

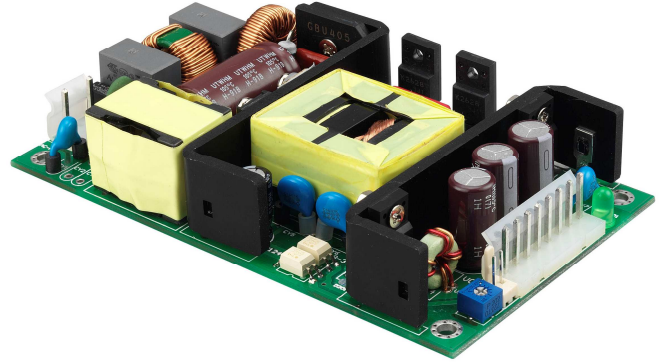
CFM100M SERIES

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



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%/°C max. |

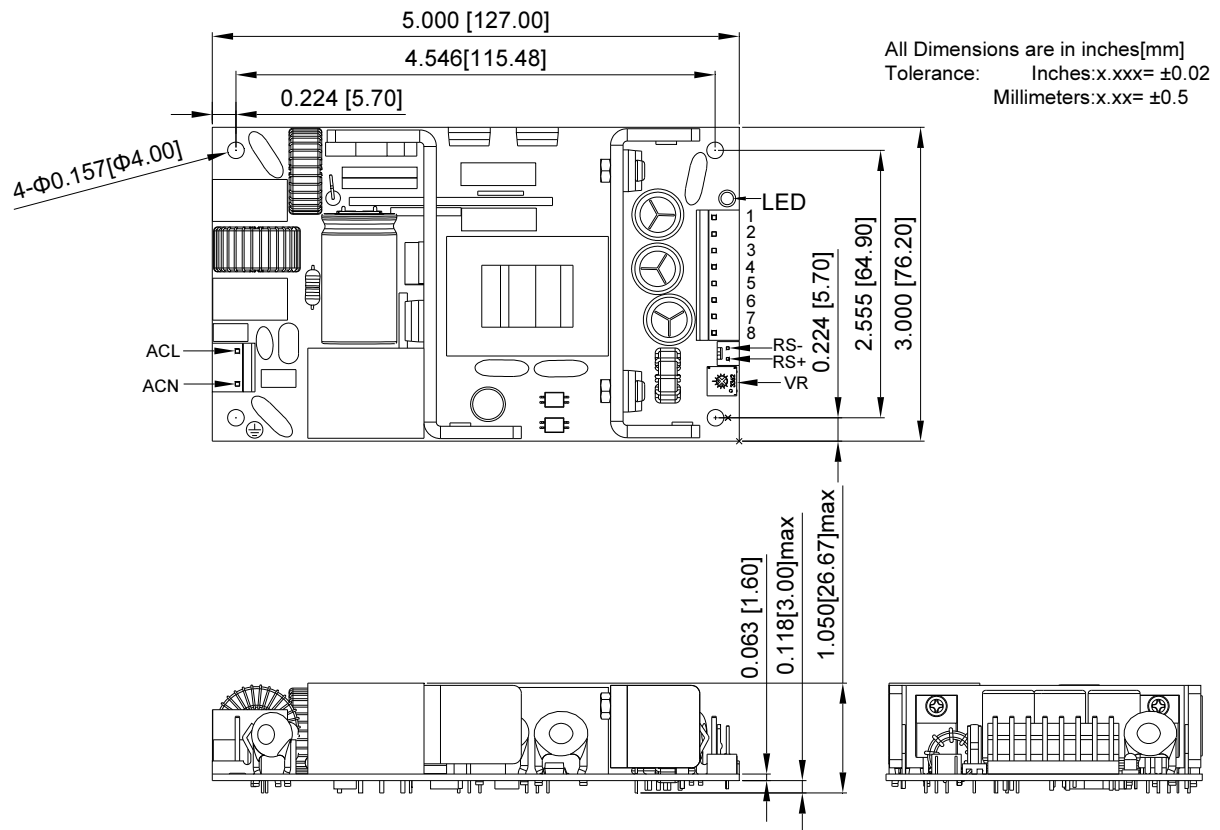
GENERAL SPECIFICATIONS:

| | |
|-----------------------------|---|
| Isolation | Input to Output = 5,656V _{dc} |
| 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 _{ac} 150khrs typ. |
| Altitude | 3000m |
| Dimensions | 5.000x3.000x1.050 inches (127.00x76.20x26.67 mm) |
| Weight | 270g (0.6Pounds) |

SAFETY AND EMC:

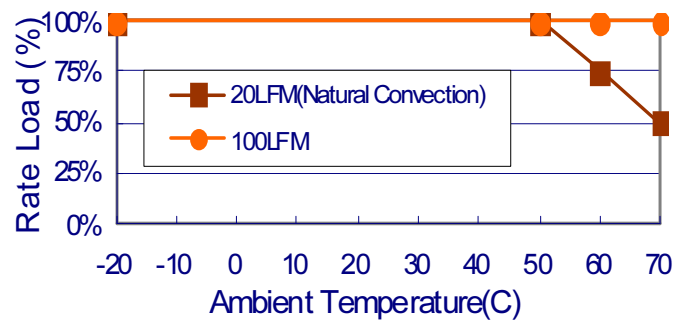
| | |
|-----------------------------|---|
| Emission and Immunity | EN60601-1-2:2015 ed. 4.0, EN55011 Class B EN55032 Class B, EN55024, FCC Part15 Class B EN61000-6-1, EN61204-3, EN61000-3-2, 3 |
| Safety | Class I, ANSI/AAMI ES60601-1:2005 |

Mechanical Specification



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°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 (+).