output	DC 24 V	DC 48 V
Rated current output	10 A	5 A
Max. output current	15 A, 30 s, @ 24 V	7.5 A, 30 s, @ 24 V
Short-circuit current	25 A, 400 ms	
Voltage trim range	23/27.5 V	45/55 V
Accuracy	–	
Line regulation	–	
Load regulation	1 %	
Rise time	–	
Temperature coefficient	–	
Ripple & Noise	50 mV	
Hold up time	>30 ms (120 V); >60 ms (230 V)	
Status indication DC ON LED green	≥21.6 V	≥43.2 V
Status indication DC LOW LED red	≤21.6 V	≤43.2 V
Parallel/redundant operation	max. 2 devices / via internal diodes	
Efficiency	89 %	90 %
Low power loss	26 A (AC 230 V)	
Rated over load protection	yes	
Over voltage protection	yes	
Short circuit characteristics	Hiccup-mode	

<b>General</b>		
Switching frequency	approx. 110 kHz	
Insulation voltage input/output	AC 3.0 kV <sub>eff</sub>	
Insulation voltage input / ground	AC 1.5 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 (derating)	
Derating	>50°C: –6 W / °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	63.5 × 140.0 × 139.0	
Cooling	Natural air cooling, 20 mm distance right/left, 100 mm distance above/below	
Housing material	Aluminium	
Field installation	rail TS 35 (EN 50022)	
Application height	– m	
Installation position	vertical	
Protection class	IP 20 (IEC529, EN60529)	
IP rating	I (SELV, PELV)	
Overvoltage category	III	
Pollution degree	2	
Weight (kg/piece)	0.720	
Termination	Screw terminal: 0.2–2.5 mm <sup>2</sup> - pluggable,max. 0.56 Nm	
Approvals	UL, cUL: UL 508, IEC 950, EN 60950, UL 60950 CE: EN 61000-4-2/3/4/5/6/11, EN 61000-6-2, EN 601000-6-4, EN 50178, EN 61558, EN 50081-1, EN 50082-2, EN 55022 Class B	

<b>Monitoring</b>		
DC ON Control (Rdy)	Normally open	
Switching voltage	AC 300 V / DC 150 V	
Switching current	AC/DC 1 A	
Switching capacity	300 VA / 30 W	
Insulation voltage	AC 500 V	

# Power supply - regulated, 240 W

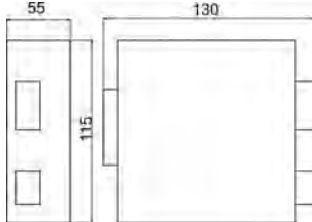
## Primary switched power supplies, PFC, 1/2/3-phase

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

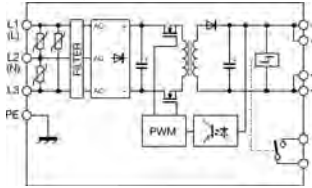
Output: 24 V, adjustable



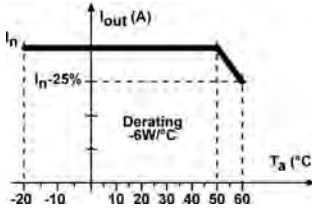
### Dimensions



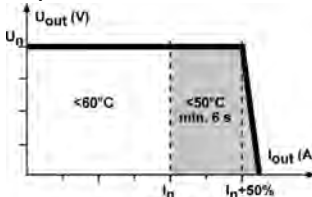
### PIN assignment



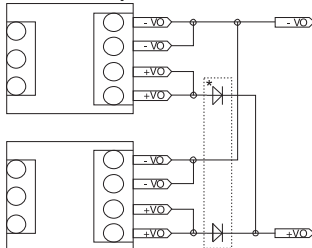
### Derating



### 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	CPSB2-123-240-24	1
<b>Input</b>				
<b>CPSB2-123-240-24</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-/2-phase @ AC 220 V: 2.2 A, 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 x h x d) in mm	55.0 x 130.0 x 115.0			
Cooling	Air convection 20 mm clearance right/left, 50 mm clearance up/down			
Housing material	Aluminium			
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)			
Overvoltage 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			