

Technical data sheet

Power supply · Compact Ultra, 480 W

Primary switchmode power supply, PFC

Input: AC 90–264 V, DC 110–345 V

Output: DC 48 V, 10 A



Identification

Type	CPS2B1-480-48
Part No.	723721

Product version

Datasheet version	04
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Use/Application/Properties

Properties	• High efficiency and extremely compact dimensions • Only 56 mm wide aluminium housing • Active PFC (Power factor correction) • Overload 150 % • Constant current or hiccup mode, user definable • Wide output voltage range • Easy to connect in parallel to increase performance • Up to 60 °C operating temperature without derating
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Input

Number of phases	1
Rated voltage U_N	AC 120/240 V (UL certified)
Operation voltage range	AC 90 - 264 V / DC 110 - 345 V (UL not evaluated)
Frequency range	47 Hz – 63 Hz
Rated current I_N	4.8 A @ AC 120 V / 2.4 A @ AC 240 V
Inrush peak current	≤23 A / 0.56 A ² s
Internal fuse	8 AT (non-replaceable)
External protection	Mini-circuit breaker: C 10 A / Safety fuse: T 10 A
Power factor correction P.F.C.	>0,90, enabled

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Output

Output voltage/current	DC 48 V/10 A
Rated voltage U_N	DC 48 V
Rated current I_N	10 A
Overload limit in constant current mode	12 A
Max. output current	17 A, 5 s @ Hiccup Mode
Power Dissipation	<31 W
Setting range $U_{out\ min.}/U_{out\ max.}$	DC 45–55 V
Load regulation	<0.5 %
Ripple and noise	<200 mV pp
Hold up time	>25 ms @ AC 240 V
Parallel / redundant mode	Yes/via external decoupling diode e.g. Part-No. 722999 NOTE: For parallel operation, set the jumper to current limit (C.C.).
Efficiency	>94 % @ AC 240 V
Overtemperature protection	Yes
Over voltage protection	≥DC 68 V
Short circuit	Hiccup Mode, Constant current (C.C.)

Status indication

Status indication DC ON LED green	≥43.2 V
Status indication DC LOW LED red	≤43.2 V

Monitoring

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

General

Insulation voltage input / output	DC 4.2 kV, 1 min.
Insulation voltage input / ground	DC 2.2 kV, 1 min.
Insulation voltage output / ground	DC 750 V, 1 min.
Derating	>50 °C: -7.6 W/°C @ AC 120 V >60 °C: -7.2 W/°C @ AC 240 V
Cooling	Air convection, 100 mm distance top/bottom, 20 mm side
Housing material	Aluminum
Mounting	DIN rail mountable TS35 (EN 60715)
Installation position	Vertical
MTBF	MIL-HDBK-217F, >600000 h at 25 °C ambient full load
Degree of protection	IP20 (IEC 529 / EN 60529)
Protection class	I
Weight/unit	1.1 kg

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Connection type	Screw terminal 0,20 mm ² – 2,5 mm ² / AWG 24–14
Strip length	6.0 - 7.5 mm / 0.24 - 0.30 in
Screwdriver	3,0 × 0,5 mm
Tightening torque	0.5 – 0.6 Nm / 4.42 – 5.30 lbf in
Dimensions (w × h × d)	56.0 mm × 140.0 mm × 139.0 mm
PU (units)	1

General ambient conditions

Operation temperature range	-40 °C ... +70 °C UL certified up to +50 °C @ AC 100 V UL certified up to +50 °C @ AC 120 V UL certified up to +60 °C @ AC 240 V UL certified up to 2000 m
Storage temperature range	-40 °C ... +80 °C
Over voltage category	III (EN 50178)
Degree of pollution	2 (IEC 60664-1)
Relative air humidity	5 – 95 %, non-condensing

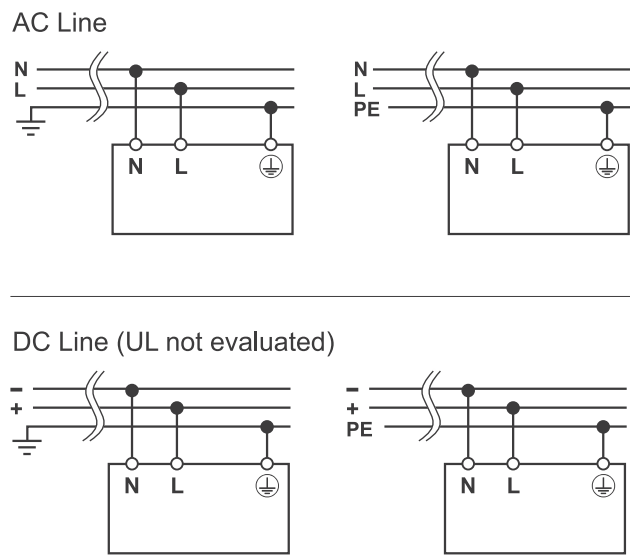
Interface

Life-cycle expectancy	167'953 h (19.1 years) at 25 °C ambient full load
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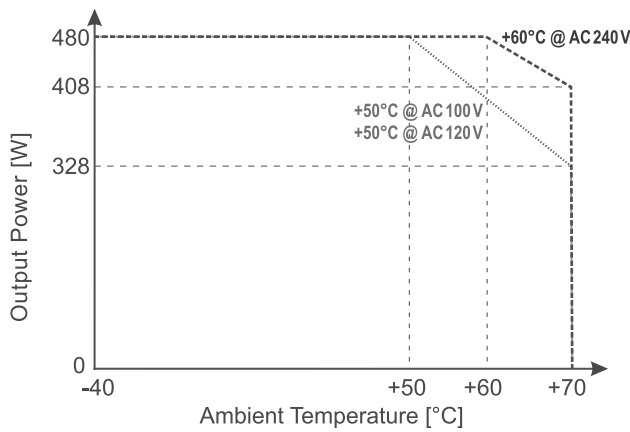
Certifications/Standards

Certifications	CE UKCA cULus (E249179)
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PIN assignment



Derating



Short circuit characteristics

C.C.

