



CFM1600H SERIES

1600WATT SINGLE OUTPUT

AC-DC MODULES WITH PFC

Features

- * 1U Low Profile, High Power Density
- * Universal Input: 90-264Vac
- * Active PFC Meets EN61000-3-2
- * Meets CISPR/FCC Class B
- * High Efficiency at 90% Typical
- * PS ON/OFF Remote Control
- * +5V Stand-by Output Power
- * Fan Speed Control Function (Option)
- * Active Current Sharing
- * Hot Swap Redundancy
- * Build-in ORing FETs
- * I²C bus Interface
- * Optional 1U x 19" Power-Rack



MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT (A)		RIPPLE & NOISE	VOLTAGE ADJ. RANGE	VOLTAGE ACCURACY	LINE REGULATION	LOAD REGULATION	% EFF. (Typ.)
		RATED@180~264Vac	MIN.						
		RATED@90~132Vac							
CFM1600H-480-24P	Main Output								
	+48V	33.4	0	1%	45.6~52.8V	±1%	±1%	±1%	90%
		25.0							
	Standby Output								
	+5V	1	0	100mVp-p	---	---	±1%	±1%	---
CFM1600H-240-24P	Main Output								
	+24V	60	0	1%	22.8~26.4V	±1%	±1%	±1%	88%
		50							
	Standby Output								
	+5V	1	0	100mVp-p	---	---	±1%	±1%	---

Specifications

INPUT SPECIFICATIONS:

AC Input Voltage 90~264Vac
 Frequency 47 to 63Hz
 Inrush Current 40A max. @230Vac
 Conducted EMI CISPR/FCC Class B
 Leakage Current 3.5mA max.

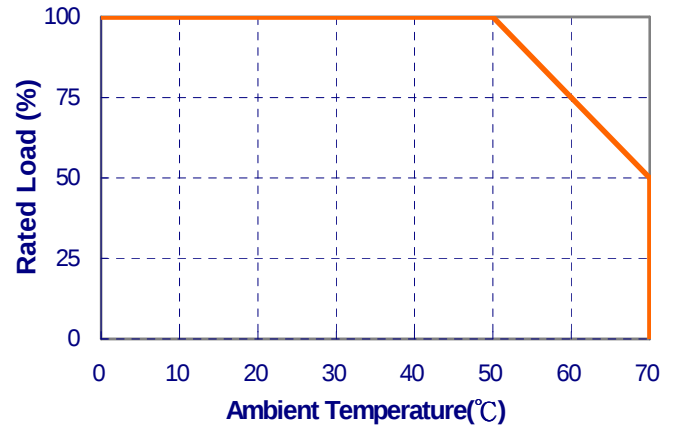
OUTPUT SPECIFICATIONS:

Total Rated output 1200W(@90~132Vac)
 1600W(@180~264Vac)
 Current Share Single wire Current Sharing
 Adjustment Range on Vout +10%, -5%
 Remote Voltage Sense Compensates for wire Voltage drop
 Hold-up Time 20ms typ.
 Over Voltage Protection Recycle AC input to Restart
 Short Circuit Protection Auto Recovery
 Temperature Coefficient $\pm 0.05\%/^{\circ}\text{C}$

GENERAL SPECIFICATIONS:

Isolation Input to output = 4242VDC
 Operating Temperature 0~70°C (see Derating Curve)
 PSU will be in thermal protection for exceeding the rated power output or the operating temperature
 Storage Temperature -20~85°C
 Humidity 93% RH max. Non condensing
 Switching Frequency 125KHz Typical
 MTBF MIL-HDBK-217F, GB, 25°C/115VAC 70K hrs min.
 Altitude 2000m
 Dimensions 11.52x5.54x1.65inches (292.6x140.7x42.0mm)
 Weight 2470g(5.45Pounds)

CFM1600H Series Derating Curve



SAFETY AND EMC:

Emission and Immunity EN55022 Class B, FCC Part15 Class B
 EN61000-6-3, EN61000-3-2, EN61000-3-3
 EN55024, EN61204-3, EN61000-6-1
 Safety IEC60950-1, EN60950-1, UL60950-1

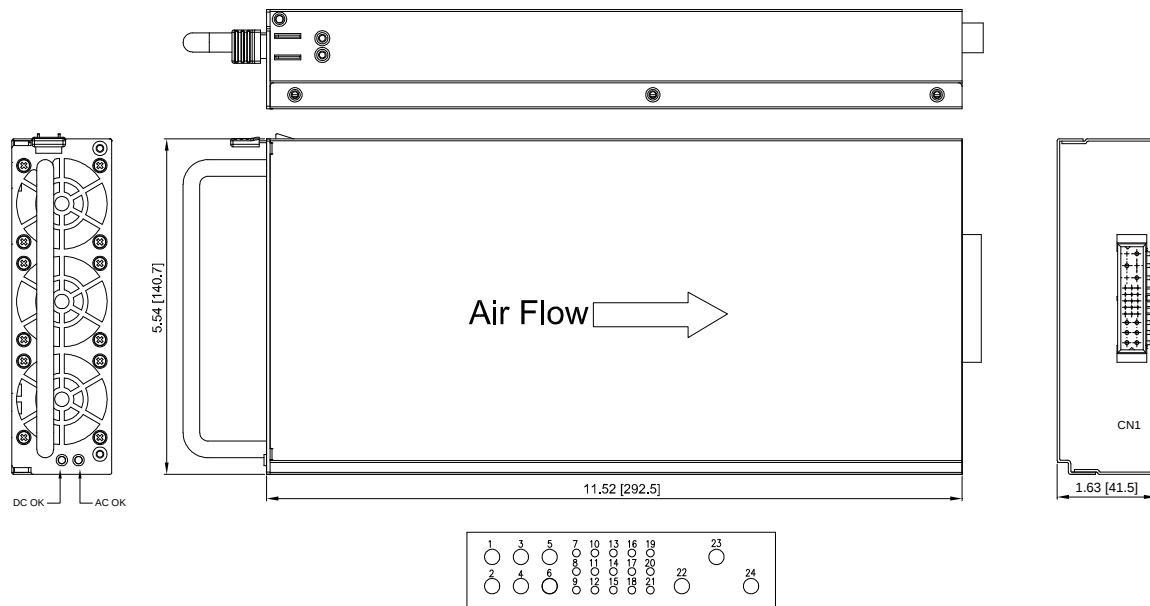
NOTE:

1. Add a 0.1uF ceramic capacitor and a 47uF E.L. capacitor to output for Ripple & Noise measuring @20MHz BW.
2. Voltage accuracy is set at 60% rated load and 25°C.Ta.
3. Line regulation is measured from High Line to Low Line with rated load.
4. Load regulation is measured at 60%±40% rated load.
5. Suffix "-F" to model number with fan speed control function

Mechanical Specification

All Dimensions In Inches(mm)

Tolerances Inches: X.XX= ± 0.04 , X.XXX= ± 0.010
 Millimeters: X.X= ± 1.0 , X.XX= ± 0.25



CN1 : Positronic PCB24W9M400A1 or equivalent

MATING CONNECTOR : Positronic PCB24W9F400A1 or equivalent

1	-Vout	4	-Vout	7	ON/OFF	10	I _C -A0	13	I _C -A2	16	+5VSB	19	SB_GND	22	PE
2	-Vout	5	+Vout	8	I _C -A1	11	-SENSE	14	+SENSE	17	AC_OK	20	DC_OK	23	N
3	+Vout	6	+Vout	9	I _C -SHARE	12	I _C -SDA	15	I _C -SCL	18	OTPW	21	V_TRIM	24	L

Note: 1.Pin7 is short pin 2.Pull down Pin7 to activate the PSU