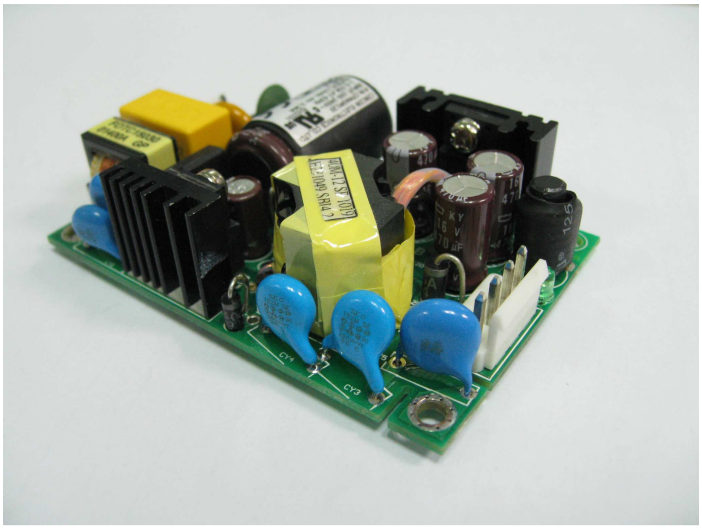
CFM40M SERIES

40W MEDICAL AND ITE OPEN FRAME AC-DC MODULES

E252331
E176177

Features

* Universal Input Range 90~264VAC
* Medical and ITE Approved
* Efficiency to 88% Typical
* Continuous Short Circuit Protection
* Meets EN55011 and EN55022 Class B
* No load Power Consumption<0.3W
* 2"x 3" Size
* Meets 2 MOPP



MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE & NOISE NOTE 2	VOLTAGE ACCURACY NOTE 1	LINE REGULATION NOTE 3	LOAD REGULATION NOTE 4	% EFF (Typ.) NOTE 5
CFM40M033	3.3 V	6 A	50 mV	±1%	±0.5%	±1%	76%
CFM40M050	5 V	6 A	1%	±1%	±0.5%	±1%	80%
CFM40M090	9 V	4.45 A	1%	±1%	±0.5%	±1%	84%
CFM40M120	12 V	3.34 A	1%	±1%	±0.5%	±1%	86%
CFM40M150	15 V	2.67 A	1%	±1%	±0.5%	±1%	87%
CFM40M240	24 V	1.67 A	1%	±1%	±0.5%	±1%	88%
CFM40M300	30 V	1.33 A	1%	±1%	±0.5%	±1%	88%
CFM40M360	36 V	1.11 A	1%	±1%	±0.5%	±1%	88%
CFM40M480	48 V	0.834 A	1%	±1%	±0.5%	±1%	88%

Specifications are subject to change without notice.

Specifications

INPUT SPECIFICATIONS:

Voltage ..... 90~264Vac
Frequency ..... 47 to 63Hz
Inrush Current ..... Cold start @25℃ 60A max. @240Vac
Input Current ..... 100Vac/1A max., 240Vac/0.55A max.
Leakage Current ..... 100uA max.

OUTPUT SPECIFICATIONS:

Hold-up Time ..... 10ms typ. @115Vac
Short Circuit Protection ..... Hiccup Mode (Auto Recover)
Over Voltage Protection ..... TVS Component to Clamp
Temperature Coefficient ..... ±0.05%/℃

GENERAL SPECIFICATIONS:

Isolation ..... Input to output=5,656VDC
Operating Temperature ..... 0℃ ~ 70℃(see Derating Curve)
Storage Temperature ..... -20℃~85℃
Humidity ..... 93% RH max. Non condensing
Cooling ..... Natural Convection
Switching Frequency ..... 65KHz Typical
MTBF ..... MIL-HDBK-217F, GB, 25℃/115VAC ..... 200Khrs min.
Altitude 3000m
Dimensions ..... 3.00x2.00x0.91 inches (76.2x50.8x23.1 mm)
CFM40XXX-P: 3.00x2.00x0.91 inches (76.2x50.8x23.1 mm)
Weight..... 90g

SAFETY AND EMC:

Emission and Immunity (Ed. 4.0) .. EN55011, EN55032, EN55022 Class B
FCC CFR 47 Part 15,18, EN61204-3, EN61000-6-1, EN610006-3
EN60601-1-2, EN61000-3-2, EN61000-3-3
Safety (Ed. 3.1) ..... Class I, IEC60601-1:2005+A1:2012, EN60601-1:2006/A1:2013
UL ANSI/AAMI ES60601-1:2005, IEC60950-1, EN60950-1, UL60950-1

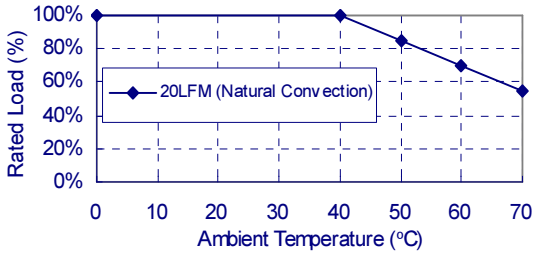
NOTE:

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 measurement @20MHz BW.
3. Line regulation is measured from high line to low line with full load.
4. Load regulation is measured from 10% to 100% full load.
5. Typical efficiency at 230VAC and full load 25℃.
6. Standard input and output connectors (CN1 and CN2) wafer with TAIWAN KING PIN TERMINAL PVHI series and mate with JST housing VHR series or equivalent.

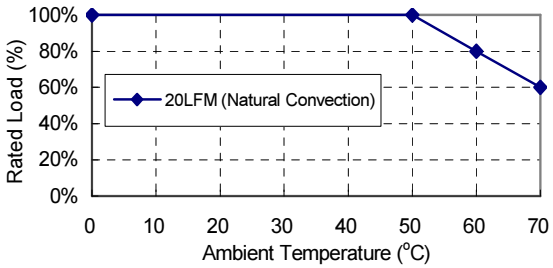
CFM40M Series Derating Curve

Open Frame version: CFM40MXXX

CFM40M050

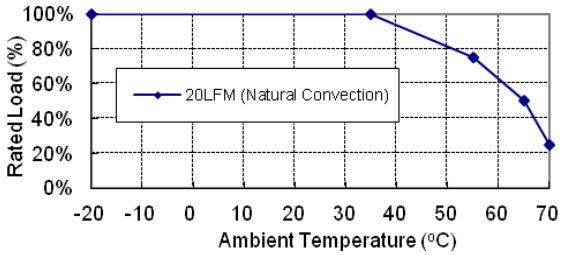


CFM40M033、090、120、150、240、300、360、480

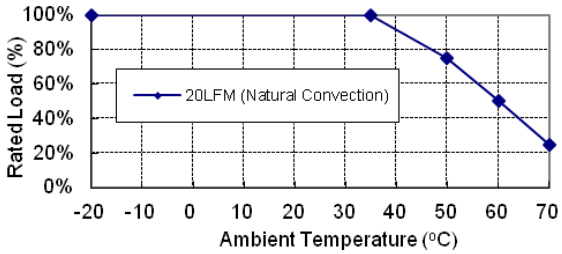


Covered version: CFM40MXXX-C

CFM40M050-C



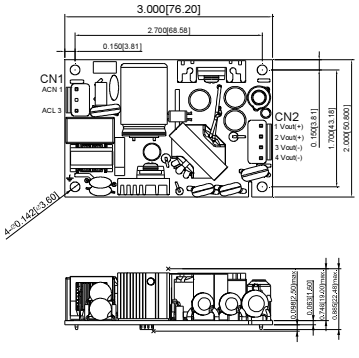
CFM40M033-C、090-C、120-C、150-C、240-C、300-C、360-C、480-C



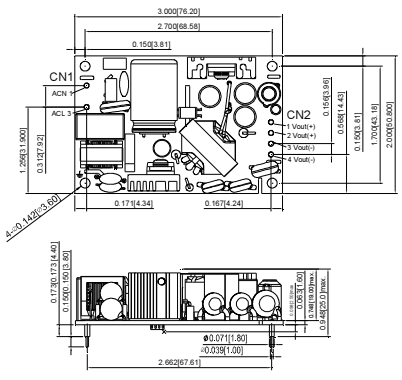
CFM40M Series

All Dimensions are in inches(mm)
Tolerance:Inches:X.XXX±0.02
Millimeters:X.XX±0.5

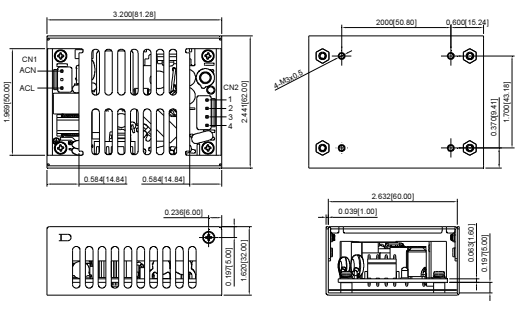
CFM40MXXX



CFM40MXXX-P



CFM40MXXX-C



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