



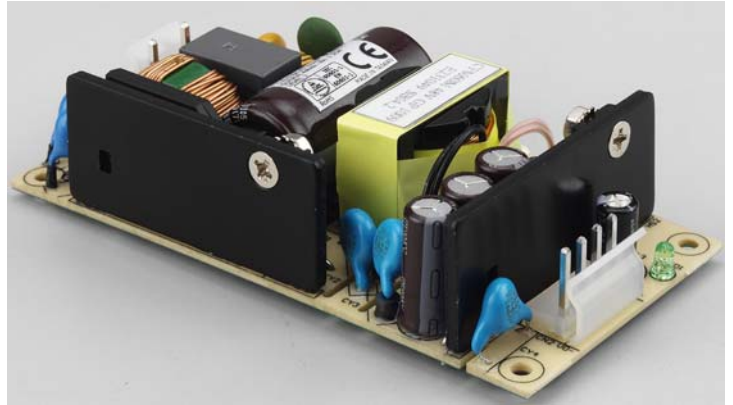
CFM60M SERIES

60W MEDICAL OPEN FRAME AC-DC MODULES



Features

- * Universal Input Range 90-264VAC
- * Efficiency to 90%
- * Continuous Short Circuit Protection
- * Meets EN60601-1 and EN55011 Class B
- * No load Power Consumption < 0.5W
- * 2" x 4" Size



MODEL	OUTPUT VOLTAGE	MAX. LOAD	MIN. LOAD	RIPPLE & NOISE	VOLTAGE ACCURACY	VOLTAGE ADJ. Range	LINE REGULATION	LOAD REGULATION	% EFF ⁽¹⁾ (Typ.)
CFM60M050	5V	8A	0A	1%	±1%	4.75~5.25	±0.5%	±1%	82%
CFM60M120	12V	5A	0A	1%	±1%	11.4~12.6	±0.5%	±1%	87%
CFM60M150	15V	4A	0A	1%	±1%	14.25~15.75	±0.5%	±1%	88%
CFM60M240	24V	2.5A	0A	1%	±1%	22.8~25.2	±0.5%	±1%	89%
CFM60M480	48V	1.25A	0A	1%	±1%	45.6~50.4	±0.5%	±1%	90%

Notes: Typical Efficiency at 230 VAC and Full Load at 25°C.

Specifications

INPUT SPECIFICATIONS:

Voltage 90~264Vac
 Frequency 47 to 63Hz
 Inrush Current 75A max. @240Vac
 Input Current 100Vac/1.6A max., 240Vac/0.8Amax.
 Leakage Current 100uA max.

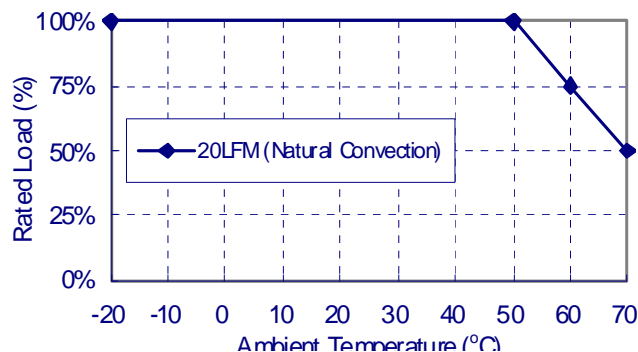
OUTPUT SPECIFICATIONS:

Holdup Time 16ms typ. @115Vac
 Short Circuit Protection Hiccup Mode (Auto Recover)
 Over Voltage Protection TVS Component to Clamp
 Temperature Coefficient $\pm 0.05\%/^{\circ}\text{C}$

GENERAL SPECIFICATIONS:

Isolation Input to output = 5,656VDC
 Operating Temperature $-20^{\circ}\text{C} \sim 50^{\circ}\text{C}$ (see Derating Curve)
 Storage Temperature $-20^{\circ}\text{C} \sim 85^{\circ}\text{C}$
 Humidity 93% RH max. Non-Condensing
 Cooling Natural Convection
 Switching Frequency 65KHz Typical
 MTBF MIL-HDBK-217F, GB, $25^{\circ}\text{C}/115\text{VAC}$ T.B.D hrs
 Altitude 3000m
 Dimensions 4.000x2.000x1.100inches (101.6x50.8x27.94mm)
 Weight 125g

CFM60M Series Derating Curve



SAFETY AND EMC:

Emission and Immunity EN55011 Class B, FCC CFR 47 Part 18
 EN60601-1-2, EN61000-3-2, EN61000-3-3
 Safety IEC60601-1, EN60601-1, UL60601-1

NOTE:

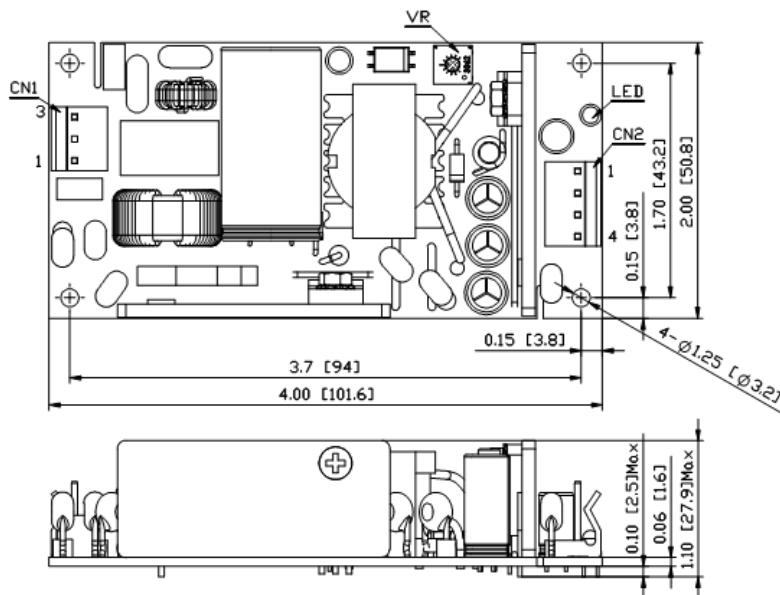
1. Voltage accuracy is set at full load.
2. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for Ripple & Noise measuring @20MHz BW.
3. Line regulation is measured from 100Vac to 240Vac with full load.
4. Load regulation is measured from 10% to 100% full load.

CFM60 Series

All Dimensions In Inches[mm]

Tolerances : Inches:X.XX = ± 0.02 , X.XXX = ± 0.010

Millimeters:X.X = ± 0.5 , X.XX = ± 0.25



Input Connector CN1

Pin 1	Line
Pin 2	Not Fitted
Pin 3	Neutral

Output Connector CN2

Pin 1	+ Vout
Pin 2	+ Vout
Pin 3	- Vout
Pin 4	- Vout

Typical at 25°C , nominal line and 75% load, unless otherwise Specified