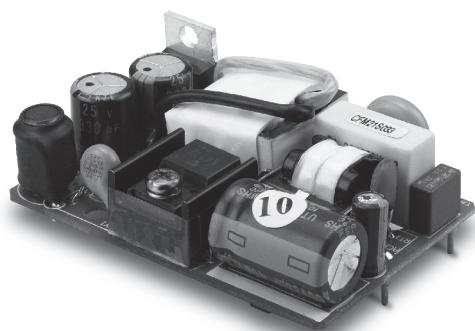


C F M 2 1  
S E R I E S

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

## 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.....	0.1mA max.

### OUTPUT SPECIFICATIONS:

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

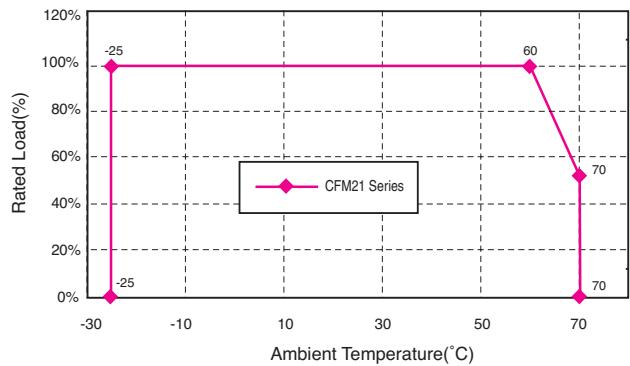
### GENERAL SPECIFICATIONS:

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 .....
Dimensions .....	2.38x1.60x0.80 inches (60.5x40.6x20.4 mm) -T: 3.00x1.60x0.77 inches (76.2x40.6x19.5 mm)
Weight .....	50g, 55g(-T)

### SAFETY AND EMC:

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

## CFM21 Series Derating Curve

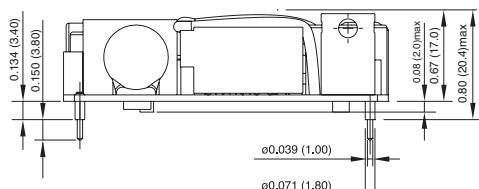
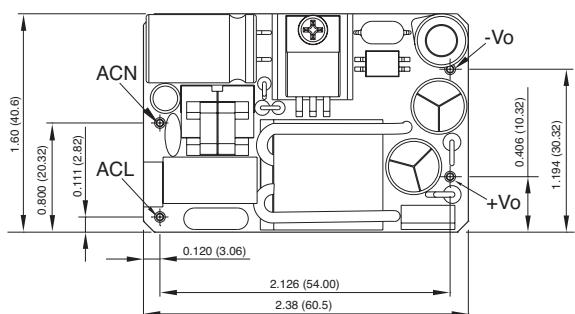


### NOTE:

1. Voltage accuracy is set of 100% rated load.
2. Add a 0.1μF ceramic capacitor and a 10μF 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 |

## CFM21S Series

All Dimensions In Inches(mm)  
Tolerance      Inches: x.xxx= ±0.02  
                  Millimeters: x.xx= ±0.5



## CFM21S-T Series

