CFM100M SERIES

100W MEDICAL&ITE OPEN FRAME AC-DC MODULES WITH PFC

E252331

Features

* Universal Input Range 90 ~ 264V_{ac}
* Medical Approved
* 3”x 5” Compact Size
* Less than 1 U high
* Industry Standard Pin Out
* Active PFC Meets EN61000-3-2
* High Efficiency up to 92%
* 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 ADJ. RANGE	VOLTAGE ACCURACY NOTE 2	LINE REGULATION NOTE 3	LOAD REGULATION NOTE 4	% EFF. (Typ.) NOTE 5
CFM100M050	5 V	20 A	0 A	2%	4.75~5.25	±1%	±0.5%	±1%	83%
CFM100M075	7.5 V	13.4 A	0 A	2%	7.13~7.88	±1%	±0.5%	±1%	87%
CFM100M090	9 V	11.2 A	0 A	1%	8.55~9.45	±1%	±0.5%	±1%	89%
CFM100M120	12 V	8.4 A	0 A	1%	11.4~12.6	±1%	±0.5%	±1%	89%
CFM100M150	15 V	6.7 A	0 A	1%	14.25~15.75	±1%	±0.5%	±1%	90%
CFM100M180	18 V	5.6 A	0 A	1%	17.1~18.9	±1%	±0.5%	±1%	90%
CFM100M240	24 V	4.2 A	0 A	1%	22.8~25.2	±1%	±0.5%	±1%	91%
CFM100M280	28 V	3.6 A	0 A	1%	26.6~29.4	±1%	±0.5%	±1%	90%
CFM100M360	36 V	2.8 A	0 A	1%	34.2~37.8	±1%	±0.5%	±1%	91%
CFM100M480	48 V	2.1 A	0 A	1%	45.6~50.4	±1%	±0.5%	±1%	92%

Specifications are subject to change without notice.

Specifications

INPUT SPECIFICATIONS:

Voltage ..... 90~264V_{ac}
120~370V_{dc}
Frequency ..... 47 to 63Hz
Inrush Current ..... 80A max. @240V_{ac}
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%/℃ max.

GENERAL SPECIFICATIONS:

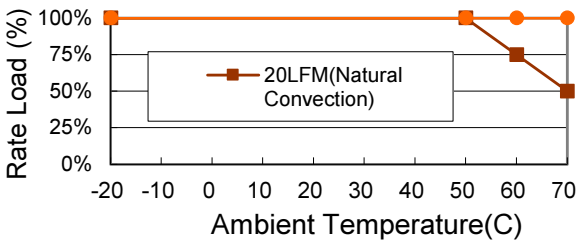
Isolation ..... Input to Output = 5,656V_{dc}
Operating Temperature ..... -20℃~ 70℃ (See Derating Curve)
Storage Temperature ..... -20 ~ 85℃
Humidity ..... 93% RH max. Non Condensing
Cooling ..... Natural Convection
Switching Frequency ..... 90kHz Typical
MTBF ..... MIL-HDBK-217F, GB, 25℃/115V_{ac} ..... 150khrs typ.
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 Class B
EN55032 Class B, EN55024, FCC Part15 Class B
EN61000-6-1, EN61204-3, EN61000-3-2, 3
Safety ..... Class I, IEC60601-1:2005+A1
EN60601-1:2006+A11+A1+A12, ANSI/AAMI ES60601-1:2005

CFM100M Series Derating Curve

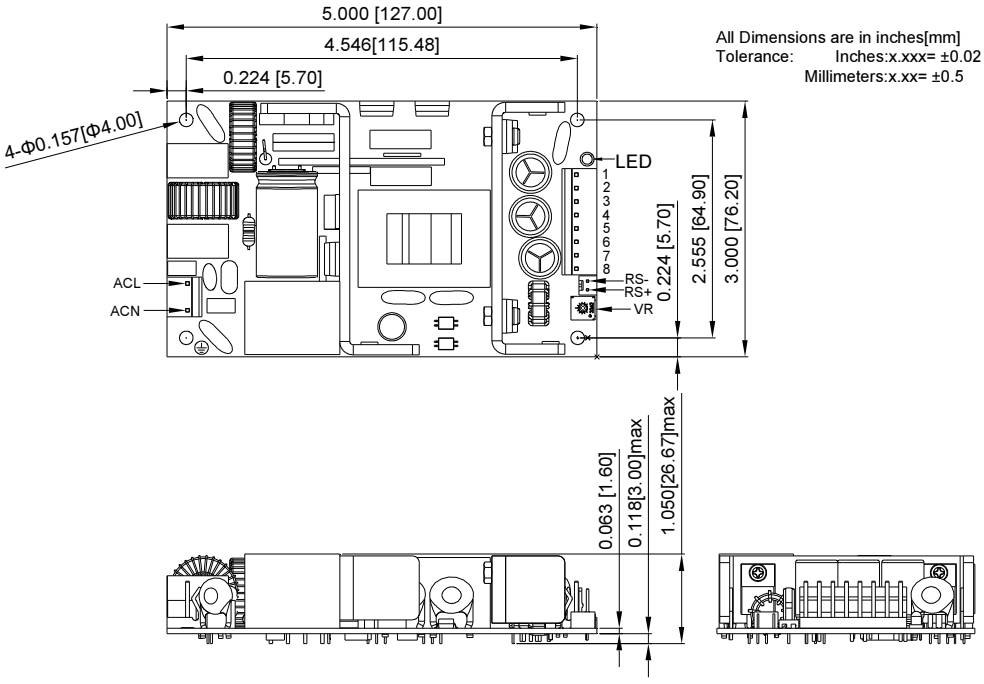
CFM100M



NOTE:

1. CFM100M050: Add a 0.1uF ceramic capacitor and 220uF E.L. capacitor to output for Ripple & Noise measuring @20MHz BW.
   Other Model: Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor
   to output for ripple&noise measuring @20MHz BW.
2. Voltage accuracy is set at 100% rated load and 25℃ 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℃.
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