

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

CT5.241

POWER SUPPLY 24VDC 5A 3 PHASE

- Output current of 5 A
- Up to 90.4% efficiency
- High reliability
- 20% power reserve
- Integrated primary fuses



### PRODUCT DESCRIPTION

Puls Dimension C is an affordable range of very high quality, reliability and performance.

CT5 has integrated primary fuses that make it possible to connect the unit without the need for intermediate fuses up to 32 A (UL) which saves space and money.

The efficiency is high over a wide load range, which results in reduced power consumption and longer life regardless of load current. The average efficiency is 88.8% with a peak value of 90.4%.

The power supply can provide a higher short-circuit current for a short time, which helps to secondary fuses. 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.

Active transient ensure operation also in very störrik electrical environment and moreover CT5 has active inrush current protection, which means a very low starting current, even if the unit has been in operation for a longer time. This is particularly useful for redundant / parallel system.

Power supply is connected to two phases, saving wiring and fuses. Thanks to the low power consumption, the effect of the imbalance in the three-phase system is negligible.

We recommend free space of 40 mm above and 20 mm below the unit and 5 mm on the sides.

## TECHNICAL DATA

### INPUT DATA

Input voltage range	Wide-range
Input voltage ac	380-480 V
Input voltage ac min	323 V AC
Input voltage ac max	576 V AC
Inrush current at 400 V ac typical	4 A
Number of phases	2

Power factor at 400 V ac, full load. Typical	0,45
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## OUTPUT DATA

Output voltage min	24 V DC
Output voltage	24 V DC
Output voltage max	28 V DC
Power	120 W
Output current	5 A

## EFFICIENCY / LIFETIME / MTBF

MTBF (IEC 61709) 400 V ac, max loan, +40 °C	1173000 h
Lifetime at 400 V ac, full load and +40 ° C	92000 h
Efficiency at 400 V ac, full load, typical	90,4 %
Efficiency at 400 V ac, typical	88,8 %

## DIMENSIONS

Weight	0,5 kg
Depth	117 mm
Width	40 mm
Height	124 mm

## OTHER

IP class	IP20
Ripple max	50 mV pp
Hold time at 400 V ac, typical full load	27 ms
Power consumption at 400 V ac	0,75 A
Power drop from +60 °C to + 70 °C	3 W/°C
Clamp type	Screw
Temperature min without derating	-25 °C
Series	Dimension C
Supply frequency	50-60 ±6 %
Approvals	ABS, CB, CE, CSA US, cRUus, cULus, GL
Temperature max without derating	60 °C
Material protection	Aluminium
Type Power Supply	AC-DC
Active Transient	Yes

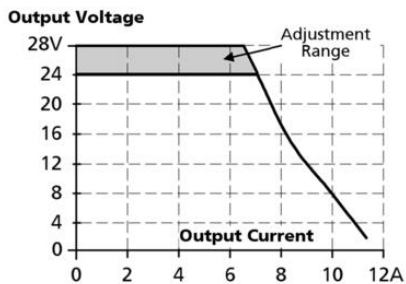


Fig. 14-1 Output current vs. ambient temp.

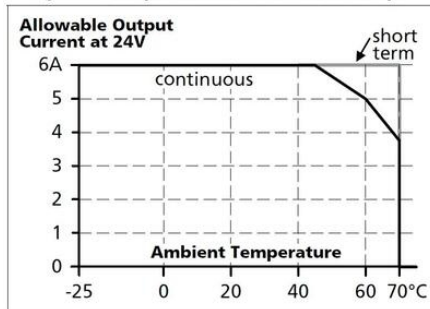


Fig. 8-1 Efficiency vs. output current at 24V, typ.

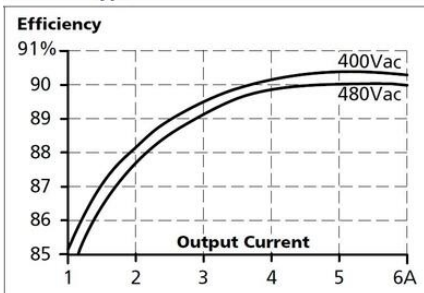
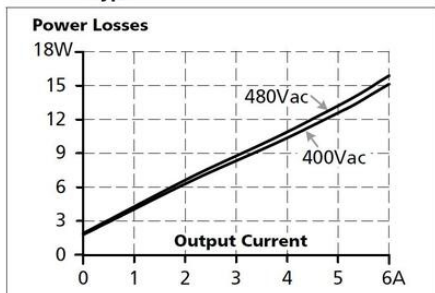


Fig. 8-2 Losses vs. output current at 24V, typ.



Maximal wire length for a magnetic (fast) tripping \*):

	0.75mm <sup>2</sup>	1.0mm <sup>2</sup>	1.5mm <sup>2</sup>	2.5mm <sup>2</sup>
C-2A	17m	19m	29m	39m
C-3A	11m	14m	22m	33m
C-4A	3m	4m	6m	14m
C-6A	1m	1m	2m	3m
C-8A	-	-	-	-
B-6A	6m	9m	13m	17m
B-10A	-	-	-	1m

Fig. 10-1 Front side



Fig. 21-1 Front view

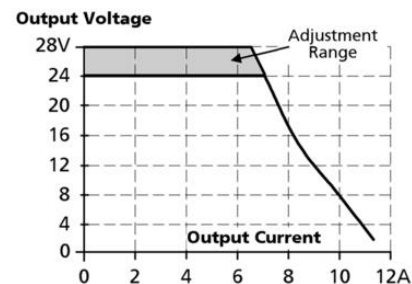
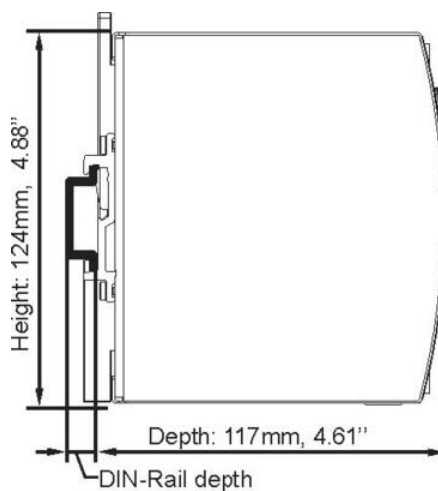
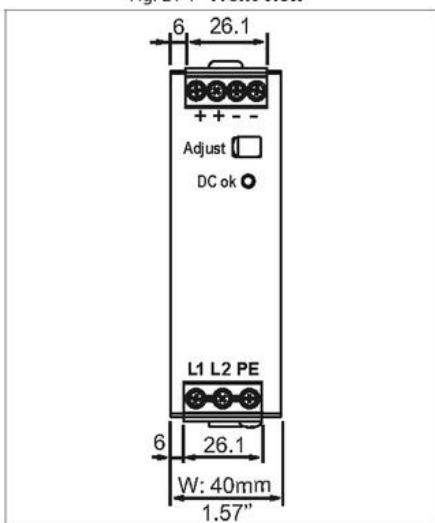


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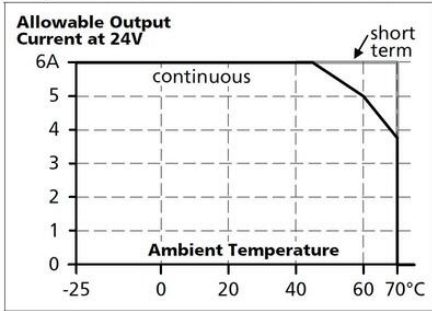


Fig. 8-1 Efficiency vs. output current at 24V, typ.

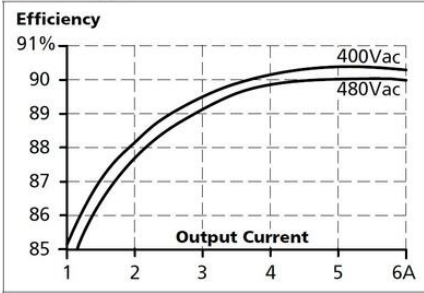
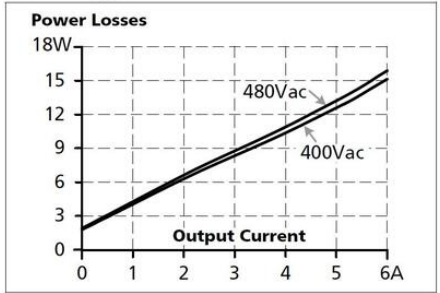


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