OEM AUTOMATIC

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

PULS

CPS20.241
PSU 100-240V ac 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.
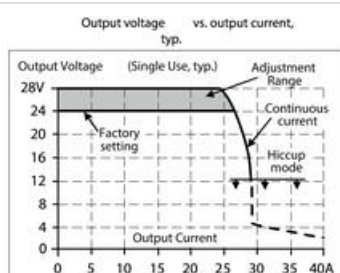
Short-circuit currents. CPS20 can leave short-circuit currents which is 4 times the nominal current for 15 ms, which helps secondary fuses and achieve selectivity.
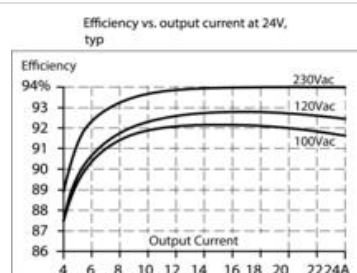
Hiccup Plus.
With new pulse short circuit protection you get optimum protection. The unit leaves a very high short circuit that solves fuses and provides sufficient starting current for example DC motors. If the output voltage drops below 13 V dc will be 2x the rated current is left for 2 seconds, then 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.
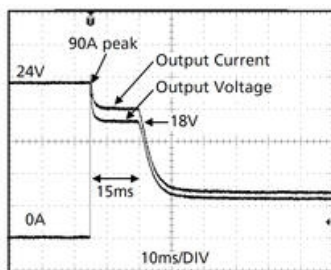
Output characteristics

Efficiency

	0.75mm²	1.0mm²	1.5mm²	2.5mm²
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 ac	100-240 V
Input voltage ac min	85 V AC
Input voltage ac max	264 V AC
Inrush current at 120 V ac typical	9 A
Inrush current at 230 V ac typical	7 A
Input voltage range	Wide-range
Power factor at 120 V ac, full load. Typical	0.99
Power factor at 230 V ac, full load. Typical	0.95
Number of phases	1

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
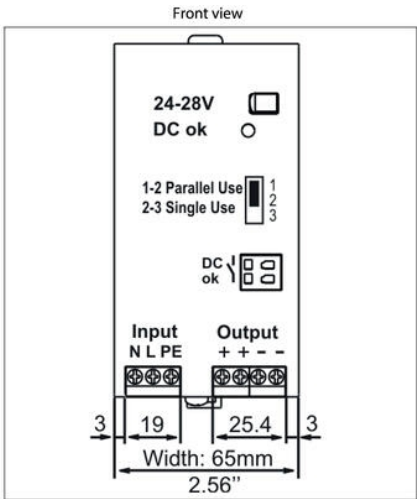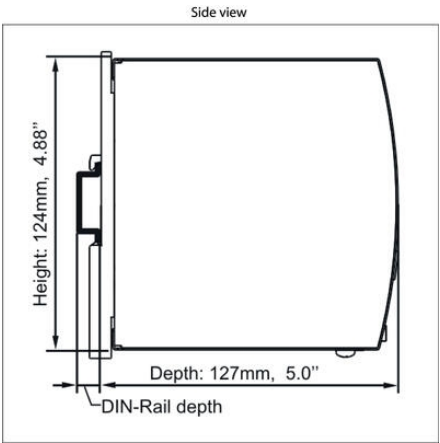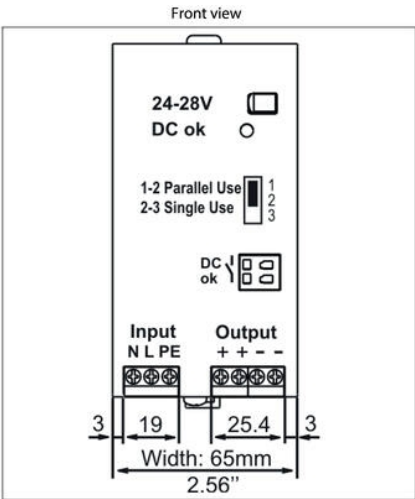
Efficiency at 120 V ac, full load, typical	92.7 %
Efficiency at 230 V ac, typical	93.3 %
Efficiency at 230 V ac, full load, typical	94 %
Lifetime at 120 V ac, full load and +40 ° C	70000 h
Lifetime at 230 V ac, full load and +40 ° C	88000 h
MTBF (IEC 61709) 230 V ac, max load, 40 ° C	537000 h

DIMENSIONS

Width	65 mm
Height	124 mm
Depth	127 mm
Weight	1 kg

OTHER

Approvals	ABS, CB, CE, CSA, EX, GL, IECEx, UL
Hold time at 120 V ac, typical full load	26 ms
Hold time at 230 V ac, typical full load	26 ms
IP class	IP20
Clamp type	Screw on
Material protection	Aluminium
Supply frequency	50-60 ±6 %
Ripple max	50 mV pp
Series	Dimension C
Power consumption 120 V ac	4.36 A
Power consumption 230 V ac	2.33 A
Power drop from +60 °C to + 70 °C	12 W/°C
Temperature min without derating	-25 °C
Temperature max without derating	60 °C
Type Power Supply	AC-DC
Active Transient	Yes
DC relay output	Yes

Side view

Height: 124mm, 4.88"

Depth: 127mm, 5.0"

DIN-Rail depth