

1600 WATT SINGLE OUTPUT AC-DC MODULES WITH PFC



Features

- Universal Input Range 90-264VAC
- +5V Standby Output
- 1U Low Profile
- Meets CISPR/FCC Class B
- Active PFC Meets EN61000-3-2
- High Efficiency at 89% Typical
- Internal Cooling Fans
- Fan Speed Control Function (Option)
- Active Current Sharing
- Hot Swap Redundancy
- I²C Bus Interface
- Optional 1U x 19" Power Rack

| MODEL | OUTPUT VOLTAGE | OUTPUT CURRENT (A) | | RIPPLE & NOISE | VOLTAGE ADJ. RANGE | VOLTAGE ACCURACY | LINE REG. ³ | LOAD REG. ⁴ | EFFICIENCY (TYPICAL) | |
|--------------|-------------------------------|--------------------|----------|----------------|--------------------|------------------|------------------------|------------------------|----------------------|--|
| | | RATED @ 180~264Vac | MIN. | | | | | | | |
| CFM1600H-480 | Main Output | | | | | | | | | |
| | +48V | 33.4 | 0 | 1% | 45.6~52.8V | ± 1% | ± 1% | ± 1% | 89% | |
| | | 25.0 | | | | | | | | |
| | Standby Output Voltage | | | | | | | | | |
| +5V | 1 | 0 | 100mVp-p | ---- | ---- | ± 1% | ± 1% | ---- | | |

Specifications

INPUT SPECIFICATIONS:

AC Input Voltage..... 90 ~ 264Vac
 Frequency47 to 63Hz
 Inrush Current.....40A max. @230Vac
 EMI.....CISPR/FCC Class B
 IsolationInput to output =4,242VDC
 Leakage Current.....3.5mA max.

OUTPUT SPECIFICATIONS:

Total Rated Output Power.....1200W (@90~132Vac)
 1600W (@180~264Vac)
 Current Share.....Single Wire Current Sharing
 Remote Voltage Sense.....Compensates for wire Voltage drop
 Adjustment Range on Vout.....+10%, -5%
 Hold-up Time20ms typ.
 Over Voltage ProtectionRecycle AC input to restart
 Over Temperature ProtectionAuto Recovery
 Short Circuit Protection.....Auto Recovery

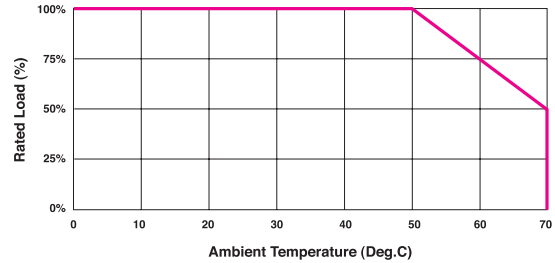
ENVIRONMENTAL CHARACTERISTICS:

Operating Temperature0 ~ 70°C
 50~70°C with 2.5%/°C Derating
 PSU will be in thermal protection for exceeding the rated power output
 or the operating temperature
 Storage Temperature-40 ~ 85°C

MECHANICAL CHARACTERISTICS:

Dimensions.....292.6 X140.7 X 42.0mm (11.52X5.54X1.65inches)

CFM1600H Series Derating Curve



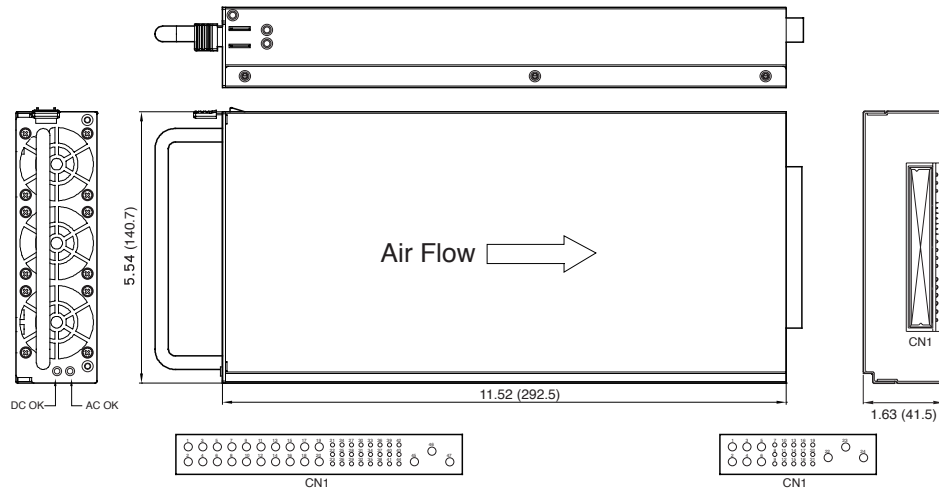
NOTE:

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.

Mechanical Specification

All Dimensions In Inches(mm)

Tolerance Inches: x.xxx= ±0.04, X.XXX= ±0.010
 Millimeters: x.xx= ±1.0, X.XX= ±0.25



CFM1600H-480 CN1: Positronic PCIH47M400A1 or Equivalent
 PIN CONNECTION

| | | | | | | | | | | | | | | | |
|---|----------|----|-------|----|-------|----|----------|----|---------------------|----|---------------------|----|----------------------|----|----------|
| 1 | Reserved | 7 | -Vout | 13 | +Vout | 19 | Reserved | 25 | I ² C-A0 | 31 | I ² C-A2 | 37 | I ² C-SCL | 43 | Reserved |
| 2 | Reserved | 8 | -Vout | 14 | +Vout | 20 | Reserved | 26 | Reserved | 32 | V_TRIM | 38 | AC_OK | 44 | PRESENT |
| 3 | Reserved | 9 | -Vout | 15 | +Vout | 21 | +5VSB | 27 | ENABLE | 33 | +SENSE | 39 | ON/OFF | 45 | PE |
| 4 | Reserved | 10 | -Vout | 16 | +Vout | 22 | S_GND | 28 | I ² C-A1 | 34 | -SENSE | 40 | I ² C-SDA | 46 | N |
| 5 | -Vout | 11 | -Vout | 17 | +Vout | 23 | Reserved | 29 | PRFL | 35 | OTPW | 41 | L_SHARE | 47 | L |
| 6 | -Vout | 12 | -Vout | 18 | +Vout | 24 | SB_GND | 30 | FANC | 36 | Reserved | 42 | DC_OK | 48 | |

MATING CONNECTOR: Positronic PCIH47F400A1 or Equivalent

Note: 1. Pin27 is Short Pin 2.PRFL: Fan Fail Warning 3. FANC: Fan Speed Control 4. Pull Down Pin27, 39 to Activate the PSU

CFM1600H-480-24P CN1: Positronic PCB24W9M400A1 or Equivalent
 PIN CONNECTION

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

MATING CONNECTOR: Positronic PCB24W9F400A1 or Equivalent

Note: 1. Pin7 is Short Pin 2. Pull Down Pin7 to Activate the PSU