

POWER SUPPLY 1-PHASE, 24 V DC DIMENSION C SERIES, 20A

CPS20.241-D1

PSU 110-300V dc I/P 24V dc 20A 480W O/P

- Output current 20 A
- Up to 94% efficiency
- 65 mm wide
- 20% power reserve
- Hiccup Plus



PRODUCT DESCRIPTION

Puls Dimension C-series stands for cost optimization without compromising quality, reliability or performance. CPS20.241 high efficiency over a wide load range, which results in reduced power consumption and longer life regardless of load current. An average efficiency is 93.3% with a peak of 94%. In addition, power losses very low at idle, only 2.6 W at 230 Vac. Power boost of 20% enables higher current extraction without voltage drops. This is especially useful during start-ups and to bridge the current peaks in the application. The power reserve can be used continuously up to +45°C and short periods from +45 to +60°C.

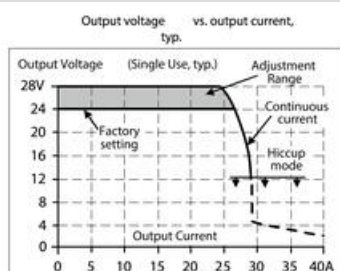
Short-circuit currents. CPS20 can leave short-circuit currents which is 4 times the nominal current for 15 ms, which helps secondary fuses and achieve selectivity.

Hiccup Plus.

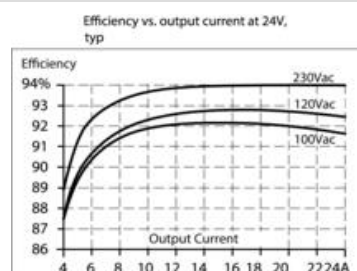
With new pulse short circuit protection you get optimum protection. The unit leaves a very high short circuit that solves fuses and provides sufficient starting current for example DC motors. If the output voltage drops below 13 V dc will be 2x the rated current is left for 2 seconds, then close the unit by the end to make a new restart attempts after about 18 seconds. This feature ensures a high short-circuit / overload current while avoiding a constant high current that can lead to heat and component damage.

Technical advantages. CPS20 has active power factor correction (PFC) and actively ströminrusningsskydd that effectively reduces start currents which are ideal if several units are connected in the same phase or if the supply is current limited through example. AC UPS. The protection is always active, regardless of the temperature. DC-OK output, wide temperature range, a large number of approvals and transient filter which ensures operation in störrik electrical environment makes the unit suitable for virtually all installations.

Output characteristics

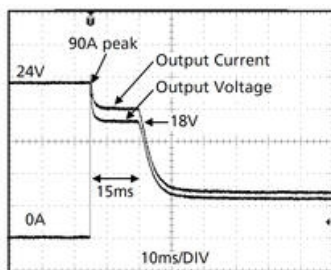


Efficiency



Peak current at short circuit

Stripping secondary Fuses



	0.75mm ²	1.0mm ²	1.5mm ²	2.5mm ²
C-2A	29m	40m	56m	82m
C-3A	26m	35m	50m	77m
C-4A	21m	28m	36m	53m
C-6A	8m	10m	14m	25m
C-8A	4m	7m	11m	18m
C-10A	1m	2m	3m	6m
C-13A	-	-	-	-
B-6A	17m	24m	35m	53m
B-10A	12m	16m	23m	32m
B-13A	9m	13m	20m	29m
B-16A	4m	7m	9m	17m
B-20A	1m	1m	2m	2m

Type 90 A for 15 ms enables tripping of example MCBs

TECHNICAL DATA

INPUT DATA

Input voltage dc	110-300 V
Input voltage dc min	88 V DC
Input voltage dc max	360 V DC
Inrush current	Typ. 6/4 A @ 110/300 V DC
Max entrance tripple	50 V pp

OUTPUT DATA

Output voltage	24 V DC
Output voltage min	24 V DC
Output voltage max	28 V DC
Output current	20 A
Power	480 W

EFFICIENCY / LIFETIME / MTBF

Efficiency	93.1 %
Life span	110 V DC: 81000 h @ 24 V DC, 20 A, 40 °C
MTBF (IEC 61709)	110 V DC: 468000 h @ 24 V DC, 20 A, 40 °C

DIMENSIONS

Width	65 mm
Height	124 mm
Depth	127 mm
Weight	0.94 kg

OTHER

Approvals	CB, CE, CSA, EX, IECEx, UL
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Keep time Typ. 26/26 ms @ 110/300 V DC

IP class IP20

Clamp type Screw on

Material protection Aluminium

Ripple max 70 mV pp

Series Dimension C

Power drop from +60 °C to +70 °C 12 W/°C

Temperature min without derating -25 °C

Temperature max without derating 60 °C

Startup delay 1100 ms

Type Power Supply AC-DC

Active Transient Yes

DC relay output Yes

