



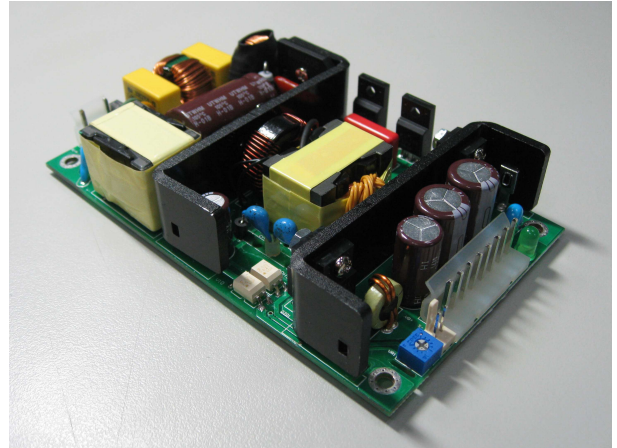
# CFM150M SERIES

## 150W MEDICAL AND ITE OPEN FRAME AC-DC MODULES WITH PFC



### Features

- \* Universal Input Range 90 ~ 264VAC
- \* Medical and ITE Safeties
- \* 3"x 5" Compact Size
- \* Less than 1 U high : 1.05"
- \* Industry Standard Pin Out
- \* Active PFC Meets EN61000-3-2
- \* High Efficiency up to 93%
- \* Meets CISPR/FCC Class B
- \* Remote Voltage Sense
- \* Over Voltage Protection
- \* Continuous Short Circuit Protection
- \* No load Power Consumption < 0.5W
- \* Meets 2MOPP



MODEL	OUTPUT VOLTAGE	MAX. LOAD	MIN. LOAD	RIPPLE & NOISE NOTE 1	VOLTAGE ACCURACY NOTE 2	LINE REGULATION NOTE 3	LOAD REGULATION NOTE 4	% EFF. (Typ.) NOTE 5
CFM150M120	12 V	12.5 A	0A	1%	±1%	±0.5%	±1%	90%
CFM150M240	24 V	6.25 A	0A	1%	±1%	±0.5%	±1%	92%
CFM150M360	36 V	4.17 A	0A	1%	±1%	±0.5%	±1%	92%
CFM150M480	48 V	3.13 A	0A	1%	±1%	±0.5%	±1%	93%

## Specifications

### INPUT SPECIFICATIONS:

Voltage ..... 90~264Vac  
 Frequency ..... 47 to 63Hz  
 Inrush Current ..... 110A max. @240Vac  
 Leakage Current ..... 300uA max.

### OUTPUT SPECIFICATIONS:

Hold-up Time ..... 16ms typ.  
 Short Circuit Protection ..... Hiccup mode(Auto Recovery)  
 Adjustment Range on Vout ..... ±5%  
 Over Voltage Protection ..... Recycle AC input to restart  
 Temperature Coefficient ..... ±0.05%/°C

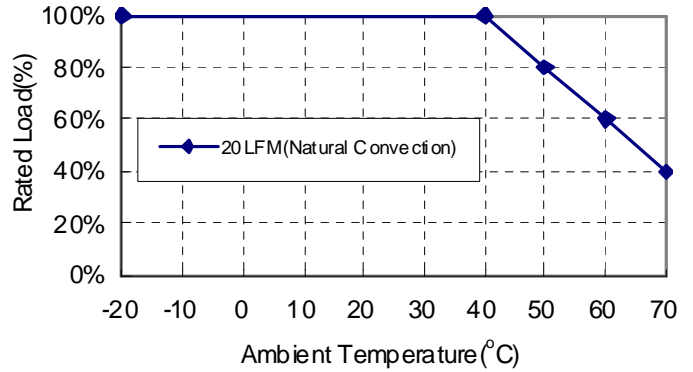
### GENERAL SPECIFICATIONS:

Isolation ..... Input to output = 5,656VDC  
 Operating Temperature ..... -20°C ~ 70°C (see Derating Curve)  
 Storage Temperature ..... -20 ~ 85°C  
 Humidity ..... 93% RH max. Non condensing  
 Cooling ..... Natural Convection  
 Switching Frequency ..... 90KHz Typical.  
 MTBF ..... MIL-HDBK-217F, GB, 25°C/115VAC ..... 100Khrs min.  
 Altitude ..... 3000m  
 Dimensions ..... 5.000x3.000x1.050inches (127.00x76.20x26.67mm)  
 Weight ..... 270g (0.6Pounds)

### SAFETY AND EMC:

Emission and Immunity ..... EN55011 Class B, FCC Part 15 Class B  
 EN60601-1-2, EN61000-3-2 Class A, B, C, D, EN61000-3-3  
 Safety ..... IEC60601-1:2005, EN60601-1:2006, ANSI/AAMI ES60601-1:2005  
 IEC60950-1, EN60950-1, UL60950-1

## CFM150M Series Derating Curve

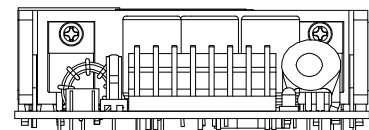
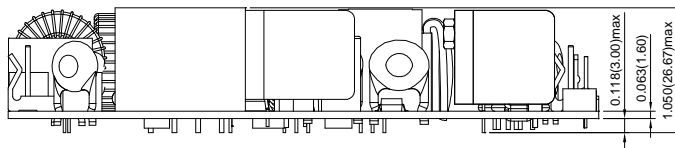
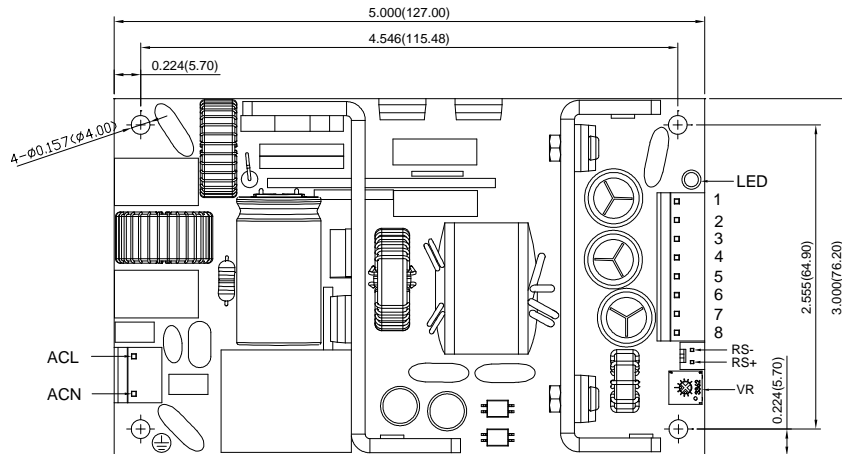


### NOTE:

1. Add a 0.1uF ceramic capacitor and 10uF E.L. capacitor to output for Ripple & Noise measuring @20MHz BW.
2. Voltage accuracy is set at 100% rated load and 25°C Ta.
3. Line regulation is measured from high line to low line with full load.
4. Load regulation is measured from full to 10% load.
5. Typical efficiency at 230VAC and full load at 25°C.
6. Standard input and output connectors wafer with LONG CHU P3060 series and mate with MOLEX housing 09-50-1031 and 09-50-1081 or equivalent.
7. DC output pin 1, 2, 3, 4: Vout (-), DC output pin 5, 6, 7, 8: Vout (+).

## CFM150M Series

All Dimensions are in inches[mm]  
 Tolerances : Inches : x.xxx=±0.02  
 Millimeters : x.xx=±0.5



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