

One-phase switching power supply
regulated, 30 W



Identification	Type	CPSFB1-30-24
	Part-No.	722790

Input

Nominal voltage	AC 120 V / 230 V
Operation voltage range	AC 90–264 V / DC 100–320 V
Line frequency	47 Hz – 63 Hz
Rated current	$U_i = AC 120 V: 0.55 A / U_i = AC 240 V: 0.30 A$
Inrush current	<25 A
Internal fuse	T 1.25 A / AC 250 V
External fuse	Mini-circuit breaker: C 2 A
Power Factor Correction P.F.C.	>0.6

Load Side

Rated voltage output	DC 24 V
Rated current output	1.2 A
Max. output current	1.4 A @ 24 V
Short-circuit current	10 A, 50 ms
Low power loss	<4.7 W (AC 120 V); <4.3 W (AC 240 V)
Accuracy	±1%
Load regulation	<1 %
Ripple & Noise	<80 mV pp
Hold up time	>10 ms (AC 120 V); >30 ms (AC 240 V)

14.08.2014 – Subject to technical modification

Part-No. 722790

USA: LUTZE INC.

13330 South Ridge Drive • Charlotte, NC 28273, USA
Tel. +1 (704) 504-0222 • Fax +1 (704) 504-0223
www.lutze.com • info@lutze.com

United Kingdom: LÜTZE Ltd.

Unit 3, Sandy Hill Park
Sandy Way, Amington • GB-Tamworth, Staffs B77 4DU
Tel. +44 (0)1827 31333-0 • Fax +44 (0)1827 31333-2
www.lutze.com • sales.gb@lutze.co.uk



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Technical data sheet - Power supply

Status indication DC ON LED green	yes
Status indication DC LOW LED red	No
Parallel/redundant operation	max. 2 devices / via external diodes
Efficiency	>86 % (AC 120 V); > 87 % (AC 240 V)
Rated over load protection	yes
Over voltage protection	yes
Short circuit characteristics	Hiccup-mode

General

Switching frequency	approx. 70 – 110 kHz
Insulation voltage input/output	3.0 kV _{eff}
Insulation voltage input / ground	class 2, without PE
Insulation voltage output / ground	class 2, without PE
Operation temperature range	-20 °C – 60 °C (derating) (50°C UL508)
Derating	>55°C: -0.8 W / °C
Storage temperature range	-25 °C – 85 °C
M.T.B.F.	750000 h to SN29500 / 250000 h to MIL Standard HDBK 217F
Relative humidity	20–90% RH, non-condensing
Dimensions (w × h × d)	22.5 × 82.0 × 99.0 mm
Cooling	Natural air cooling, 10 mm distance right/left, 20 mm distance above/below
Installation position	vertical
Housing material	Noryl UL 94-0
Protection class	IP 20 (IEC529, EN60529)
Field installation	rail TS 35 (EN 50022)
IP rating	II (SELV, PELV)
Overvoltage category	II
Pollution degree	2
Weight (kg/piece)	0.140
Termination	Screw terminal: 0.2–2.5 mm ² , 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 61000-3-2, EN 50081-1, EN 50082-2, EN 55022 Class B, EN 55011B

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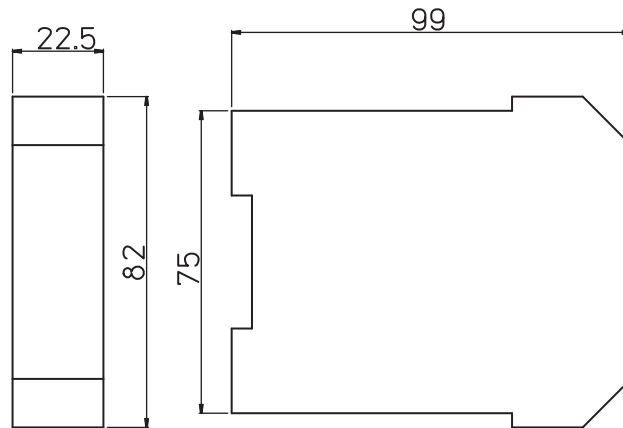
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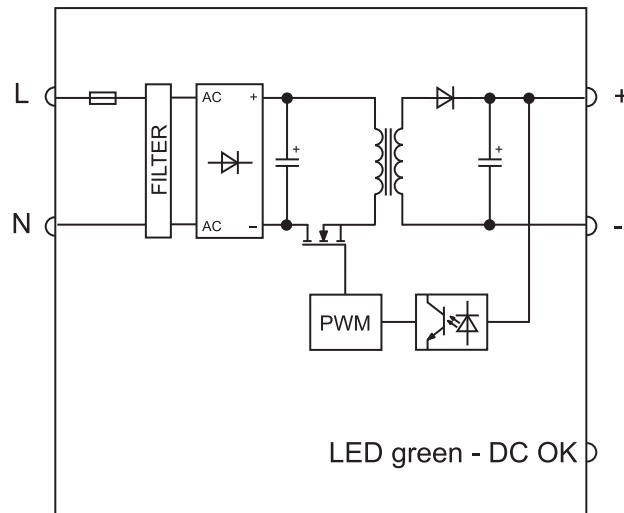
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Dimensions



PIN assignment



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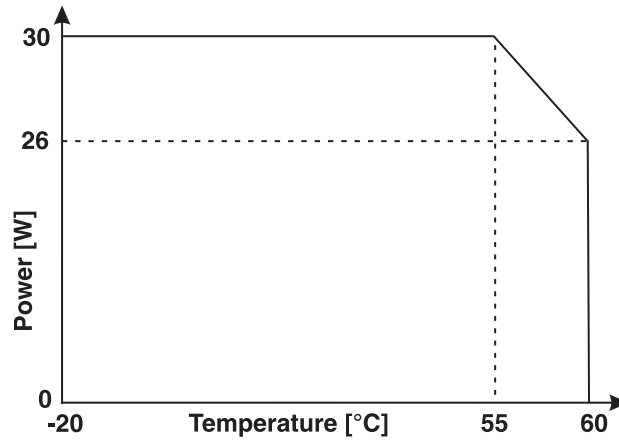
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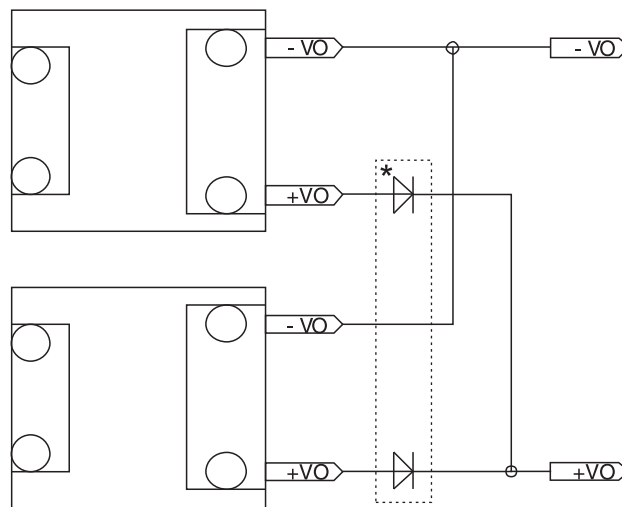


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Derating



Redundant operation



* Redundant Module 722987

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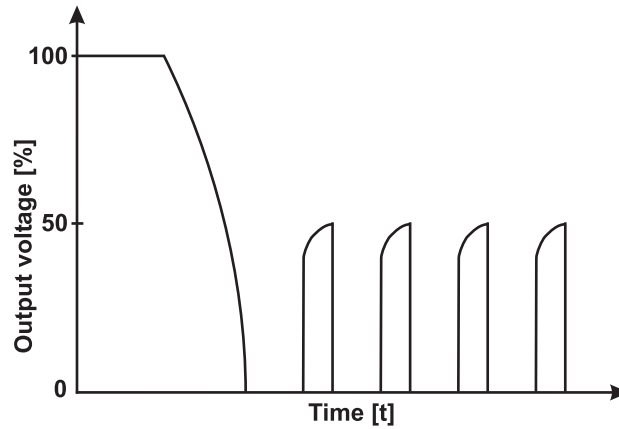
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Short circuit characteristics



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