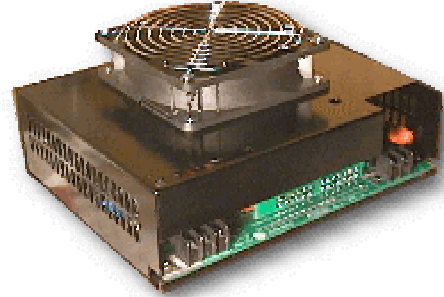


DCFR750 SERIES

750 Watt DC-DC Converter

Features:

- Input voltages from 48Vdc to 400Vdc
- Fully isolated input to output
- Reverse polarity protected
- Up to seven outputs available
- 600Vdc maximum output voltage
- Hot swap capability
- Front panel available for rack mounting
- Thermal protection as standard



Description:

The DCFR750 series has proven to be a highly popular product within industry due not only to its high performance and reliability but also in terms of value. Available with up to seven outputs, optional features include mains input auto-select, top or side fan cooling, powerfail, output OK, inhibit / enable control, current share for parallel use, ORing diodes for N+1, output remote sense.

Specification:

Input

Input range : Contact sales
Inrush current : Meets relevant sections of BTNR 2511
Input current : Dependant upon input voltage requirement
Hold up time : >4mS @ full load
Input fuse: Consult sales

Output

Output voltages / currents : 600Vdc max / 100A Current
Voltage adjustment : +/- 5% (V1)
Initial setting : 0.5%(V1);1.5%(V2 - V5)
Load regulation:<1% single o/p and V1 (4%V2-V5)*10% min load
Line regulation : <0.2% over input range
Cross regulation : 0.5% (V2-5) @ 10% load change V1
Ripple and noise: 0.2%RMS, 1% peak DC - 30MHz
Transient deviation : 5% for 50% load variation
Transient time : 2mS
Over voltage protection : 115 - 125% of V1
Over current protection : All outputs
Output power : 750W Fan cooled
Temperature coefficient :0.02%/°C (V1)0.05%(V2-V5)

Options

Side fans for low profile
DC input powerfail signal
Output OK signal
Current share for parallel use
ORing diode for N+1
Inhibit / enable control
External voltage / current control via potentiometer
Remote sense
Under / over-voltage signals
Front panel to specification
Fully regulated auxiliary outputs (normally semi-regulated)
9mm screw terminal or M6 stud connections

Output ratings

Up to seven outputs available
(contact sales)
Output voltages up to 600Vdc
Max 100A current

General

Efficiency:
75-80% typical @ full load

MTBF:
>100,000 hrs to MIL217E @ 25°C

Environmental

Operating Temperature: 0 - 70°C
De-rate at 2.5% /°C above 50°C (Top Fan)
De-rate at 2.5% /°C above 40°C (Side Fans)
Storage Temperature: -25°C to + 85°C
Shock and vibration: Meets MIL STD810E
Operating humidity:
0 to 95% RH non-condensing

Safety & EMC

Isolation, input to earth : 2.5kVdc, >2.5mm
Isolation, input to output : 4.25KVdc, >6.4mm
Isolation, output to earth :
500Vdc (unless commoned)

Units designed to meet: EN60950, UL60950,
CSA 22.2 No. 950 & 234, EN41003

Emissions designed to meet: EN55022-B
(conducted) EN55022-A (radiated)

Immunity designed to meet: EN61000-4-2 (ESD)
(IEC801-2) EN61000-4-3 (radiated) (IEC801-3)
pending EN61000-4-4 (fast transients)
(IEC801-4) IEC801-5 (surge)

DCFR750 Series Single Output Mechanical Details and Connections

TOP VIEW

OUTPUT CONNECTOR
OPTIONS:
 2 x 6mm STUDS
 0.375" SCREW TERMINALS

3	V1
4	-
2	V1
1	+

OPTIONS CONNECTOR:
 0.1" MOLEX

6	+S
5	INH
4	B
3	A
2	PF
1	PF

I SHARE

COMMON

INPUT CONNECTOR:
 0.375" SCREW TERMINALS

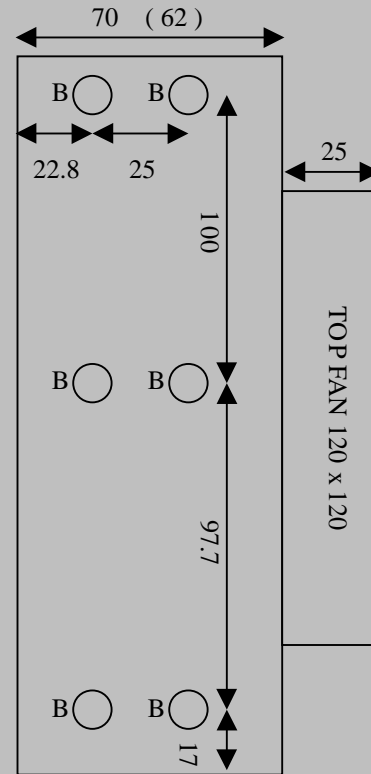
3	+
2	-
1	E

A : M3 CAPTIVE NUT
 Maximum Insertion 6mm

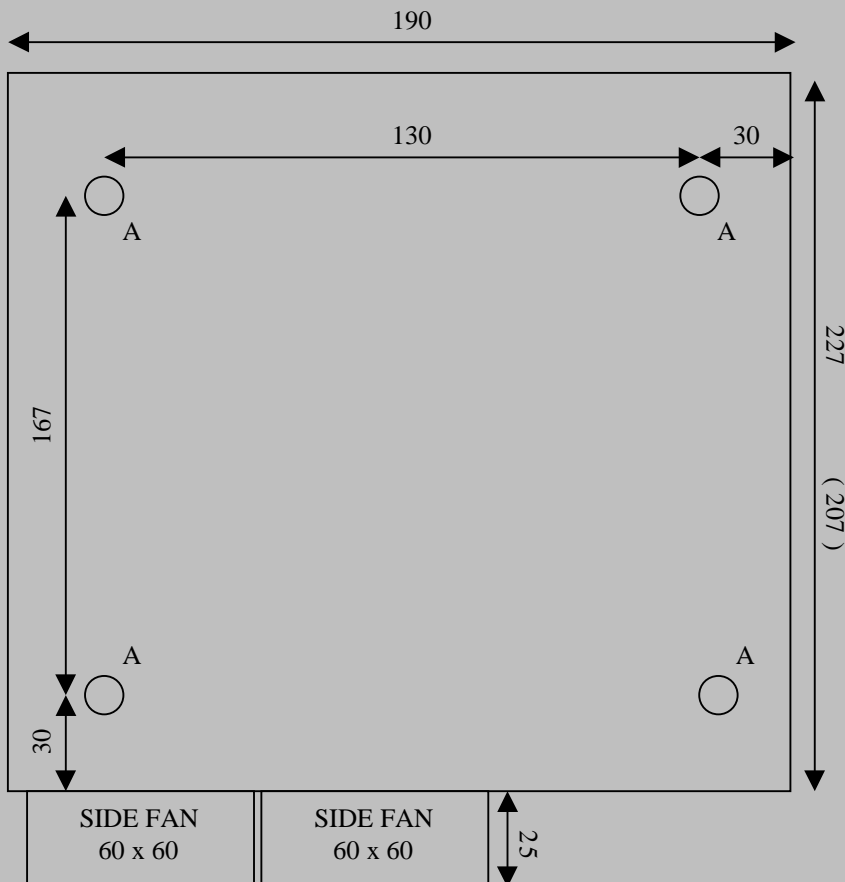
B : M4 CAPTIVE NUT
 Maximum Insertion 6mm

Dimensions in (brackets)
 Apply to side fans version only

SIDE VIEW



BOTTOM VIEW



DCFR750 Series Multiple Output Mechanical Details and Connections

