



CFM21M SERIES

20 WATT SINGLE OUTPUT

AC-DC MODULES



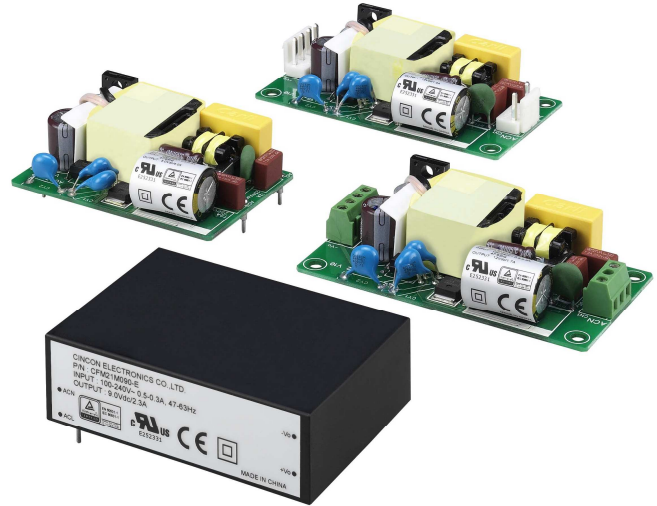
EN 60601-1
IEC 60601-1
www.tuv.com
ID 1419051834

cULus
E252331



Features

- * Universal Input Range 90~264VAC
- * Class II
- * Miniature Size Low Profile 0.8"
- * Industry-Standard Pin Out
- * Efficiency to 86%
- * Option for On-Board, Connector, Screw Terminal or Encapsulated type
- * Continuous Short Circuit Protection
- * Over Voltage Protection
- * No Load Input Power < 0.1W
- * Leakage Current < 100uA
- * UL60601-1/IEC60601-1/EN60601-1 Ed.3.1 Medical Safety Approved
- * 2 MOPP
- * Peak Load 130% (note 8)
- * Meet UL62368/IEC62368/EN62368
- * Meet UL60335-1/IEC60335-1/EN60335-1



MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE & NOISE NOTE 1	VOLTAGE ACCURACY NOTE 2	LINE REGULATION NOTE 3	LOAD REGULATION NOTE 4	OUTPUT RATED POWER	% EFF.
CFM21M050	5.0 V	4.0 A	50 mV	±1%	±0.5%	±1.0%	20.0 W	81%
CFM21M090	9.0 V	2.3 A	90 mV	±1%	±0.5%	±1.0%	20.7 W	83%
CFM21M120	12 V	1.7 A	100 mV	±1%	±0.5%	±1.0%	20.4 W	85%
CFM21M150	15 V	1.4 A	100 mV	±1%	±0.5%	±1.0%	21.0 W	85%
CFM21M240	24 V	0.9 A	100 mV	±1%	±0.5%	±1.0%	21.6 W	86%

Specifications are subject to change without notice.

Specifications

INPUT SPECIFICATIONS:

Voltage	90~264Vac
Frequency	47 to 63Hz
Input Current	0.3 to 0.5A
Inrush Current Cold Start@25°C	40A max. @230Vac
Leakage Current	70uA Typical - 100uA max.

OUTPUT SPECIFICATIONS:

Isolation Input to Output = 4000VAC
 Hold-up Time 10ms typ. @115Vac
 Short Circuit Protection Continuous
 Over Voltage Protection (TVS) 110%-140% of Nominal Output Voltage

GENERAL SPECIFICATIONS:

Efficiency	See Table
Switching Frequency	65KHz typ.
Operating Temperature	-25 ~ 70℃ (with De-Rating)
Storage Temperature	-40~85℃
Cooling	Natural Convection
Humidity	93% RH max. Non Condensing
Operating Altitude	5000m
MTBF	MIL-HDBK-217F, GB 500Khrs min.
Dimensions	2.38x1.60x0.80inches (60.5x40.6x20.4mm) -T: 3.00x1.60x0.77inches (76.2x40.6x19.5mm) -E: 2.53x1.74x0.80Inches (64.2x44.2x20.4mm) -S: 3.00x1.60x0.77Inches (76.2x40.6x19.5mm)
Weight	55g, 60g (-T, -S), 110g(-E)

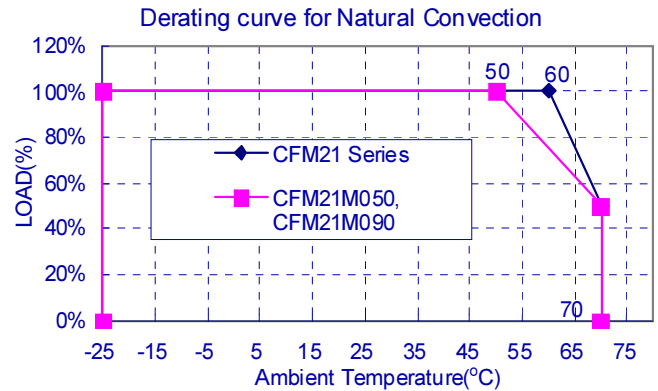
SAFETY AND EMISSION:

Emissions and Immunity (Ed. 4.0) EN55011 Class B, EN61000-3-2(3)
EN60601-1-2 2015, IEC 61000-4-2(3/4/5/6/8/11)
Safety Approved (Ed.3.1) IEC60601-1
ANSI/AAMI ES 60601-1:2005/A1:2012&C1:2009/®2012&2010/®2012
CAN/CSA-C22.2 NO. 60601-1:14, EN 60601-1: 2006+A11:2011+A1:2013,
IEC 60601-1:2005+A1:2012

Mechanical Specification

Annotations: For all models, height does not exceed 34mm max.

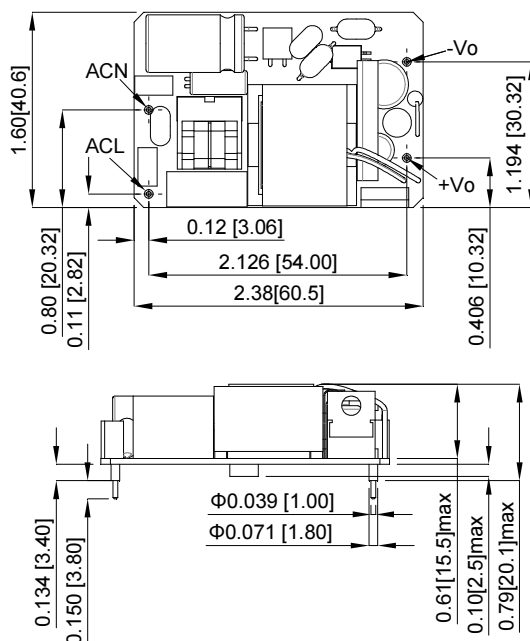
CFM21M Series De-rating Curve



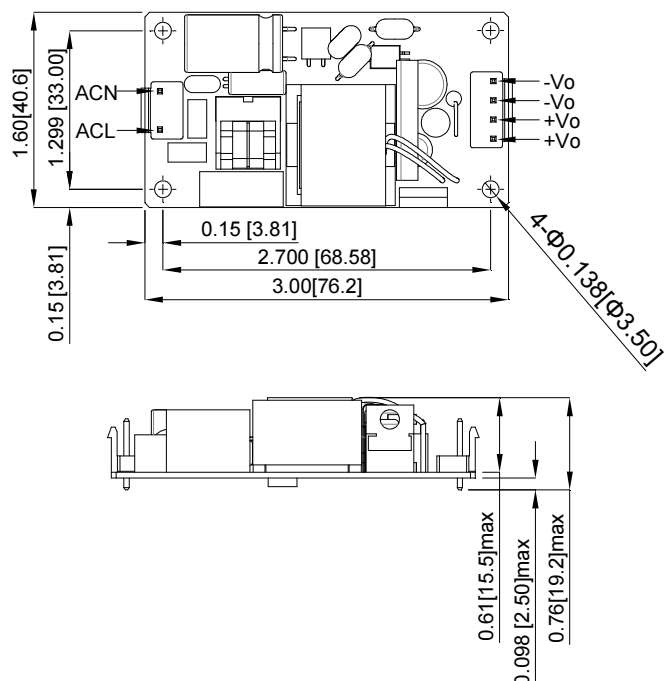
NOTE:

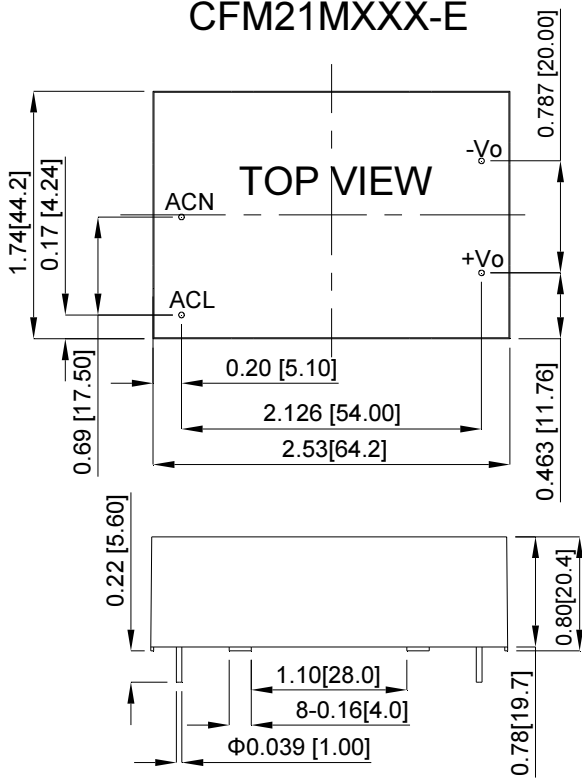
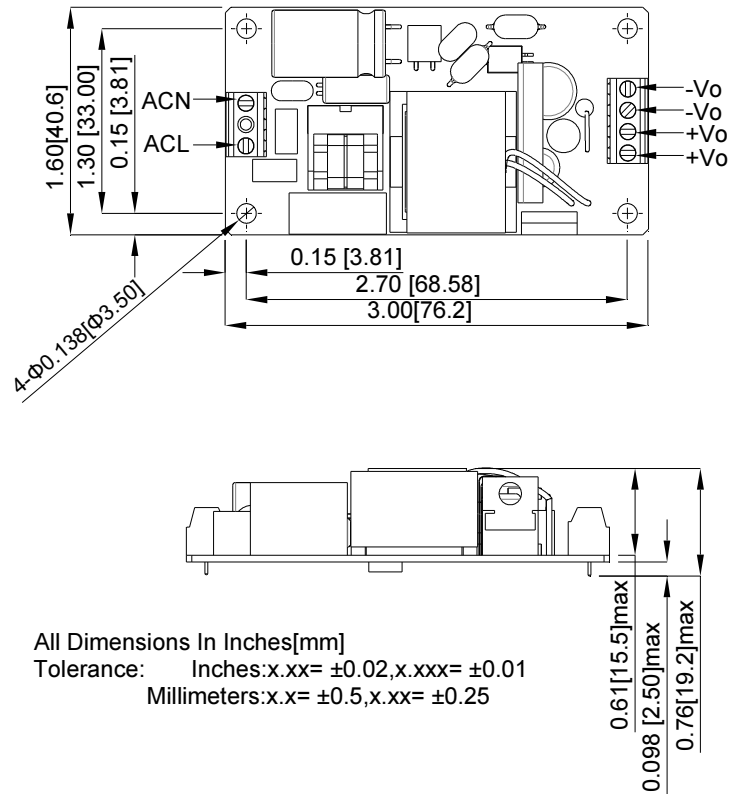
1. Add a 0.1 μ F ceramic capacitor and a 10 μ F E.L. capacitor to output for ripple&noise measuring @20MHz BW.
2. Voltage accuracy is set of 100% rated load.
3. Line regulation is measured from high line to low line with full load.
4. Load regulation is measured from 10% to 100% full load.
5. T Version Connection: JST B3P-VH / B4P-VH or equivalent.
6. S Version Connection: DECA MB332-381A or equivalent.
7. Typical efficiency at 230VAC and 100% load at 25°C.
8. Peak load 130% lasting < 10 seconds with a maximum duty cycle of 10% at nominal Line.

CFM21MXXX



CFM21MXXX-T



Mechanical Specification**CFM21MXXX-E****CFM21MXXX-S**

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

Mouser Electronics

Authorized Distributor

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Cincon:

[CFM21M050](#) [CFM21M090](#) [CFM21M120](#) [CFM21M150](#) [CFM21M240](#) [CFM21M050-S](#) [CFM21M150-T](#) [CFM21M240-](#)
[E](#) [CFM21M150-E](#) [CFM21M090-S](#) [CFM21M120-T](#) [CFM21M050-T](#) [CFM21M120-S](#) [CFM21M090-E](#) [CFM21M150-S](#)
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