



# CFM150M SERIES

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

### Features

- \* Universal Input Range 90 ~ 264V<sub>ac</sub>
- \* Medical Approved
- \* 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
- \* Meets Class I



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	0 A	1%	±1%	±0.5%	±1%	90%
CFM150M240	24 V	6.25 A	0 A	1%	±1%	±0.5%	±1%	92%
CFM150M360	36 V	4.17 A	0 A	1%	±1%	±0.5%	±1%	92%
CFM150M480	48 V	3.13 A	0 A	1%	±1%	±0.5%	±1%	93%

Specifications are subject to change without notice.

## Specifications

### INPUT SPECIFICATIONS:

Voltage .....	90~264V <sub>ac</sub> 120~370V <sub>dc</sub>
Frequency .....	47 to 63Hz
Inrush Current .....	110A max. @240V <sub>ac</sub>
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 max.

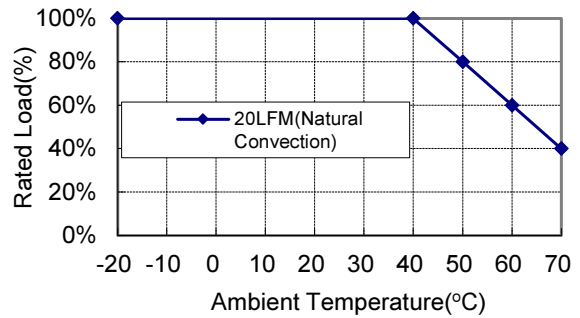
### GENERAL SPECIFICATIONS:

Isolation .....	Input to Output = 5,656V <sub>dc</sub>
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/115V <sub>ac</sub> ..... 100khrs min.
Altitude .....	3000m
Dimensions .....	5.000x3.000x1.050 inches (127.00x76.20x26.67 mm)
Weight .....	270g (0.6Pounds)

### SAFETY AND EMC:

Emission and Immunity .....	EN60601-1-2:2015 ed. 4.0 EN55011, EN55032 Class B, FCC CFR 47 Part 15 EN61000-3-2, 3, IEC61000-4-2, 3, 4, 5, 6, 8, 11
Safety .....	Class I, IEC60601-1:2005+A1:2012 ed3.1 EN60601-1:2006+A11:2011+A1+A12 ed 3.1, ULANSI/AAMI ES60601-1:2005

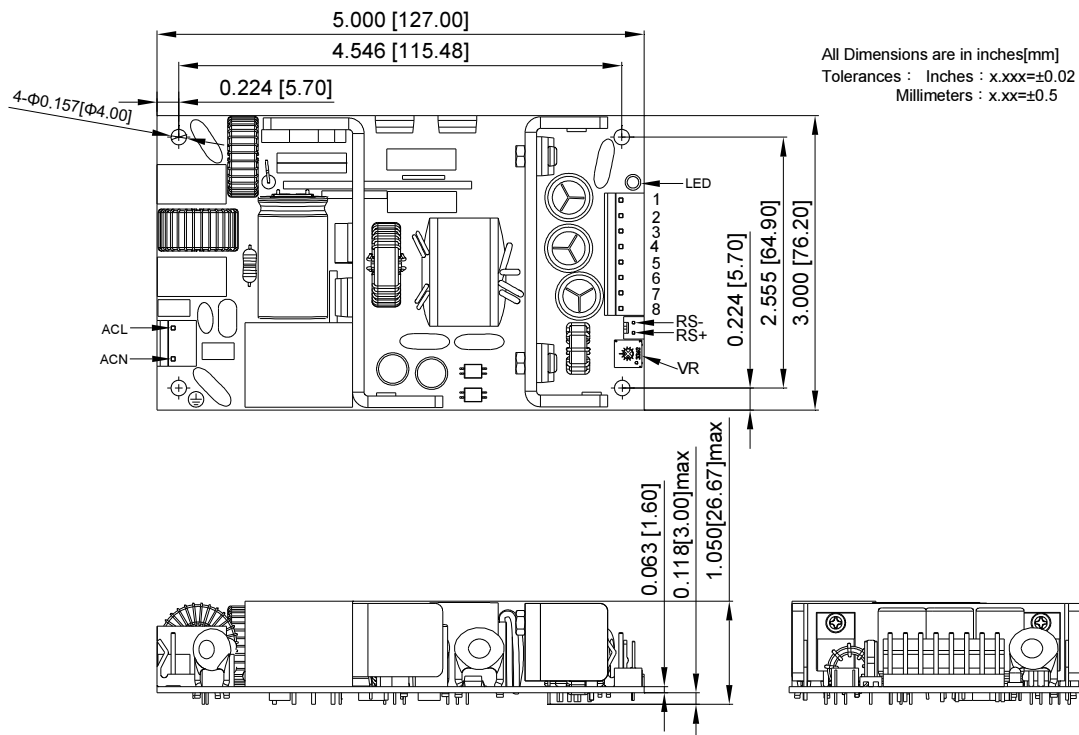
## CFM150M Series Derating Curve



### 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 (+).

## Mechanical Specification



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