



CFM21(-E,-S) SERIES

20 WATT SINGLE OUTPUT

AC-DC MODULES



UL 60950-1
And CSA C22
NO.60950-1-07
APPROVED



IEC
60601-1
EN
60601-1



Features

- * Universal Input Range 90-264VAC
- * Miniature Size, Low Profile 0.8"
- * Industry-Standard Pin Out
- * Efficiency to 85%
- * Option for On-board, Connector, Screw Terminal Or Encapsulated type
- * Continuous Short Circuit Protection
- * Over Voltage Protection
- * No load input power < 0.3W
- * Leakage Current < 0.1mA
- * UL60601-1/IEC60601-1/EN60601-1 Medical safety approved
- * UL60950-1/IEC60950-1/EN60950-1 ITE safety approved



MODEL	INPUT VOLTAGE	OUTPUT VOLTAGE	MIN. LOAD	MAX. LOAD	Output Rated Power	RIPPLE & NOISE	VOLTAGE ACCURACY	% EFF.
CFM21S033	90-264VAC	3.3V	0	4.0A	13.2W	50mV	±1%	75 %
CFM21S050	90-264VAC	5.0V	0	4.0A	20.0W	50mV	±1%	80 %
CFM21S090	90-264VAC	9.0V	0	2.3A	20.7W	90mV	±1%	81 %
CFM21S120	90-264VAC	12V	0	1.7A	20.4W	100mV	±1%	83 %
CFM21S150	90-264VAC	15V	0	1.4A	21.0W	100mV	±1%	84 %
CFM21S240	90-264VAC	24V	0	0.9A	21.6W	100mV	±1%	85 %

Specifications

INPUT SPECIFICATIONS:

Voltage	90~264Vac
Frequency	47 to 63Hz
Input Current	0.3 to 0.5A
Inrush Current	Cold Start@25℃..... 40A max. @230Vac
Leakage Current	0.1mA max.

OUTPUT SPECIFICATIONS:

Voltage Accuracy:	±1.0% max.
Line Regulation (note 3)	±0.5% max.
Load Regulation (note 4)	±1.0% max.
Holdup Time	10ms typ. @115Vac
Short Circuit Protection	Continuous
Over Voltage Protection(TVS)	115%-140% of nominal output voltage

GENERAL SPECIFICATIONS:

Efficiency	see Table
Switching Frequency	100KHz typ.
Isolation	Input to output = 5656VDC
Operating Temperature	-25 ~ 70°C (with de-rating)
Storage Temperature	-40~85°C
Cooling	Natural Convection
Humidity	93% RH max. Non condensing
MTBF	MIL-STD-217F, GB 650K hrs min.
Dimensions	-E: 2.53x1.74x0.80Inches (64.2x44.2x20.4mm) -S: 3.00x1.60x0.77Inches (76.2x40.6x19.5mm)
Weight	105g(-E), 55g(-S)

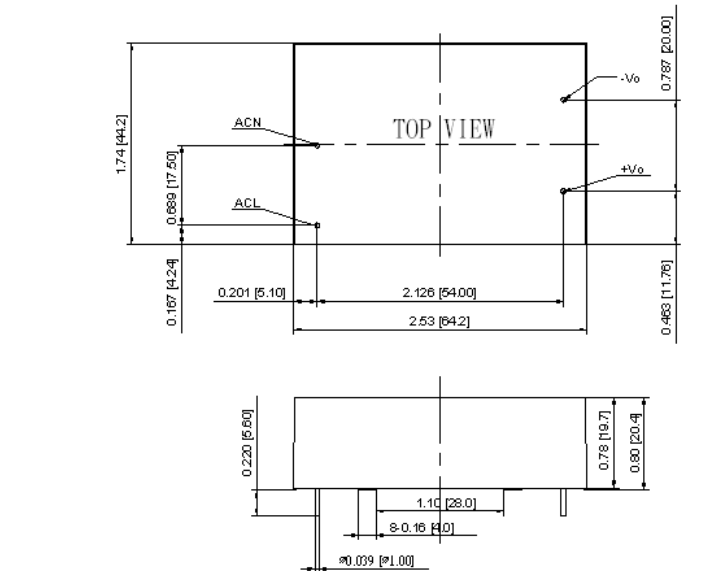
Mechanical Specification

CFM21SXXX-E

All Dimensions are in inches[mm]

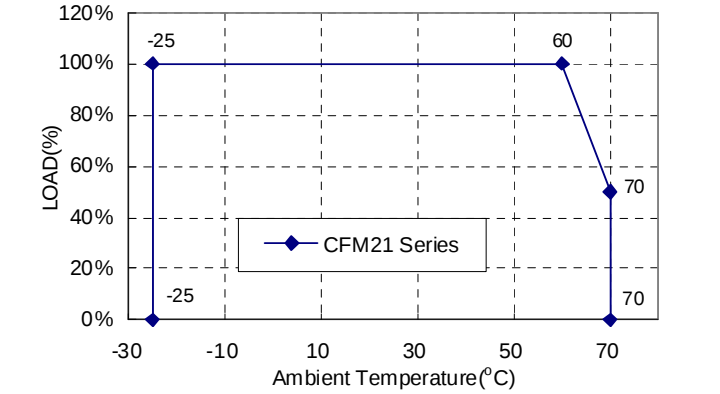
Tolerance: Inches: x.xx=±0.02, x.xxx=±0.010

Millimeters: x.x=±0.5, x.xx=±0.25



CFM21 Series De-rating Curve

Derating curve for Natural Convection



SAFETY AND EMISSION:

CE Directive	2004/108/EC, 93/42/EEC
Emissions ...	EN60601-1/EN61204-3/EN55022/CISPR Class B, EN55024
Safety Approvals	UL60601-1, IEC60601-1, EN60601-1
	UL60950-1, IEC60950-1, EN60950-1

NOTE:

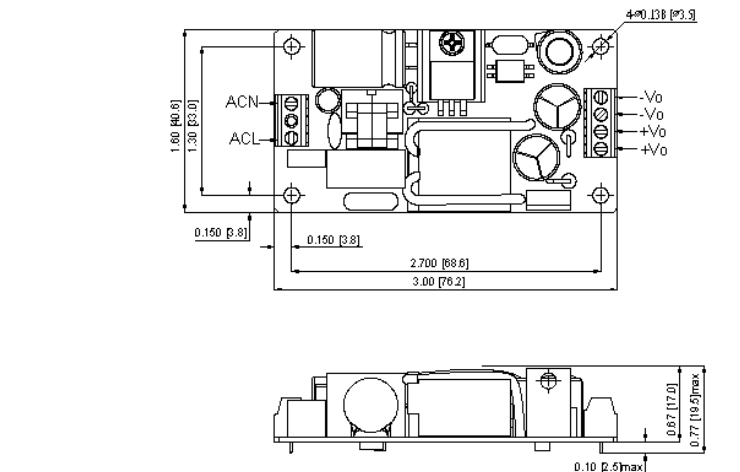
1. Voltage accuracy is set of 100% rated load.
2. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for Ripple & Noise measuring @20MHz BW.
3. Line regulation is measured from high line to low line with full load.
4. Load regulation is measured from 10% to 100% full load.
5. S Version Connection : DECA MB332-381A or equivalent

CFM21SXXX-S

All Dimensions In Inches[mm]

Tolerance: Inches x.xx = ± 0.02 , x.xxx = ± 0.01

Millimeters: $x.x = \pm 0.5$, $x.xx = \pm 0.25$



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

Mouser Electronics

Authorized Distributor

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Cincon:

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