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

Input voltage range	Wide-range
Number of phases	2
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

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

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

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

Width	40 mm
Height	124 mm
Depth	117 mm
Weight	0.5 kg

Clamp type	Screw

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

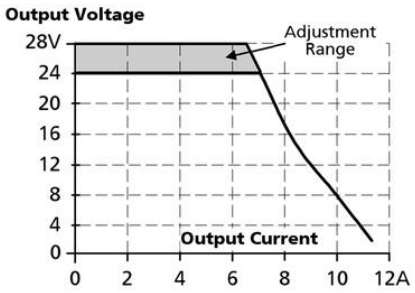


Fig. 14-1 **Output current vs. ambient temp.**

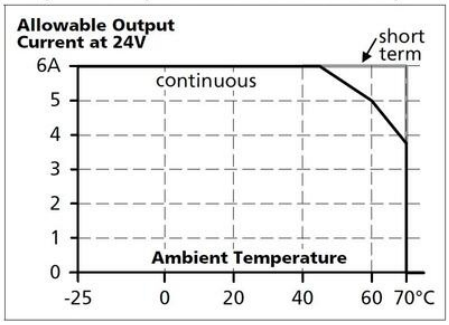


Fig. 8-1 **Efficiency vs. output current at 24V, typ.**

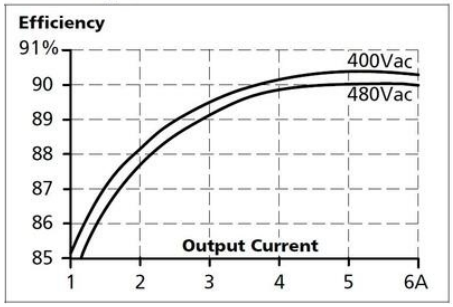
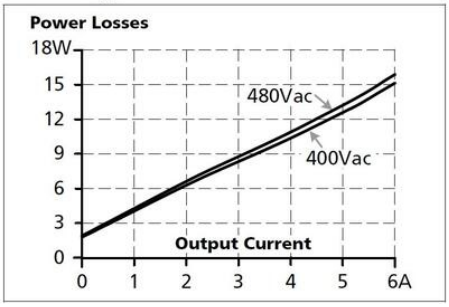


Fig. 8-2 **Losses vs. output current at 24V, typ.**

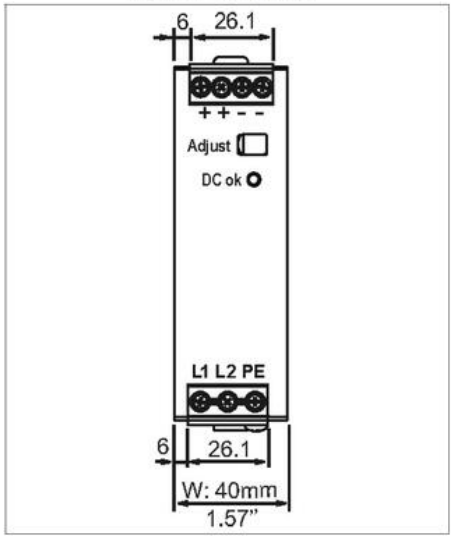


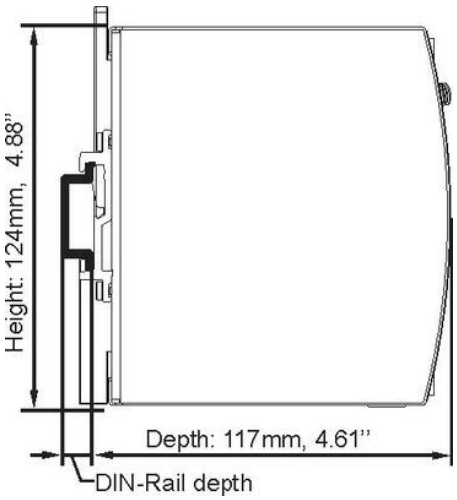
Maximal wire length for a magnetic (fast) tripping *):

	0.75mm²	1.0mm²	1.5mm²	2.5mm²
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**





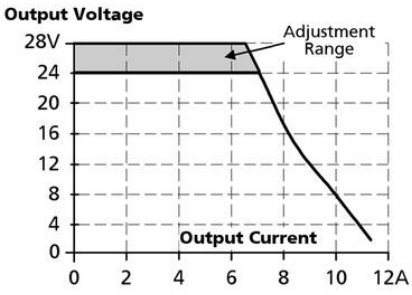


Fig. 14-1 **Output current vs. ambient temp.**

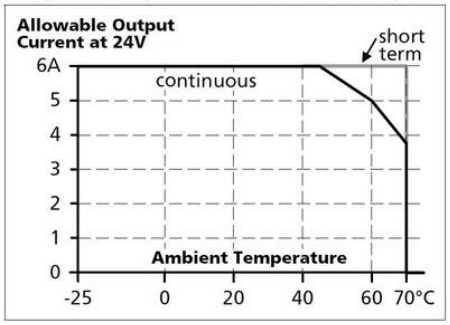


Fig. 8-1 **Efficiency vs. output current at 24V, typ.**

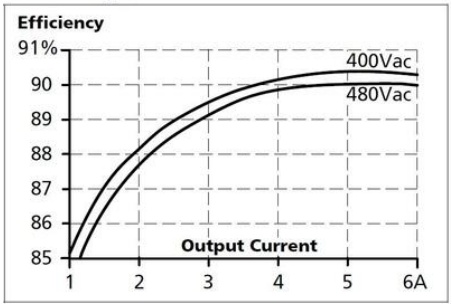
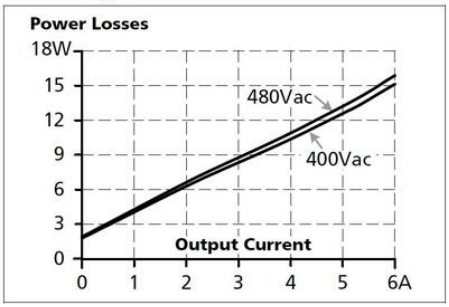


Fig. 8-2 **Losses vs. output current at 24V, typ.**



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

	0.75mm²	1.0mm²	1.5mm²	2.5mm²
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**