



# CFM12S SERIES

## 12 WATT SINGLE OUTPUT AC-DC OPEN FRAME

*Preliminary*



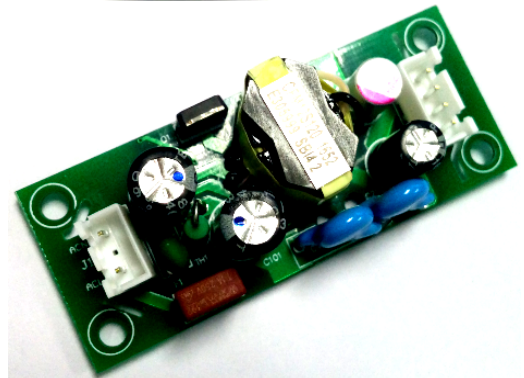
### Features

- \* Universal Input 90~264VAC
- \* High Efficiency up to 84%
- \* Meets EN55032 Class B and CIRSS/FCC Class B
- \* Meets IEC62368-1, UL62368-1
- \* Meets EN61558(60335)
- \* Continuous Short Circuit Protection
- \* Over Voltage Protection
- \* No load input power < 0.1W
- \* Class II



### Ordering information

- CFM12SXXX - X**
- Blank: PCB mount
  - E: Encapsulated
  - T: WAFER



MODEL	Output Voltage	Output Current	Ripple (mV p-p) NOTE 1	Voltage Accuracy NOTE2	Line Regulation NOTE3	Load Regulation NOTE4	% EFF. (typ.) NOTE5
CFM12S050	5V	2A	100mV	±2%	±1%	±1%	79%
CFM12S090	9V	1.34A	100mV	±2%	±1%	±1%	83.26%
CFM12S120	12V	1.0A	120mV	±2%	±1%	±1%	83.26%
CFM12S150	15V	0.8A	150mV	±2%	±1%	±1%	83.26%
CFM12S240	24V	0.5A	240mV	±2%	±1%	±1%	83.26%

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

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Elektronische Bauelemente und Systeme

## Specifications

### INPUT SPECIFICATIONS:

Voltage ..... 90~264Vac  
 Frequency ..... 47 to 63Hz  
 Inrush Current ..... 50A max. @240Vac, Cold Start @25°C  
 Leakage Current ..... 0.25mA max. @ 264Vac  
 Input Current ..... 0.4A max.

### OUTPUT SPECIFICATIONS:

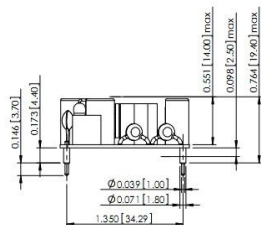
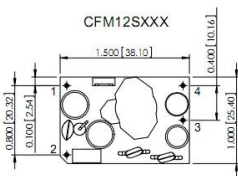
Holdup Time ..... 8ms typ. @115Vac  
 Short Circuit Protection .....Hiccup Mode (Auto Recovery)  
 Temperature Coefficient ..... ±0.05% / °C  
 Over Voltage Protection .....Hiccup Mode(Auto Recovery)  
 Startup time .....<3.0s

### GENERAL SPECIFICATIONS:

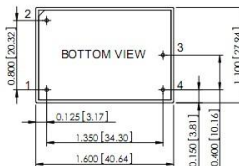
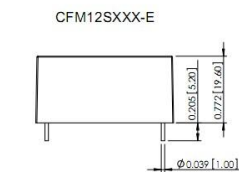
Isolation Voltage(Input to Output) ..... 3000VAC  
 Operating Temperature..... -30°C~70°C (Derating from 50°C to 70°C)  
 Storage Temperature ..... -40°C~85°C  
 Cooling ..... Natural Convection  
 Humidity ..... 93% RH max. Non condensing  
 Switching Frequency ..... 65KHz Typical  
 MTBF ..... MIL-HDBK-217F, GB, 25°C/115VAC ..... 300Khrs min.  
 Life time..... 26000 hours min.@ 75% load ,40°C  
 Altitude ..... 3000m  
 Dimensions ..... 1.500x1.000x0.764inches (38.10x25.40x19.40mm)  
 -E: 1.600x1.1x0.772 Inches (40.64x27.94x19.60 mm)  
 -T: 2.500x1.000x0.681 Inches (63.50x25.40x17.30 mm)  
 Weight ..... T B D

### Mechanical Specification

All Dimensions in inches[mm]  
 Tolerance Inches:x.xxx= ± 0.02  
 Millimeters: x.xx = ± 0.5

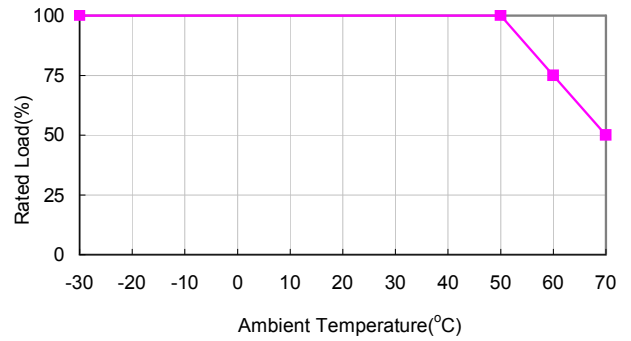


Pin	Function
1	ACN
2	ACL
3	-Vout
4	+Vout



## CFM12S Series De-rating Curve

Derating curve:



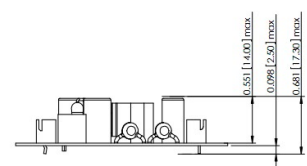
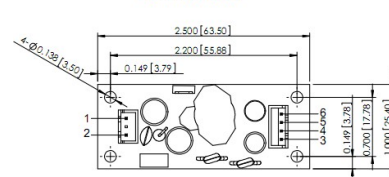
### SAFETY AND EMISSION:

Emission and Immunity..... EN55032 Class B, FCC Part 15 Class B  
 EN61000-3-2, EN6100-3-3  
 Immunity ..... EN55024, EN61204-3, EN61000-6-1  
 Safety ..... IEC60950-1, UL60950-1

### 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 wafer with JST B3B-XH / B4B-XH and mate with JST housing XH series or equivalent..

CFM12SXXX-T



Pin	Function
1	ACN
2	ACL
3	-Vout
4	-Vout
5	+Vout
6	+Vout

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

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