

## 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.

### SPECIFICATIONS

|                               |            |
|-------------------------------|------------|
| Type Power Supply             | AC-DC      |
| Input voltage range           | Wide-range |
| Power consumption at 400 V ac | 0,75 A     |
| Input voltage AC              | 380-480 V  |
| Input voltage ac min          | 323 V AC   |
| Input voltage ac max          | 576 V AC   |

|  |                                       |
|--|---------------------------------------|
| <b>Inrush current at 400 V ac typical</b>            | 4 A                                   |
| <b>Number of phases</b>                              | 2                                     |
| <b>Power Factor at 400 V AC, full load. Typical</b>  | 0,45                                  |
| <b>Supply Frequency</b>                              | 50-60 ±6 %                            |
| <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>MTBF (IEC 61709) 400 V ac, max loan, +40 °C</b>   | 1173000 h                             |
| <b>Lifetime at 400 V ac, full load and +40 ° C</b>   | 92000 h                               |
| <b>Efficiency At 400 V AC, full load. Typical</b>    | 90,4 %                                |
| <b>Efficiency At 400 V AC. Typical</b>               | 88,8 %                                |
| <b>Weight</b>  | 0,5 kg                                |
| <b>Depth</b>   | 117 mm                                |
| <b>Width</b>   | 40 mm                                 |
| <b>Height</b>  | 124 mm                                |
| <b>Clamp type</b>                                    | Screw                                 |
| <b>IP Class</b>                                      | IP20                                  |
| <b>Hold-up time at 400 V AC, full load. Typical.</b> | 27 ms                                 |
| <b>Series</b>  | Dimension C                           |
| <b>Approvals</b>                                     | ABS, CB, CE, CSA US, cRUus, cULus, GL |
| <b>Material Protection</b>                           | Aluminium                             |
| <b>Active Transient</b>                              | Yes                                   |

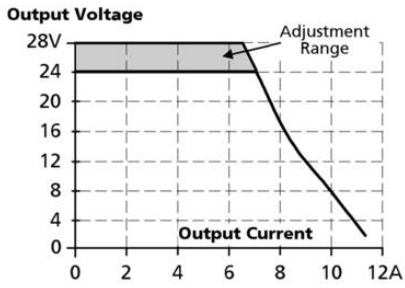


Fig. 14-1 Output current vs. ambient temp.

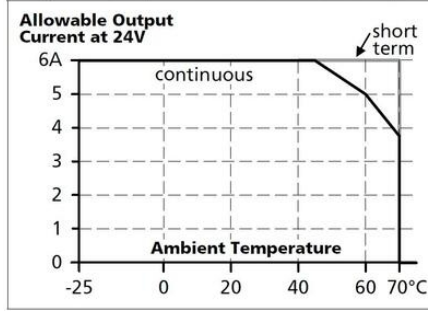


Fig. 8-1 Efficiency vs. output current at 24V, typ.

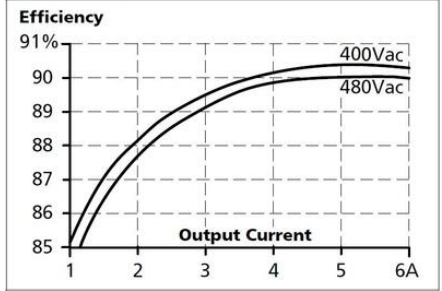
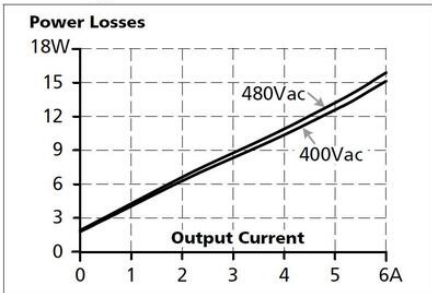


Fig. 8-2 Losses vs. output current at 24V, typ.



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

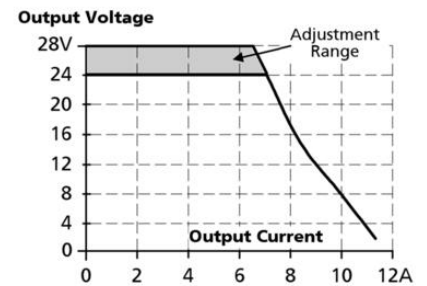
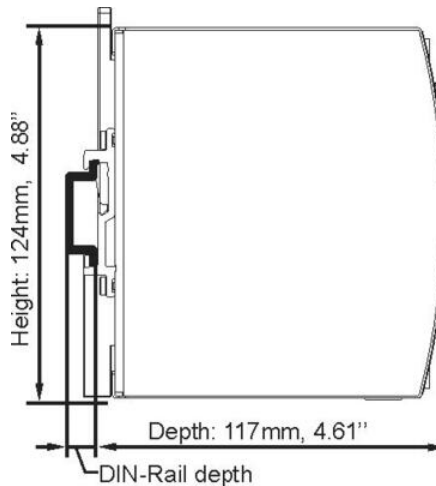
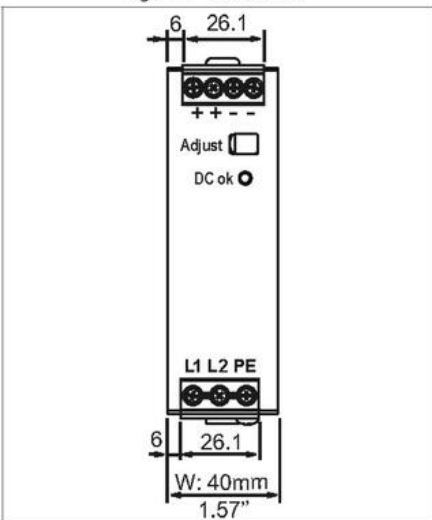


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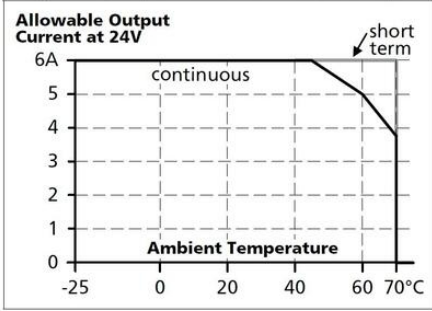


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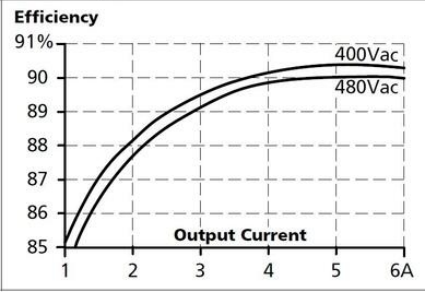
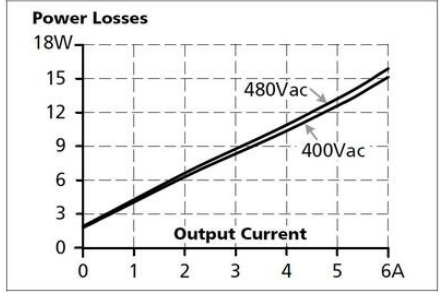


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