



CFM21 SERIES

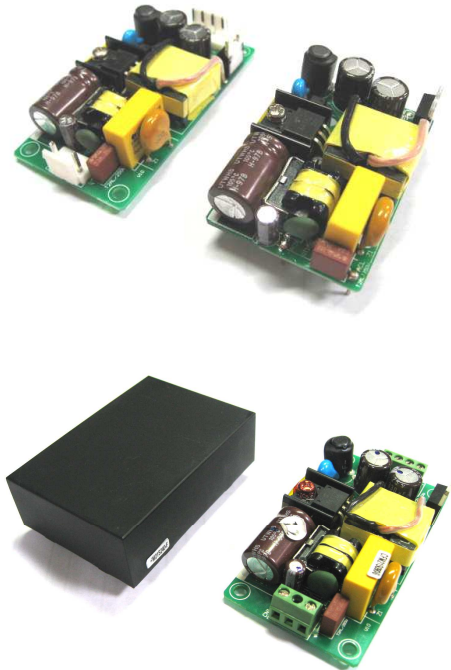
20 WATT SINGLE OUTPUT

AC-DC MODULES



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	90~264 VAC	3.3 V	0	4.0 A	13.2 W	50 mV	±1%	75%
CFM21S050	90~264 VAC	5.0 V	0	4.0 A	20.0 W	50 mV	±1%	80%
CFM21S090	90~264 VAC	9.0 V	0	2.3 A	20.7 W	90 mV	±1%	81%
CFM21S120	90~264 VAC	12 V	0	1.7 A	20.4 W	100 mV	±1%	83%
CFM21S150	90~264 VAC	15 V	0	1.4 A	21.0 W	100 mV	±1%	84%
CFM21S240	90~264 VAC	24 V	0	0.9 A	21.6 W	100 mV	±1%	85%

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℃..... 40A max. @230Vac
Leakage Current	0.1mA max.

OUTPUT SPECIFICATIONS:

Voltage Accuracy:	±1.0% max.
Line Regulation (note3)	±0.5% max.
Load Regulation (note4)	±1.0% max.
Hold-up Time	10ms typ. @115Vac
Short Circuit Protection	Continuous
Over Voltage Protection(TVS)	115%-140% of nominal output voltage

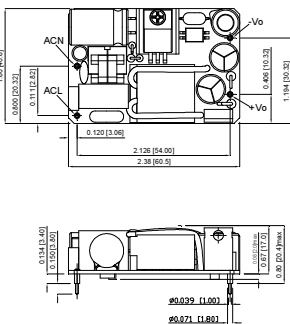
GENERAL SPECIFICATIONS:

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 650Khrs 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	50g, 55g(-T, -S), 105g(-E)

Mechanical Specification

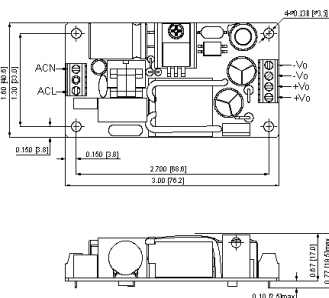
CFM21SXXX

All Dimensions In Inches[mm]
Tolerance: Inches:x.xx= ± 0.02 ,x.xxx= ± 0.01
Millimeters:x.x= ± 0.5 ,x.xx= ± 0.25



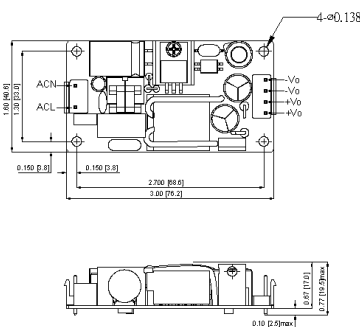
CFM21SXXX-S

All Dimensions In Inches[mm]
Tolerance: Inches x.xx= ±0.02, x.xxx= ±0.01
Millimeters x.x= ±0.5 x.xx= ±0.25



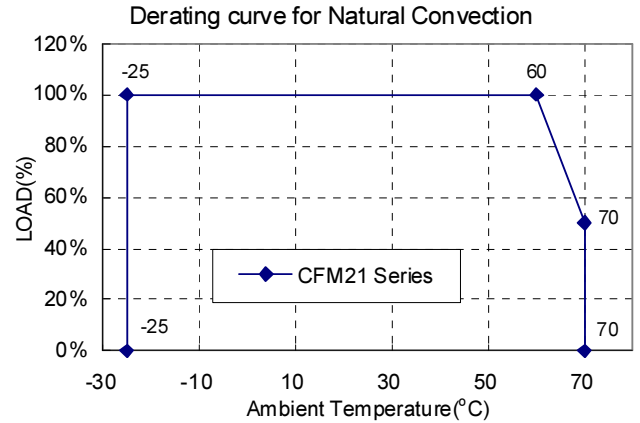
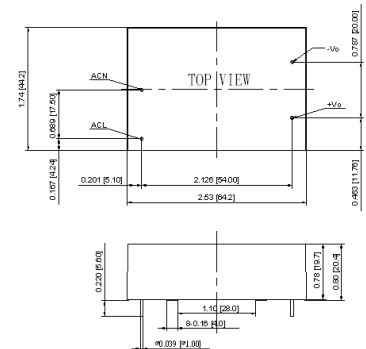
CFM21SXXX-T

Tolerance: Inches: x.xx = ±0.02, xxx = ±0.01
 Millimeters: x,x = ±0.5, x.xx = ±0.25



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



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. T Version Connection: JST B3P-VH / B4P-VH or equivalent.
6. S Version Connection: DECA MB332-381A or equivalent.