

## Technical data sheet

Power supply · Compact Universal, 120 W

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**Primary switched power supplies, PFC, 1/2-phase**  
**Input: wide-range input AC 187–550 V, DC 270–725 V**  
**Output: DC 24 V, 5 A**



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### Identification

Type CPSB2-120-24  
Part No. [722995](#)

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### Product version

Datasheet version 01

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### Input

Number of phases 2  
Rated voltage  $U_N$  AC 200–500 V  
Operation voltage range AC 187–550 V / DC 270–725 V  
Frequency range 47 Hz – 63 Hz  
Rated current  $I_N$  1.4 A @ AC 200 V / 0.7 A @ AC 500 V  
Inrush current <21 A  
External protection Mini-circuit breaker: D 6 A, C 6 A / safety fuse: T 4 A (required)  
Power factor correction P.F.C. >0.55

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### Output

Output voltage/current DC 24 V/5 A  
Rated voltage  $U_N$  DC 24 V  
Rated current  $I_N$  5 A  
Max. output current 7.5 A, 30 s  
Short-circuit current 14 A  
Power Dissipation <17 W  
Setting range  $U_{out\ min.}/U_{out\ max.}$  23-28 V  
Load regulation <1 %

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Part No. [722995](#) • Datasheet version: 01

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Ripple and noise	<110 mV pp
Hold up time	>17 ms @ AC 120 V / >60 ms @ AC 230 V
Parallel / redundant mode	Yes/via external decoupling diode e.g. 722999
Efficiency	88 %
Over voltage protection	>DC 33 V
Rated over load protection	Yes
Short circuit	Hiccup Mode

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#### Status indication

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Status indication DC ON LED green	≥21.6 V
Status indication DC LOW LED red	$I_{out} > 110 \% I_N$

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#### Monitoring

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DC ON Control (Rdy)	N/O contact
Switching voltage	AC/DC 300 V / DC 150 V
Switching current	AC/DC 1 A
Switching capacity	300 VA / 30 W
Isolation voltage	AC 500 V

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#### General

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Insulation voltage input / output	DC 4.2 kV
Insulation voltage input / ground	DC 2.2 kV
Insulation voltage output / ground	DC 750 V
Derating	>60 °C: -1.2 W/°C
Cooling	Air convection, 50 mm distance top/bottom, 20 mm side
Housing material	Aluminum
Mounting	DIN rail mountable TS35 (EN 60715)
Installation position	Vertical
MTBF	>500000 h: SN29500 / >500000 h: MIL HDBK 217F
Degree of protection	IP20 (IEC 529 / EN 60529)
Protection class	I
Weight/unit	0.5 kg
Connection type	Screw terminal 0.20 mm <sup>2</sup> – 2.5 mm <sup>2</sup> AWG 24 – AWG 12 plug-in
Dimensions (w × h × d)	40.0 mm × 115.0 mm × 110.0 mm
PU (units)	1

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#### General ambient conditions

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Operation temperature range	-20 °C ... +70 °C (overtemperature protection)
Storage temperature range	-40 °C ... +80 °C
Over voltage category	III
Degree of pollution	2

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## Technical data sheet

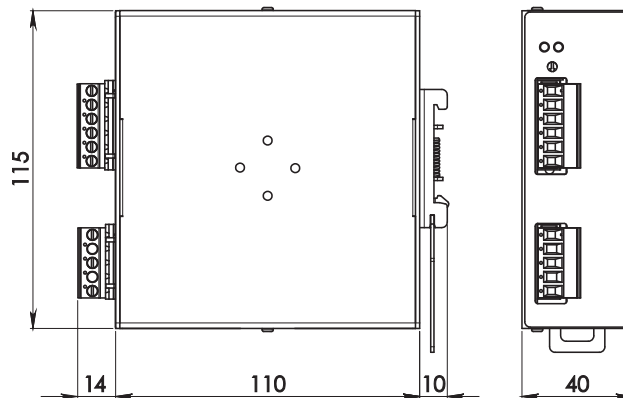
### Power supply · Compact Universal, 120 W

Relative air humidity	5 – 95 % RH, non-condensing
Vibration resistance	5 – 17.8 Hz: $\pm 1.6$ mm, 17.8 – 500 Hz: 2 g 2 hours/axes X,Y,Z, IEC 60068-2-6
Shock resistance	30 g 6 ms, 20 g 11 ms, 3 shocks/direction, 18 shocks in total, IEC60068-2-27

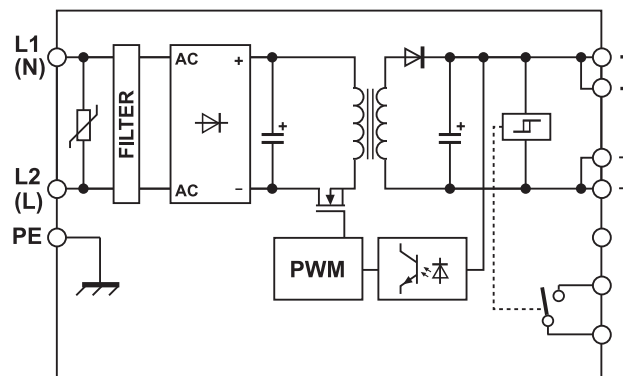
### Certifications/Standards

Certifications	CE UKCA cULus (E249179)
Standards	UL 508 IEC/EN 61010-1 IEC/EN 61010-2-201 IEC/EN 60950 EN 55011 (CISPR11) Class A EN 55022 (CISPR22) Class A EN 61000-4-2 Level 3 EN 61000-4-3 Level 3 EN 61000-4-4 Level 3 EN 61000-4-5 Level 4 EN 61000-4-11 Level 2 IEC 60068-2-6 (Vibration sinusoidal), 5-17.8 Hz: $\pm 1.6$ mm, 17.8-500 Hz: 2 g 2 hours / axis (X,Y,Z) IEC 60068-2-27 (Shock), 30 g 6 ms, 20 g 11 ms, 3 bumps / direction, 18 bumps total

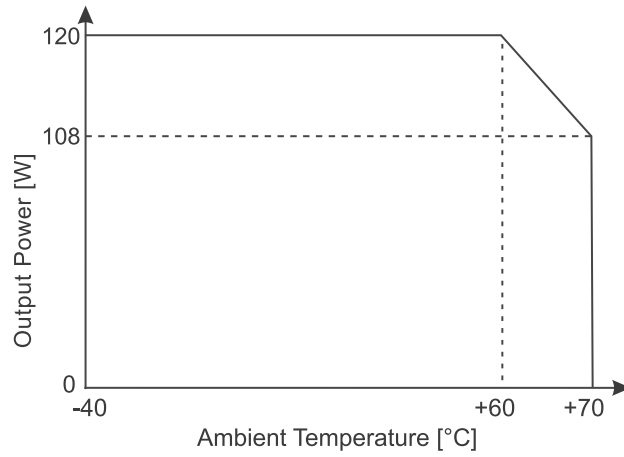
### Dimensions



### PIN assignment

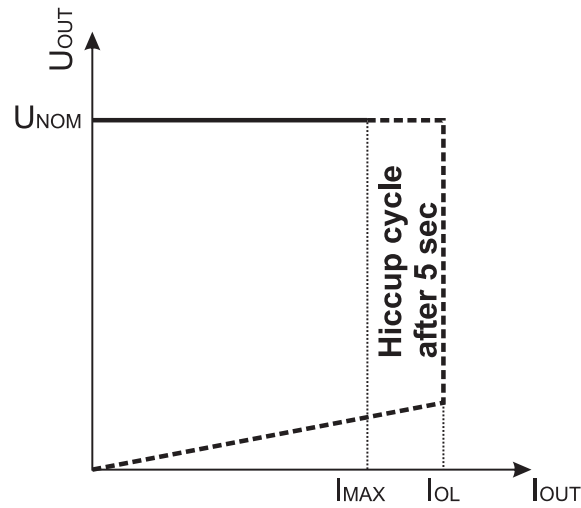


Derating



Short circuit characteristics

Hiccup limitation output characteristic



Short circuit conditions

