

One-phase switching power supply
regulated, 120 W



Identification	Type	CPSB1-120-24R
	Part-No.	722783
Input		
Nominal voltage	AC 120 V / 230 V	
Operation voltage range	AC 90–264 V / DC 110–345 V	
Line frequency	47 Hz – 63 Hz	
Rated current	$U_i = AC 115 V: 1.9 A / U_i = AC 230 V: 1.1 A$	
Inrush current	<20 A	
Internal fuse	T3, 15 A / AC 250 V	
External fuse	Mini-circuit breaker: B 6 A, C 4 A	
Power Factor Correction P.F.C.	>0.65	
Load Side		
Rated voltage output	DC 24 V	
Rated current output	5 A	
Max. output current	9 A, 30 s, @ 24 V	
Short-circuit current	15 A, 50 ms	
Low power loss	<20 W	
Voltage trim range	DC 23–27.5 V	
Load regulation	<1 %	
Ripple & Noise	<30 mV	
Hold up time	>16 ms (AC 120 V), >81 ms (AC 230 V)	

02.04.2016 – Subject to technical modification

Part-No. 722783

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Technical data sheet - Power supply

Status indication DC ON LED green	≥21.6 V
Status indication DC LOW LED red	≤21.6 V
Parallel/redundant operation	max. 2 devices / via internal diodes
Efficiency	>86 %
Rated over load protection	yes
Over voltage protection	yes
Short circuit characteristics	Hiccup-mode

General

Switching frequency	approx. 110 kHz
Insulation voltage input/output	AC 3.0 kV _{eff}
Insulation voltage input / ground	AC 1.5 kV _{eff}
Insulation voltage output / ground	AC 0.5 kV _{eff}
Operation temperature range	-20 °C – 60 °C (derating)
Derating	>45 °C: -4 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)	40.0 × 115.0 × 128.0 mm
Cooling	Natural air cooling, 10 mm distance right/left, 50 mm distance above/below
Installation position	vertical
Housing material	Aluminum
Protection class	IP 20 (IEC529, EN60529)
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)
IP rating	I (SELV, PELV)
Overvoltage category	II
Pollution degree	2
Weight (kg/piece)	0.400
Termination	Screw terminal: 0.2–2.5 mm ² - 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

Monitoring

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

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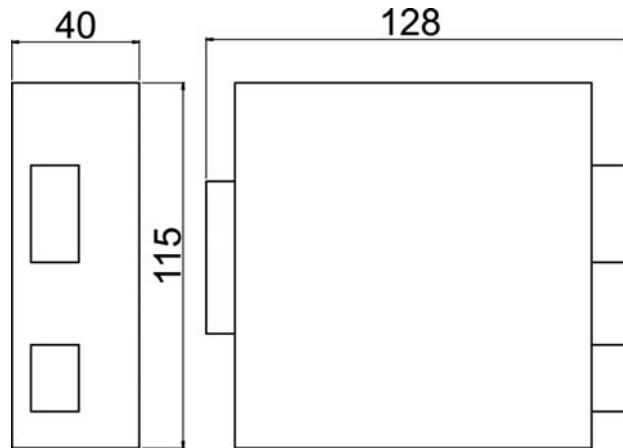
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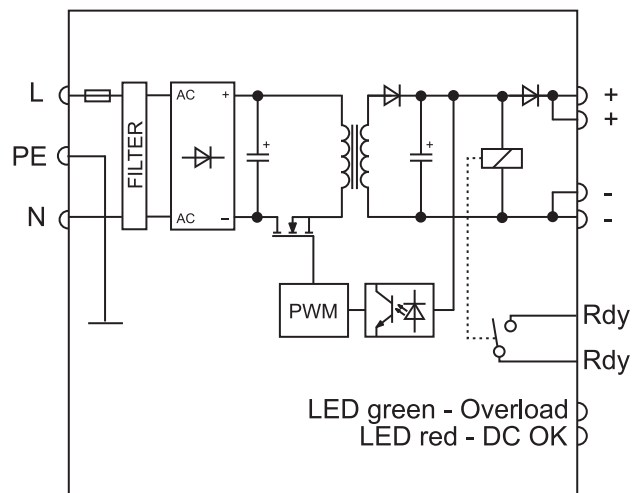
SYSTEMATIC TECHNOLOGY

Technical data sheet · Power supply

Dimensions



PIN assignment



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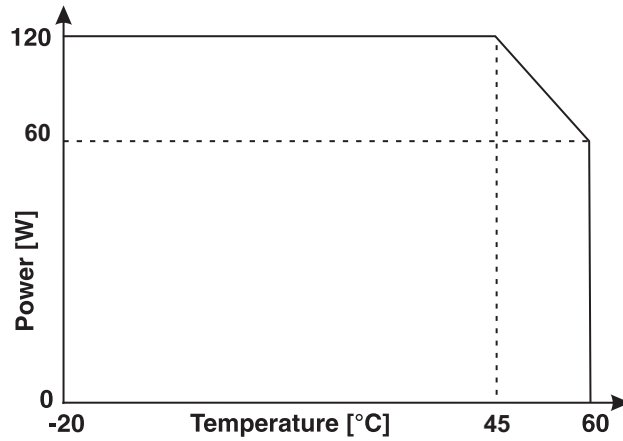
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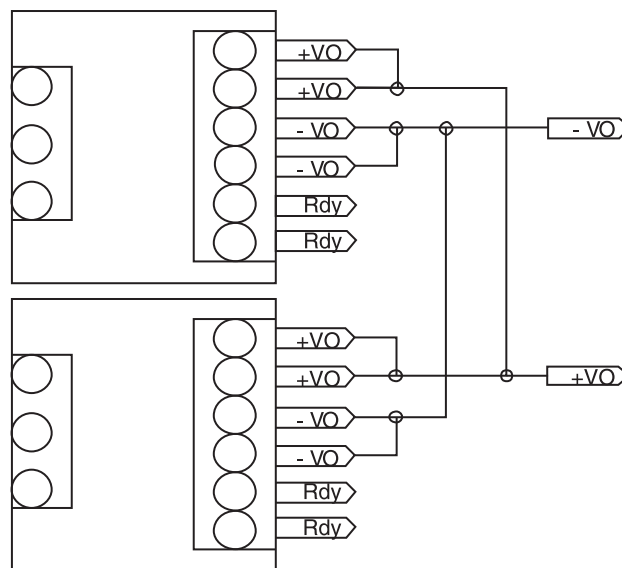
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Derating



Parallel mode



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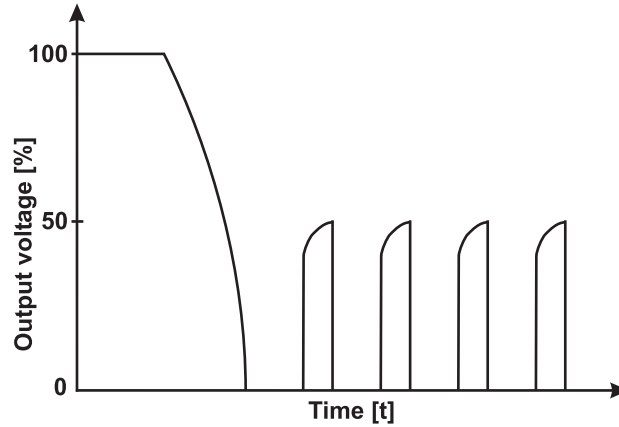
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Short circuit characteristics



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