

IDC80-48-5D12D

80 Watts

The **IDC80-48-5D12D** is an open frame 36V ~ 72 VDC DC-DC converter with nominal 48V DC input, configured as either 80 watts convection cooling or 100 watts forced air-cooling. It features four DC outputs (5V/12V/-5V/-12V), utilizes a thermally efficient U-channel chassis with no audible noise. The **IDC80-48-5D12D** is designed as a component for micro-process based fan less applications.

Key Features:

- 80W convection cooling
- Compact 1U height , thermal efficient U-channel design
- Isolated, chassis mount, nominal 48V DC input
- 5V/-5V/12V/-12V DC outputs
- Rated at 50 °C
- 100% 50 °C burn-in
- MTBF>243,784 hr. Mil-217F

Input Type	Input Voltage	Input Current	Inrush Current
DC	36 - 72 VDC Continuous	5 A @ 48 VDC	10 A @ 48 VDC

Output Specification

Outputs	+5V		+12V		-12V		-5V	
	Range I	Range II	Range I	Range II	Range I	Range II	Range I	Range II
Minimum Output Current	0A	0A	0A	0A	0A	0A	0A	0A
Rated Output Current	7A	10A	6A	2A	0.5A	0.5A	0.75A	0.5A
Maximum Output Current	-	12A	-	3A	-	-	-	-
Line Regulation	1%	1%	1%	1%	1%	1%	1%	1%
Load Regulation	1%	1%	5%	5%	5%	5%	5%	5%
Ripple and Noise (peak to peak)	50 mV	50 mV	100 mV	100 mV	100 mV	100 mV	100 mV	100 mV
Efficiency	> 70%							
MTBF	243,784 hours at 50 °C							

Interface Signals and Internal Protection

Overload Protection	Fully protected against output overload and short circuit. Automatic recovery upon of removal of overload condition.
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Safety Approvals, EMI and EMS specification

Safety Approval	Designed to meet: UL 1950, CSA 22.2 No. 234, VDE EN 60950
EMS	Designed to meet: IEC-801-2 15KV air discharge, IEC-801-3 10V/M, IEC-801-4 2KV
Radiation/Conduction	Designed to meet FCC docket 20780 curve" B, EN 55022 "B"

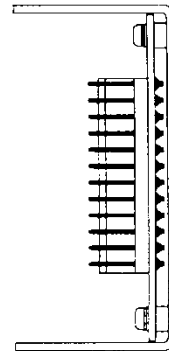
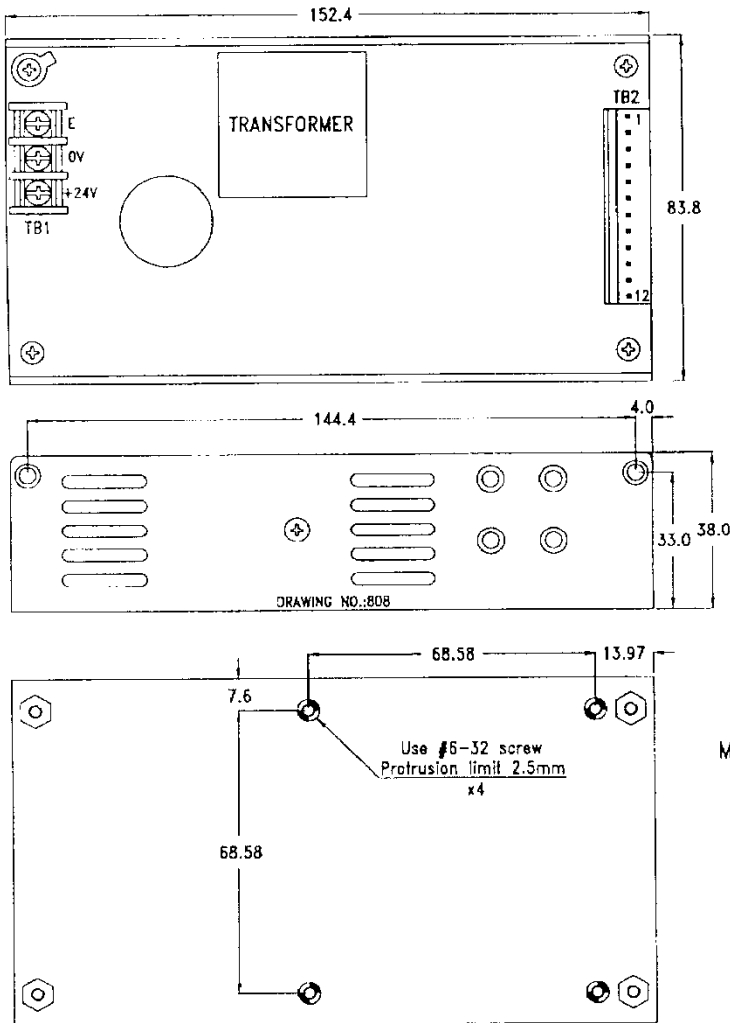
Environment Specification

Operating Temperature	0~50 °C
Storage Temperature	-40~85°C
Altitude (max)	up to 10,000 ft

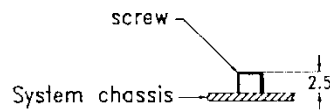
Dimension

Width x Length x Height	3.3x6.0x1.5 (inches)
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Mechanical Specifications:



Measuring the screw protrusion first:



Dimensions: Dimensions shown in mm as above. Tolerance specified is +/-0.4mm between mounting holes, +/-0.8mm for other dimensions.

Connectors: TB1—DC input: Terminal blocks. TB2---DC output: Molex 5273-12A

DC output pin assignment

Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9	Pin 10	Pin 11	Pin 12
5V	5V	5V	GND	GND	GND	GND	+12V	+12V	-12V	-5V	N/C