

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

CT5.241

POWER SUPPLY 24VDC 5A 2 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.

### SPECIFICATIONS

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

<b>Power Factor at 400 V AC, full load. Typical</b>	0.45
<b>Supply Frequency</b>	50-60 ±6 %
<b>Power consumption at 400 V ac</b>	0.75 A
<b>Type Power Supply</b>	AC-DC

<b>Output voltage</b>	24 V DC
<b>Output voltage min</b>	24 V DC
<b>Output voltage max</b>	28 V DC
<b>Output Current</b>	5 A
<b>Effect</b>	120 W
<b>Power Reduction Of 60 To 70 ° C</b>	3 W/°C
<b>Ripple. max</b>	50 mV pp
<b>Temperature Range Without Derating From</b>	-25 °C
<b>Temperature Range Without Derating To</b>	60 °C

<b>Efficiency At 400 V AC. Typical</b>	88.8 %
<b>Efficiency At 400 V AC, full load. Typical</b>	90.4 %
<b>Lifetime at 400 V ac, full load and +40 ° C</b>	92000 h
<b>MTBF (IEC 61709) 400 V ac, max loan, +40 °C</b>	1173000 h

<b>Width</b>	40 mm
<b>Height</b>	124 mm
<b>Depth</b>	117 mm
<b>Weight</b>	0.5 kg

<b>Clamp type</b>	Screw
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<b>Series</b>	Dimension C
<b>Approvals</b>	ABS, CB, CE, CSA US, cRUus, cULus, GL
<b>Material Protection</b>	Aluminium
<b>Hold-up time at 400 V AC, full load. Typical.</b>	27 ms
<b>IP Class</b>	IP20
<b>Active Transient</b>	Yes

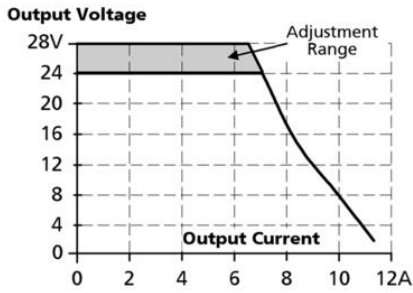


Fig. 14-1 Output current vs. ambient temp.

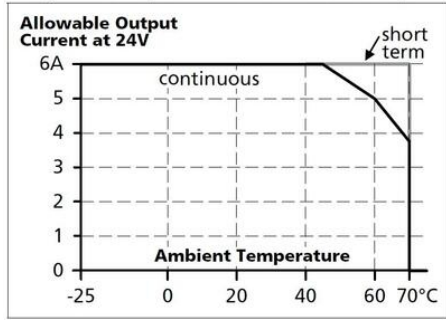


Fig. 8-1 Efficiency vs. output current at 24V, typ.

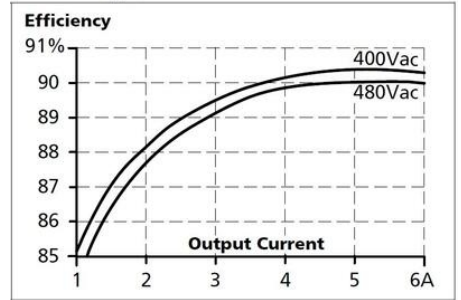
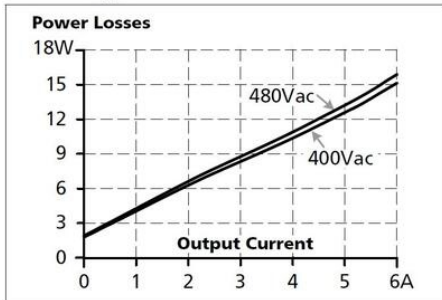


Fig. 8-2 Losses vs. output current at 24V, typ.



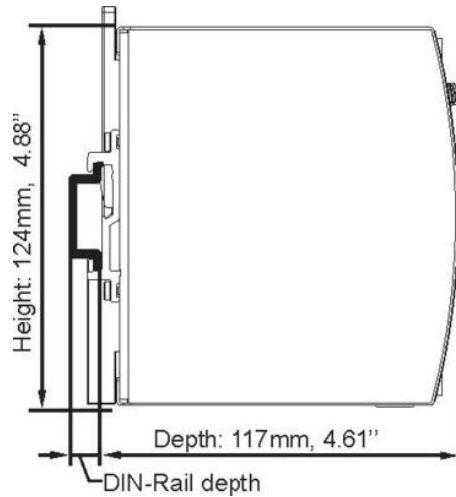
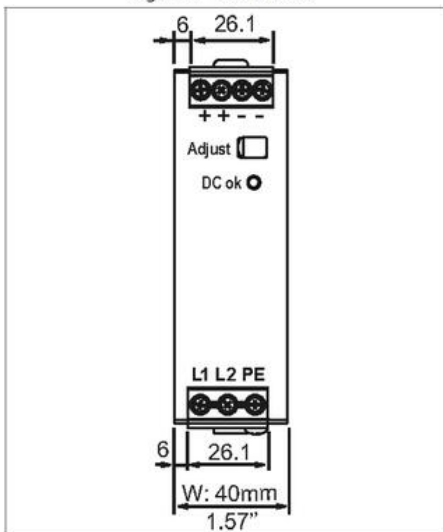
Maximal wire length for a magnetic (fast) tripping \*):

	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



Output Voltage

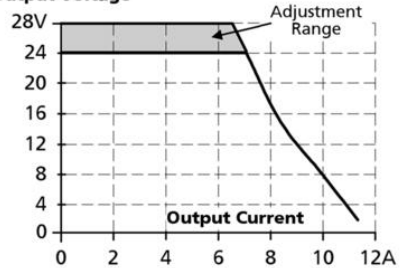


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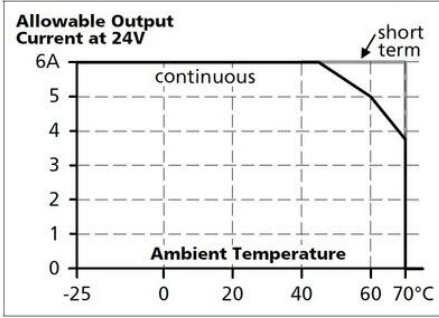


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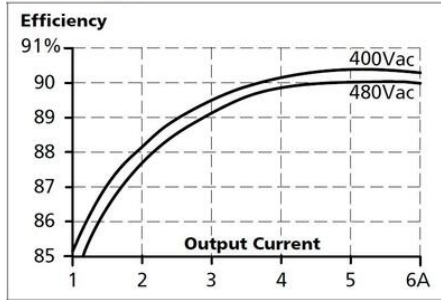
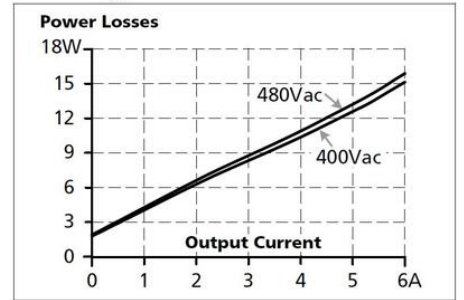


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