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60W Open Frame type Single output power supply < CFM61S



Features

- * Universal Input 90~264VAC
- * High Efficiency up to 90%
- * Meets EN55032 Class B and CIRSS/FCC Class B
- * Approved IEC62368-1, UL62368-1, EN62368-1
- * Continuous Short Circuit Protection
- * Over Voltage Protection
- * Peak Load (2 times of rated current (**note6**))
- * Class II



Ordering information

CFM61SXXX - X YZ (Optional)
 Blank: PCB mount Blank
 E: Encapsulated PL: PEAK LOAD FUNCTION
 T: WAFER

MODEL	Output Voltage	Output Current	Ripple (mV p-p) NOTE 1	Voltage Accuracy NOTE 2	Line Regulation NOTE 3	Load Regulation NOTE 4	% EFF. (typ.) NOTE 5
CFM61S050	5 V	8 A	50mV	±2%	±1%	±1%	86%
CFM61S120	12 V	5 A	120mV	±1%	±1%	±1%	88%
CFM61S150	15 V	4 A	150mV	±1%	±1%	±1%	88%
CFM61S240	24 V	2.5 A	240mV	±1%	±1%	±1%	89%
CFM61S360	36 V	1.67 A	360mV	±1%	±1%	±1%	89%
CFM61S480	48 V	1.25 A	480mV	±1%	±1%	±1%	90%

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



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Specifications

INPUT SPECIFICATIONS:

Voltage 90~264Vac
 Frequency 47 to 63Hz
 Inrush Current 120A max. @240Vac, Cold Start @25°C
 Leakage Current 0.25mA max. @ 264Vac
 Input Current 100Vac/1.5A max., 240Vac/0.8A max.

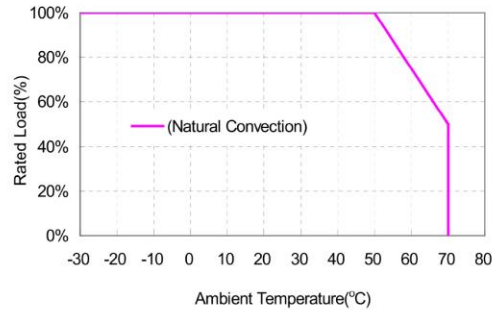
OUTPUT SPECIFICATIONS:

Holdup Time 10ms typ. @115Vac
 Short Circuit Protection Hiccup Mode (Auto Recovery)
 Temperature Coefficient ±0.05%/°C
 Over Voltage Protection TVS Component to Clamp
 Startup time <3.0s
 Switching Frequency 65KHz Typical

GENERAL SPECIFICATIONS:

Isolation Voltage(Input to Output) 3000VAC
 Operating Temperature..... -30°C~70°C (Derating from 50°C to 70°C)
 Storage Temperature -30°C~85°C
 Cooling Natural Convection
 Humidity 93%RH max. Non condensing
 Isolation Voltage (Input to Output) 3000VAC
 MTBF MIL-HDBK-217F, GB, 25°C/115VAC 300Khrs min.
 Life time..... 26000 hours min.@ 75% load, 40°C
 Altitude 5000m
 Dimensions 2.000x2.000x1.346 inches (50.80x50.80x34.20 mm)
 -E: 2.136x2.136x1.409 inches (54.25x54.25x35.80 mm)
 -T: 2.700x2.000x1.291 inches (68.58x50.80x32.80 mm)
 Weight 93g, 96g(-T), 190g(-E)

CFM61S Series De-rating Curve



SAFETY AND EMISSION:

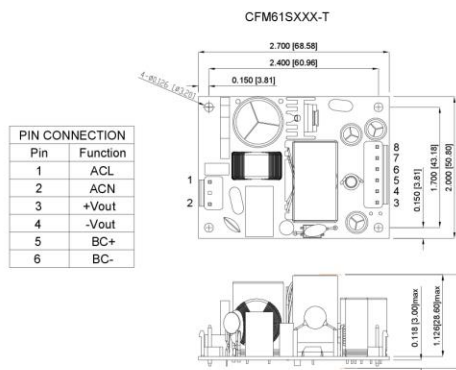
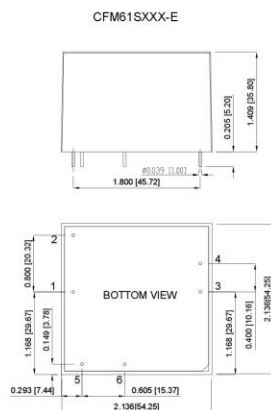
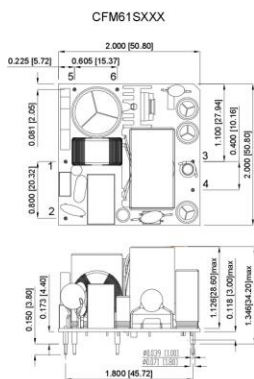
Emission and Immunity EN55032 Class B, FCC Part 15 Class B
 EN61000-3-2, EN61000-3-3, EN61000-6-3, EN61000-6-4
 Immunity EN55024, EN61204-3, EN61000-6-1, EN61000-6-2
 Safety IEC62368-1, UL62368-1

NOTE:

- Voltage accuracy is set of 100% rated load.
- Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for ripple&noise measuring @20MHz BW. (CFM61S050: Add a 0.1uF ceramic capacitor and 47uF E.L. capacitor.)
- Line regulation is measured from high line to low line with full load.
- Load regulation is measured from 10% to 100% full load.
- T Version wafer with JST B3B-XH / B4B-XH and mate with JST housing XH series or equivalent.
- PL(Peak load function) Lasting time < 10 seconds with a maximum 10% duty cycle And must add external 100uF / 400V capacitor to BC+ & BC-

Mechanical Specification

All Dimensions in Inches(mm)
 Tolerance Inches:xxx± ± 0.02
 Millimeters: .xxx ± ± 0.5



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

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

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