



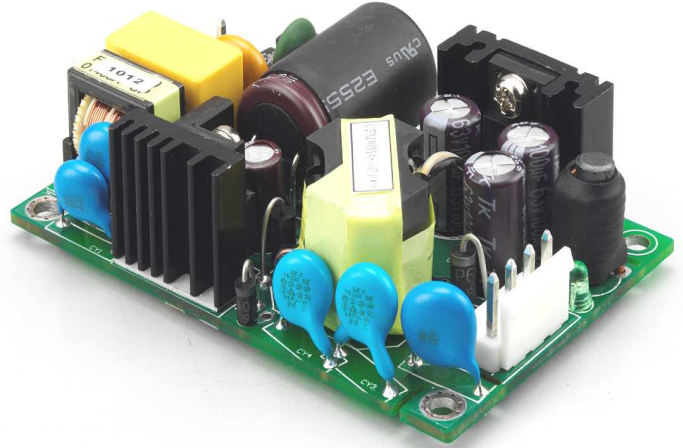
# CFM40M SERIES

## 40W MEDICAL AND ITE OPEN FRAME AC-DC MODULES



### Features

- \* Universal Input Range 90~264VAC
- \* Efficiency to 88% Typical
- \* Continuous Short Circuit Protection
- \* No Load Power Consumption<0.3W
- \* 2"x 3" Size
- \* Meets 2 MOPP
- \* Medical and ITE Approved
- \* Meets IEC/EN60335-1
- \* Meets EN55011 and EN55032 Class B



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 120~370Vdc
Frequency	47 to 63Hz
Inrush Current	Cold start @25°C 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%/°C

### GENERAL SPECIFICATIONS:

Isolation	Input to output=4000VAC min.
Operating Temperature	-20°C ~ 70°C (see Derating Curve)
Storage Temperature	-40°C~85°C
Humidity	93% RH max. Non Condensing
Cooling	Natural Convection
Switching Frequency	65KHz Typical
MTBF	MIL-HDBK-217F, GB, 25°C/115VAC ..... 200Khrs min.
Altitude	3000m
Dimensions	3.000x2.000x0.909 Inches (76.20x50.80x23.10 mm) CFM40XXX-P: 3.000x2.000x0.948 Inches (76.20x50.80x25.00 mm) CFM40XXX-C: 3.200x2.441x1.260 Inches (81.28x62.00x32.00 mm)
Weight	CFM40MXXX, CFM40MXXX-P: 90g, CFM40MXXX-C: 176g

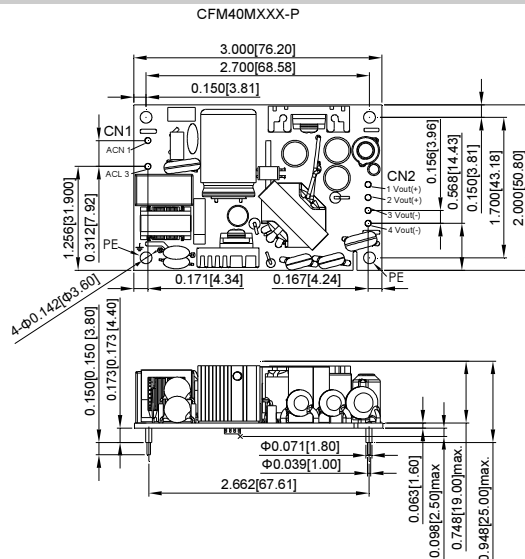
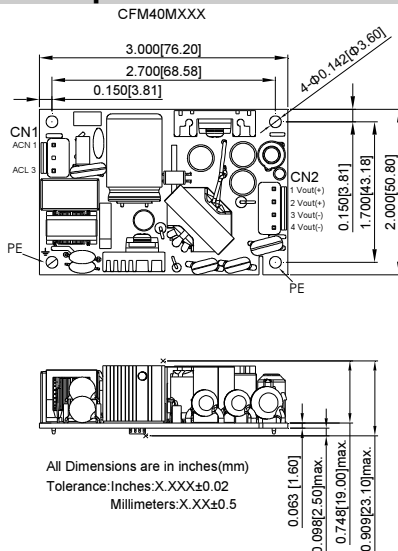
### SAFETY AND EMC:

Emission and Immunity (Ed. 4.0)	EN55011, EN55032, EN55032 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:

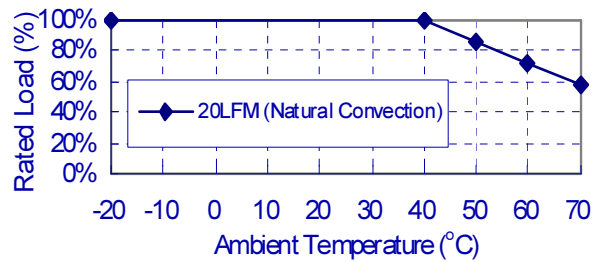
1. Voltage accuracy is set at full load.
2. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for ripple&noise measurement @20MHz BW.
3. Line regulation is measured from high line to low line with full load.
4. Load regulation is measured from 10% to 100% full load.
5. Typical efficiency at 230VAC and full load 25°C.
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.

## Mechanical Specification

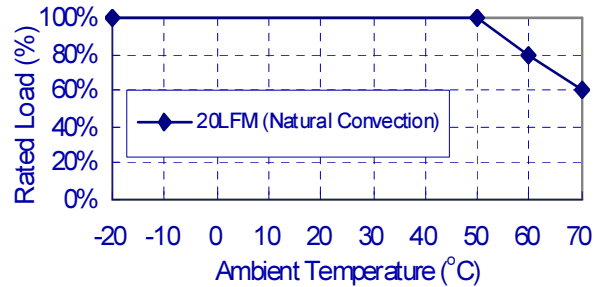


## CFM40M Series Derating Curve

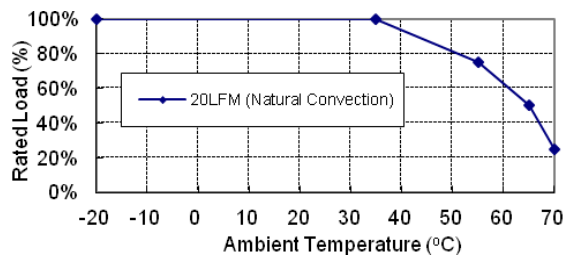
### Open Frame version: CFM40MXXX CFM40M050



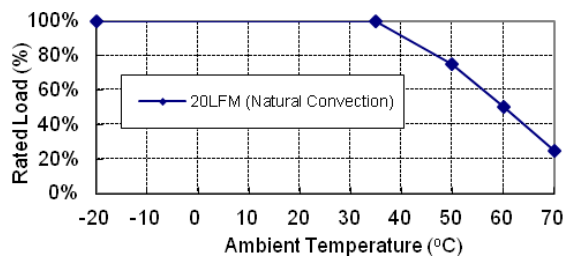
### CFM40M033、090、120、150、240、300、360、480



### Covered version: CFM40MXXX-C CFM40M050-C

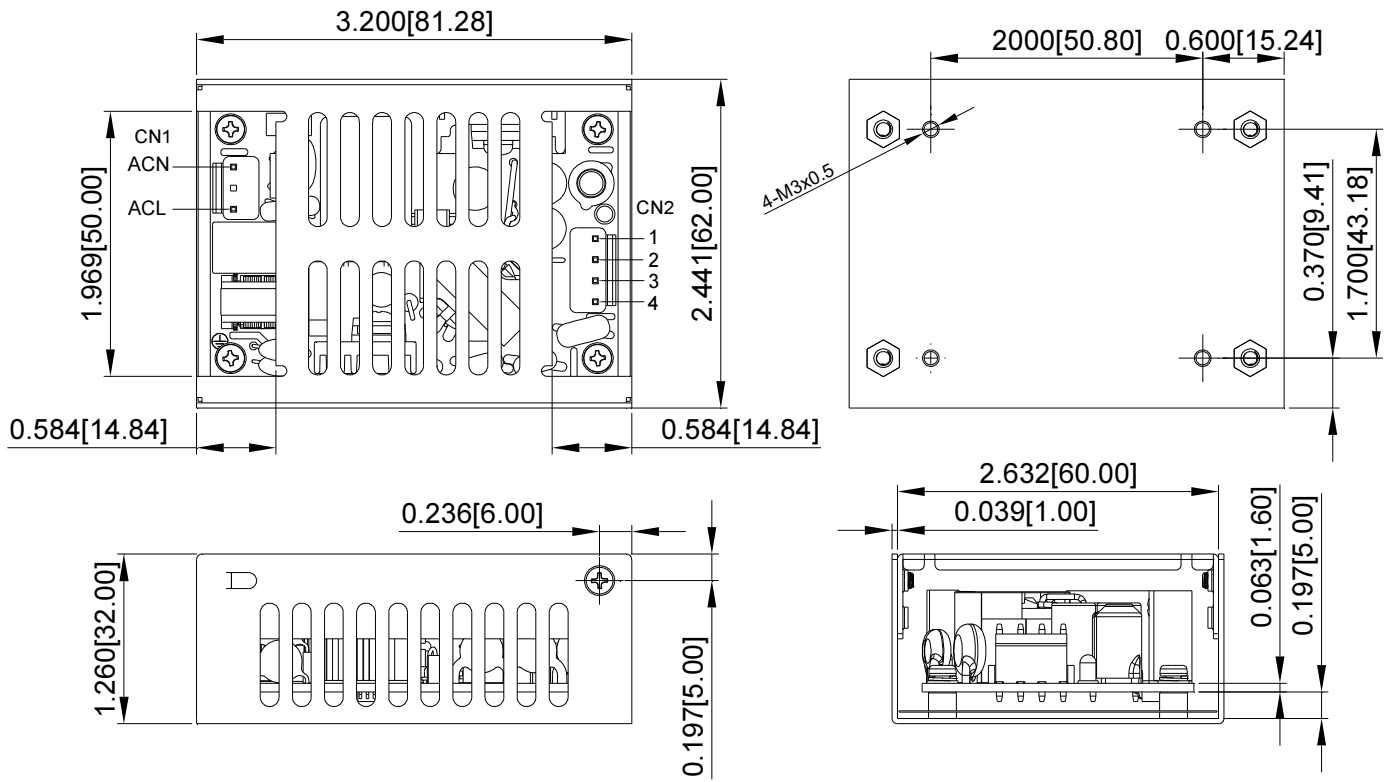


### CFM40M033-C、090-C、120-C、150-C、240-C、300-C、360-C、480-C



**Mechanical Specification**

CFM40MXXX-C



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