

3-phase switching power supply
regulated, 960 W, 3-phase



Identification	Type	CPSB3-960-24
	Part-No.	722811

Input

Nominal voltage	3× AC 400–500 V
Operation voltage range	3× AC 340–550 V
Line frequency	47 Hz – 63 Hz
Rated current	$U_i = AC 400 V: 2.8 A / U_i = AC 500 V: 2.2 A$
Inrush current	<50 A
External fuse	Automatic: 3 × B 16 A, C 10 A (required)
Power Factor Correction P.F.C.	>0.7

Load Side

Rated voltage output	DC 24 V
Rated current output	40 A
Max. output current	44 A
Short-circuit current	60 A (>90 A Hiccup)
Low power loss	<95 W
Voltage trim range	24/28 V
Load regulation	<1 %
Ripple & Noise	<100 mV
Hold up time	>10 ms (AC 400 V); >15 ms (AC 500 V)
Status indication DC ON LED green	≥21.6 V

02.04.2016 – Subject to technical modification

Part-No. 722811

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Status indication DC LOW LED red	≤21.6 V
Parallel/redundant operation	max. 2 devices / via external diodes
Efficiency	>91 %
Rated over load protection	> 90°C, auto-reset
Over voltage protection	<33 V
Short circuit characteristics	Hiccup-mode / Constant current

General

Switching frequency	approx. 70 – 110 kHz
Insulation voltage input/output	AC 3.0 kV _{eff}
Insulation voltage input / ground	AC 2.0 kV _{eff}
Insulation voltage output / ground	AC 1.0 kV _{eff}
Operation temperature range	-20 °C – 60 °C (derating)
Derating	>50 °C: -15 W / °C, UL 508: >45 °C: -15 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)	81.0 × 127.0 × 146.0 mm
Cooling	Natural air cooling, forced cooling >50°C, 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)	1.200
Termination	Screw terminal: 0.2–10.0 mm ² , max. 0.62 Nm
Approvals	UL, cUL: UL 508, IEC 950, EN 60950 CE: EN 61000-4-2/3/4/5/6/11, EN 61000-6-2, EN 61000-6-4, 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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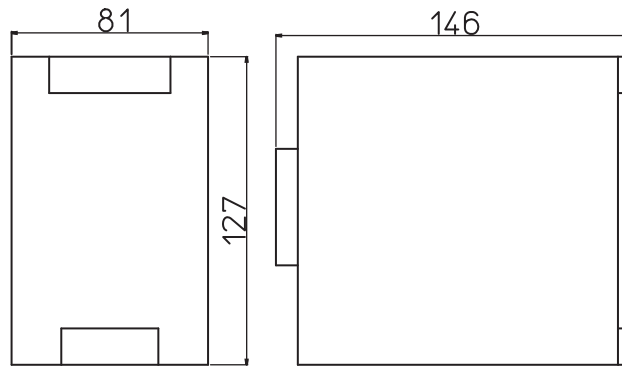
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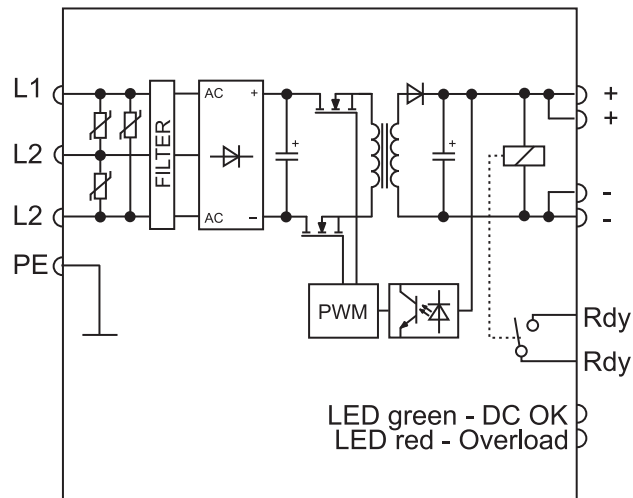
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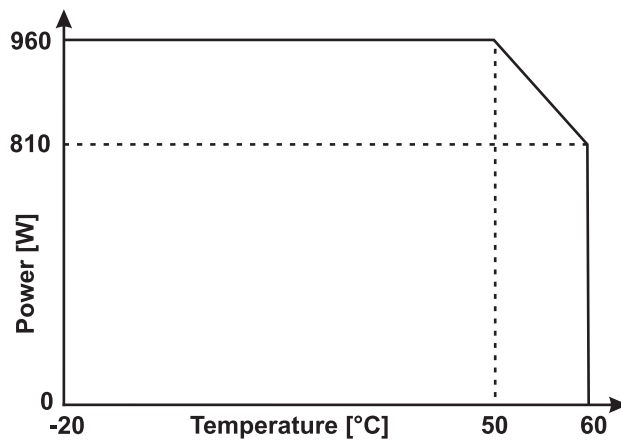
Dimensions



PIN assignment



Derating



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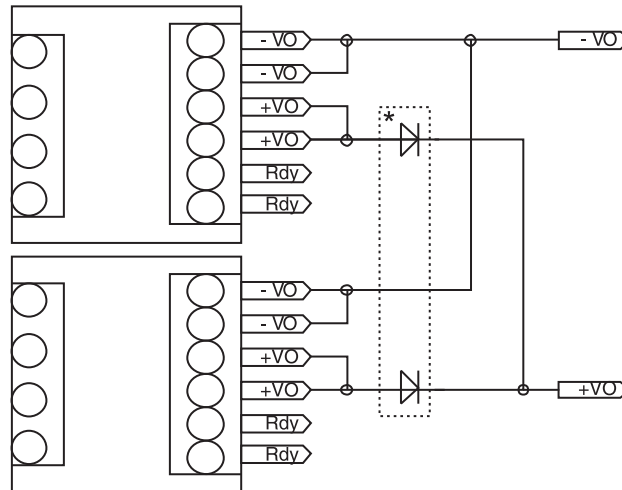
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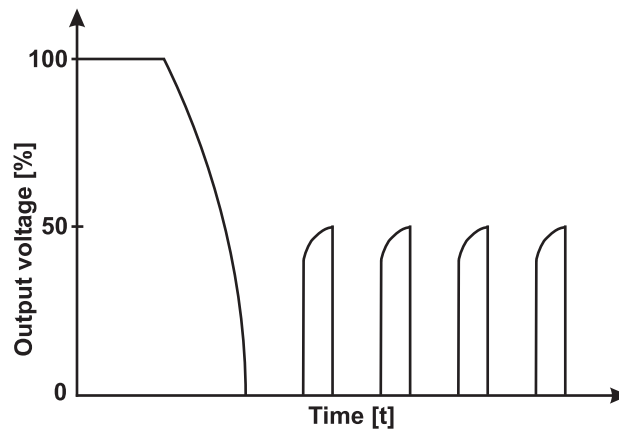
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Redundant operation



* Redundant Module 722999

Short circuit characteristics



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