

POWER SUPPLY 3-PHASE, 48 V DC DIMENSION C SERIES

CT10.481 POWER SUPPLY 48VDC 5A 3 PHASE

- . Output current of 5 A
- Up to 92.8% efficiency
- · Integrated primary fuses
- · High reliability





PRODUCT DESCRIPTION

Puls Dimension C is a series of very high quality, reliability and performance.

CT10 has built 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. An average efficiency of 50% to 100% load is 92% with a peak value of 92.8%.

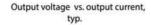
The short circuit current is 3×10^{-2} x rated current for 20 ms, which helps secondary fuses. Power boost of 20% enables higher current extraction without voltage drops. This is especially useful during start-ups and to bridge the current peaks in the application. Power can be used continually up to +45°C and short periods from +45°C to +60°C.

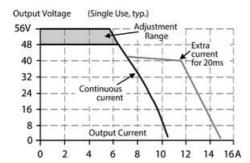
Active transient ensure operation also in very interference rich electrical environment in addition, CT10 active inrush current protection, which means a very low starting current, even if the unit has been in operation for a longer time. Especially useful for redundant/parallel-connected systems.

Power supply connected with 3 stages but can operate on only two phases, taking into account the loading and ambient temperature.

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

Power reserve





SPECIFICATIONS

Type Power Supply	AC-DC
Input voltage range	Wide-range
Power consumption at 400 V ac	0,7 A
Input voltage AC	380-480 V
Input voltage ac min	323 V AC
Input voltage dc max	780 V DC
Input voltage ac max	576 V AC
Inrush current at 400 V ac typical	4 A
Number of phases	3
Power Factor at 400 V AC, full load. Typical	0,53
Supply Frequency	50-60 ±6 %
Input voltage dc min	450 V DC
Dinnle may	50 mV nn
Ripple. max	50 mV pp
Output voltage min Power Reduction Of 60 To 70 ° C	48 V DC
	6 W/°C
Temperature Range Without Derating From	-25 °C
Output voltage	48 V DC
Output voltage max Effect	56 V DC 240 W
Output Current	
•	5 A
Temperature Range Without Derating To	60 °C
MTBF (IEC 61709) 400 V ac, max loan, +40 °C	1051000 h
Lifetime at 400 V ac, full load and +40 ° C	122000 h
Efficiency At 400 V AC, full load. Typical	92,8 %
Efficiency At 400 V AC. Typical	92 %
Weight	0,75 kg
Depth	117 mm
Width	62 mm
Height	124 mm
gnt	12 1 11111
Clamp type	Screw
ID Class	ID20
IP Class	IP20

Hold-up time at 400 V AC, full load. Typical.	34 ms
Series	Dimension C
Approvals	ABS, CB, CE, CSA US, cRUus, cULus, GL
Material Protection	Aluminium
Active Transient	Yes

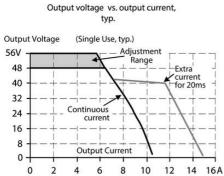
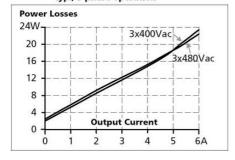


Fig. 14-1 Output current vs. ambient temp. Allowable Output Current at 48V √short term 6A continuous 5 4 3 2 1 **Ambient Temperature** 0 --25 0 20 40 60 70°C

Fig. 8-1 Efficiency vs. output current at 48V, typ., 3-phase operation Efficiency 94% 93 3x400Vac 92 91 3x480Vac 90 89 **Output Current** 88 3 4 5 6A

Fig. 8-2 Losses vs. output current at 48V, typ., 3-phase operation



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

	0./5mm²	1.0mm²	1.5mm²	2.5mm
C-2A	52m	70m	94m	148m
C-3A	33m	42m	64m	97m
C-4A	19m	23m	33m	48m
C-6A	8m	9m	13m	22m
C-8A	1.5	-	-	- 5
C-10A	-		-	-
B-6A	18m	22m	33m	46m
B-10A	4m	5m	10m	13m



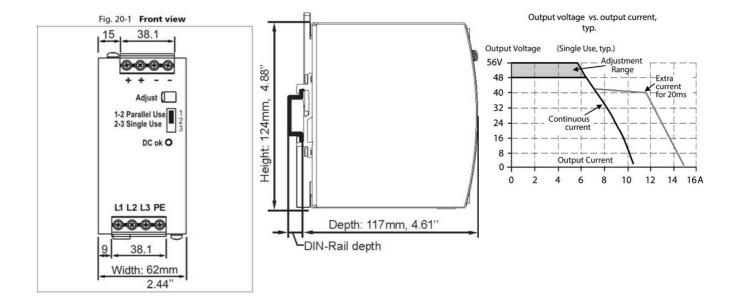


Fig. 14-1 Output current vs. ambient temp.

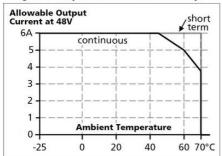


Fig. 8-1 Efficiency vs. output current at 48V, typ., 3-phase operation

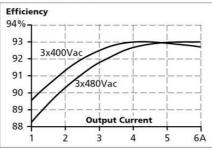
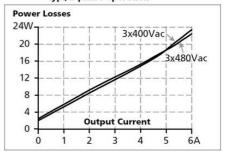


Fig. 8-2 Losses vs. output current at 48V, typ., 3-phase operation



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

	0.75mm ²	1.0mm ²	1.5mm ²	2.5mm
C-2A	52m	70m	94m	148m
C-3A	33m	42m	64m	97m
C-4A	19m	23m	33m	48m
C-6A	8m	9m	13m	22m
C-8A	125	-	-	17
C-10A	-	- 2	-	-
B-6A	18m	22m	33m	46m
B-10A	4m	5m	10m	13m



15 38.1 38.1 1-2 Parallel Use 2-3 Single Use 2-3 Single Use 2-3 Width: 62mm
2.44"

