

## POWER SUPPLY 1-PHASE, 24 V DC, DIMENSION C SERIES, GENERATION 2

CP5.241

POWER SUPPLY 24VDC 120W 5A

- Output current 5 A
- Efficiency up to 94.3%
- 20% power reserve
- Only 32mm wide



### PRODUCT DESCRIPTION

The Dimension CP-Series are cost optimized power supplies without compromising quality, reliability and performance. The CP-Series is part of the DIMENSION power supply family.

The CP5.241 power supplies come with three connection terminal options: screw, spring-clamp or push-in terminals, which are optimized for automated wiring. The CP5.241-C1 is equipped with conformal coated pc-boards preferred for the use in harsh environments and the CP5.242 features an enhanced DC input voltage range.

The most outstanding features of these units are the small size, the high efficiency, the electronic inrush current limitation, active PFC and the wide operational temperature range. The devices have a power reserve of 20% included, which may even be used continuously at temperatures up to +45°C. Additionally, they can deliver 3 times the nominal output current for 12ms which helps to trip fuses on faulty output branches.

High immunity to transients and power surges as well as low electromagnetic emission, a DC-OK signal contact for remote monitoring, and a large international approval package for a variety of applications makes this unit suitable for nearly every situation.

- AC 100-240V Wide-range Input
- Widthonly 32mm
- Efficiencyup to 94.3%
- ExcellentPartial Load Efficiency
- 20%Output Power Reserves
- EasyFuse Breaking – 3 times nominal current for 12ms
- SafeHiccupPLUS Overload Mode
- ActivePower Factor Correction (PFC)
- MinimalInrush Current Surge
- Full Power Between -25°C and +60°C
- DC-OKRelay Contact
- 3Year Warranty

### SPECIFICATIONS

Type Power Supply	AC-DC
Input voltage range	Wide-range
Power Consumption At 120 V AC	1,09 A
Input voltage AC	100-240 V

<b>Input voltage ac min</b>	85 V AC
<b>Input voltage dc max</b>	180 V DC
<b>Input voltage DC</b>	110-150 V
<b>Input voltage ac max</b>	264 V AC
<b>Input current at 230 V ac typical</b>	6 A
<b>Number of phases</b>	1
<b>Power Consumption At 230 V AC</b>	0,6 A
<b>Supply Frequency</b>	50-60 ±6 %
<b>Inrush current at 120 V ac typical</b>	5 A
<b>Power Factor at 120 V AC, full load. Typical</b>	0,98
<b>Power Factor at 230 V AC, full load. Typical</b>	0,91
<b>Input voltage dc min</b>	88 V DC
<b>Ripple. max</b>	50 mV pp
<b>Output voltage min</b>	24 V DC
<b>Power Reduction Of 60 To 70 ° C</b>	3 W/°C
<b>Temperature Range Without Derating From</b>	-25 °C
<b>Output voltage</b>	24 V DC
<b>Output voltage max</b>	28 V DC
<b>Effect</b>	120 W
<b>Output Current</b>	5 A
<b>Temperature Range Without Derating To</b>	60 °C
<b>Lifetime at 120 V ac, full load and +40 ° C</b>	143000 h
<b>MTBF (IEC 61709) 230 V AC, Maximum Load, 40 ° C</b>	876000 h
<b>Efficiency At 230 V AC, full load. Typical</b>	94,3 %
<b>Efficiency At 230 V AC. Typical</b>	92 %
<b>Lifetime at 230 V ac, full load and +40 ° C</b>	166000 h
<b>Efficiency At 120 V AC, full load. Typical</b>	93,6 %
<b>Weight</b>	0,44 kg
<b>Depth</b>	102 mm
<b>Width</b>	32 mm
<b>Height</b>	124 mm

Clamp type	Screw
IP Class	IP20
DC relay output	Yes
Hold-up time at 120 V AC, full load. Typical.	35 ms
Series	Dimension C
Hold-up time at 230 V AC, full load. Typical.	35 ms
Approvals	ATEX, CE, cULus, IECEx, IEC 62368-1:2018
Material Protection	Aluminium
Active Transient	Yes
Conformal coated	No



