



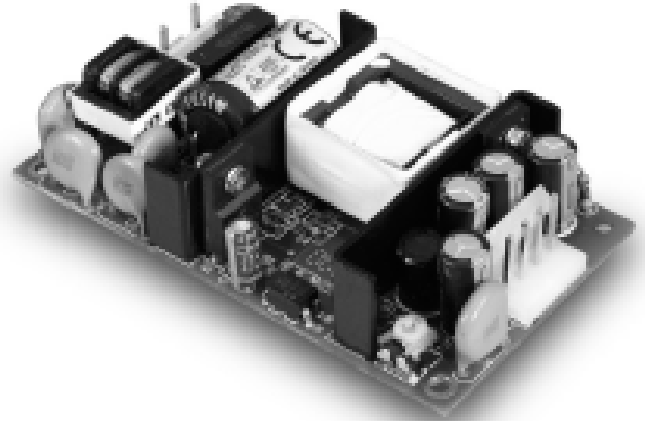
## CFM20 SERIES

### 20 WATT OPEN FRAME AC-DC MODULES



### Features

- \* Universal Input Range 85~264Vac
- \* Efficiency to 81%
- \* Industry Standard Pin Out
- \* Meets EN55022 Class B
- \* Continuous Short Circuit Protection
- \* PCB Mountable Type is available



MODEL	OUTPUT VOLTAGE	MAX. LOAD	MIN. LOAD	RIPPLE & NOISE NOTE 1	VOLTAGE ACCURACY NOTE 2	LINE REGULATION NOTE 3	LOAD REGULATION NOTE 4	% EFF. (Typ.) NOTE 5
CFM2001S	5 V	4400 mA	0 A	1%	±1%	±0.5%	±1%	72%
CFM2002S	12 V	1800 mA	0 A	1%	±1%	±0.5%	±1%	79%
CFM2003S	15 V	1400 mA	0 A	1%	±1%	±0.5%	±1%	80%
CFM2005S	24 V	920 mA	0 A	1%	±1%	±0.5%	±1%	81%
CFM2007S	3.3 V	4400 mA	0 A	50mV	±1%	±0.5%	±1%	66%
CFM2009S	9 V	2450 mA	0 A	1%	±1%	±0.5%	±1%	76%

## Specifications

### INPUT SPECIFICATIONS:

Voltage .....	85~264Vac
Frequency .....	47 to 63Hz
Inrush Current .....	40A max. @230Vac
Conducted EMI .....	CISPR/FCC Class B
Leakage Current .....	3.5mA max.

### OUTPUT SPECIFICATIONS:

Holdup Time .....	16ms typ. @115Vac
Short Circuit Protection .....	Hiccup Mode (Auto Recovery)
Over Voltage Protection .....	TVS Component to Clamp
Temperature Coefficient .....	±0.05%/°C

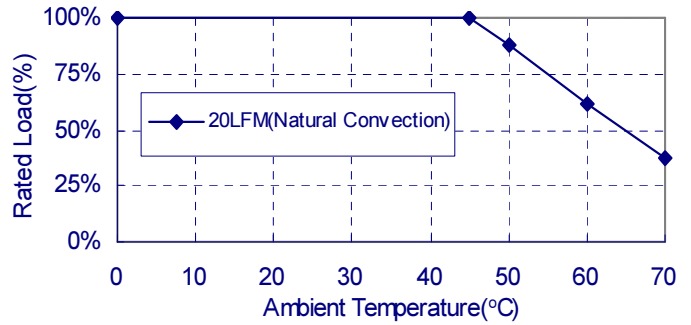
### GENERAL SPECIFICATIONS:

Isolation .....	Input to output = 4,242VDC
Operating Temperature .....	0 ~ 70°C (see Derating Curve)
Storage Temperature .....	-20~85°C
Humidity .....	93% RH max. Non condensing
Cooling .....	Natural Convection
Switching Frequency .....	67KHz Typical
MTBF .....	MIL-HDBK-217F, GB, 25°C/115VAC 300Khrs min.
Altitude .....	2000m
Dimensions .....	3.501x2.000x0.906Inches (88.92x50.80x23.00mm)
	(CFM200XS-P) 3.501x2.000x1.000Inches (88.92x50.80x25.40mm)
Weight .....	100g(0.22 Pounds)

### SAFETY AND EMC:

Emission and Immunity .....	EN55022 Class B
	EN61000-6-3, EN61000-3-2,
	EN61000-3-3
	EN55024, EN61204-3, EN61000-6-1
Safety .....	IEC60950-1, EN60950-1, UL60950-1

## CFM20S Series Derating Curve

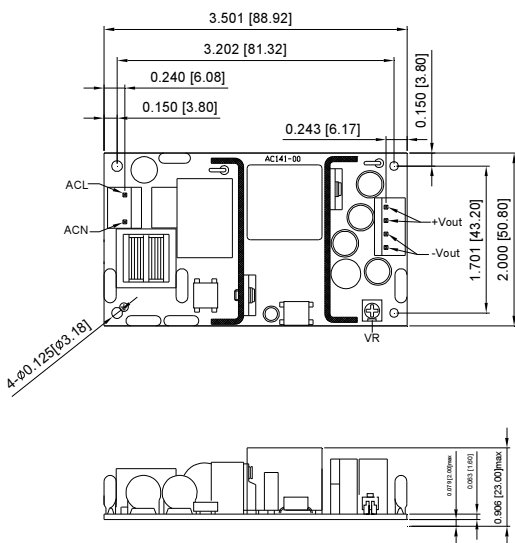


### NOTE:

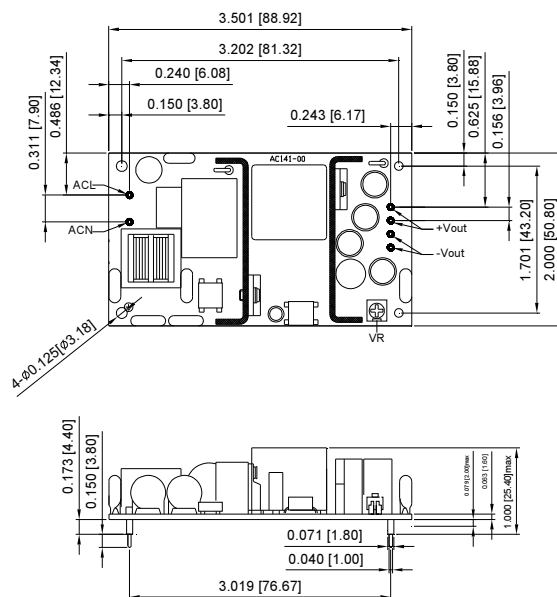
1. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for Ripple & Noise measuring @20MHz BW.
2. Voltage accuracy is set at 100% rated load and 25°C Ta.
3. Line regulation is measured from high line to low line with full load.
4. Load regulation is measured from full to 10% load.
5. Typical efficiency at 230VAC and full load at 25°C.
6. Standard input and output connectors wafer with LONG CHU P3060 series and mate with MOLEX housing 5195 series or equivalent.
7. Model "CFM200XS-P":Connectors with pcb mountable type.

### CFM20 Series

All Dimensions are in inches(mm)  
 Tolerance:Inches:X.XXX±0.02  
 Millimeters:X.XX±0.5



### CFM20XS-P Series



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