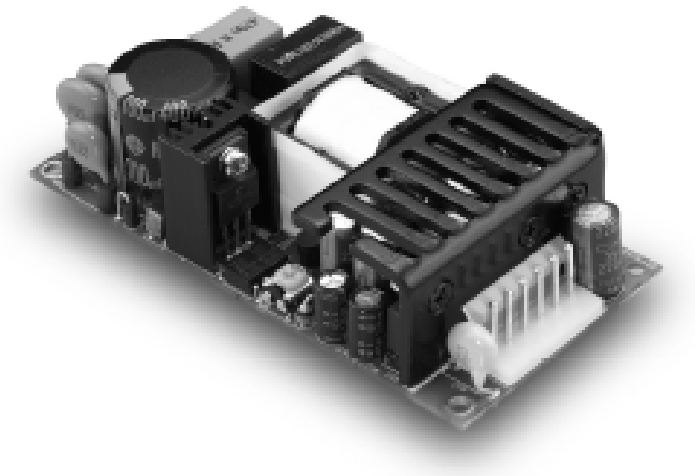
CFM40D/T SERIES

40W DUAL/TRIPLE OUTPUT AC-DC OPEN FRAME

E176177



Features

* Universal Input Range 90~264Vac
* 2” x 4” Size
* Industry-Standard Pin Out
* Efficiency to 81%
* Short Circuit Protection
* Meets EN61204-3 Class B and CISPR/FCC Class B
* Approved IEC/EN/UL62368-1

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT(A)			RIPPLE (mVp-p)	VOLTAGE ACCURACY	LINE Reg.	LOAD Reg.	O/P Power Max.	(%) EFF. (Typ.)
		Min.	Rated	Max.						
CFM40D-01	5V(V1) 12V(V2)	0.4 0.2	3.2 2.0	5.0 2.5	50 120	±3% ±4%	±1% ±2%	±3% ±5%	40.0W	80%
CFM40D-02	5V(V1) 24V(V2)	0.4 0.2	3.2 1.0	5.0 1.5	50 240	±3% ±4%	±1% ±2%	±3% ±5%	40.0W	81%
CFM40T-01	5V(V1) 12V(V2) -5V(V3)	0.4 0.2 0	3.0 2.0 0.3	5.0 2.5 0.5	50 120 50	±3% ±4% ±3%	±1% ±2% ±1%	±3% ±5% ±1%	40.5W	78%
CFM40T-02	5V(V1) 12V(V2) -12V(V3)	0.4 0.2 0	3.0 2.0 0.3	5.0 2.5 0.5	50 120 120	±3% ±4% ±3%	±1% ±2% ±1%	±3% ±5% ±1%	42.6W	78%
CFM40T-03	5V(V1) 15V(V2) -15V(V3)	0.4 0.2 0	3.0 1.5 0.3	5.0 2.3 0.5	50 150 150	±3% ±4% ±3%	±1% ±2% ±1%	±3% ±5% ±1%	42.0W	78%
CFM40T-04	5V(V1) 24V(V2) -12V(V3)	0.4 0.2 0	3.0 1.0 0.3	5.0 1.5 0.5	50 240 120	±3% ±4% ±3%	±1% ±2% ±1%	±3% ±5% ±1%	42.6W	78%
CFM40T-05	5V(V1) 24V(V2) -5V(V3)	0.4 0.2 0	3.0 1.0 0.3	5.0 1.5 0.5	50 240 50	±3% ±4% ±3%	±1% ±2% ±1%	±3% ±5% ±1%	40.5W	78%
CFM40T-06	5V(V1) 24V(V2) 12V(V3)	0.4 0.2 0	3.0 1.0 0.3	5.0 1.5 0.5	50 240 120	±3% ±4% ±3%	±1% ±2% ±1%	±3% ±5% ±1%	42.6W	78%
CFM40T-07	3.3V(V1) 5V(V2) -12V(V3)	0.4 0.2 0	5.0 2.0 0.3	7.0 3.5 0.5	100 100 120	±3% ±4% ±3%	±1% ±3% ±1%	±3% ±5% ±1%	30.0W	71%

Specifications

INPUT SPECIFICATIONS:

Voltage ..... 90~264Vac
120~370Vdc
Frequency ..... 47 to 63Hz
Inrush Current ..... Cold Start@25℃ ..... 60A max. @240Vac
Input Current ..... 1A max. (RMS) @115Vac
Leakage Current ..... 3.5mA max.

OUTPUT SPECIFICATIONS:

Rated Power for Convection Cooling 40W (CFM40T-07, 30W)
Maximum Power with 30 CFM Forced Air 50W (CFM40T-07, 40W)
Holdup Time ..... 20ms typ. @115Vac
Short Circuit ..... Hiccup Mode (Auto Recover)
Over Voltage Protection CFM40D/T ..... 6V on V1(5V)
16V/20V/30V on V2(12V/15V/24V)
Over Voltage Protection CFM40T-07 ..... 6V on V1 (3.3V), 9V on V2 (5V)
Temperature Coefficient ..... ±0.05%/℃

GENERAL SPECIFICATIONS:

Isolation ..... Input to output = 4,242VDC
Operating Temperature ..... 0 ~ 70℃ (see Derating Curve)
Storage Temperature ..... -20 ~ 85℃
Humidity ..... 93% RH max. Non-Condensing
Cooling ..... Natural Convection
Switching Frequency ..... 62.5KHz Typical
MTBF ..... MIL-HDBK-217F, GB, 25℃/115VAC ..... 200Khrs min.
Altitude 2000m
Dimensions
Open Frame Versions ..... 4.000x2.000x1.224Inches(101.60x50.80x31.10mm)
Covered Versions .... 4.606x2.480x1.575inches(117.00x63.00x40.00mm)
Weight ..... Open Frame versions ... 180g (0.40 Pounds)
Covered versions ..... 220g (0.49 Pounds)

SAFETY AND EMC:

Emission and Immunity ..... EN55032 Class B, FCC Part 15 Class B
EN61000-6-3, EN61000-3-2, EN61000-3-3
EN55024, EN61204-3, EN61000-6-1
Safety IEC/EN/UL62368-1, IEC/EN/UL60950-1

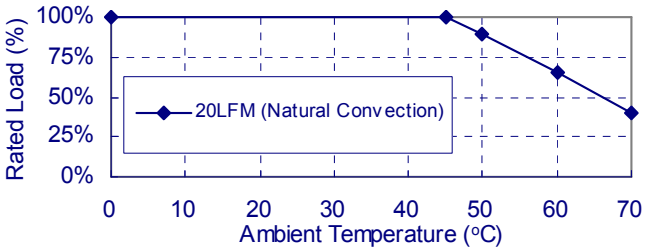
NOTE:

1. Voltage accuracy is set at full load and 25℃ Ta.
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 100Vac to 240Vac with full load.
4. Load regulation is measured from 60% to 100% full load and from 60% to 20% full load (60% ±40% full load)
5. Input connector mates with Molex housing 09-50-3031 and Molex 2878 series crimp terminal.
6. Output connector mates with Molex housing 09-50-3061 and Molex 2878 series crimp terminal.
7. Safety approvals do not apply to the covered versions, only to the open-frame versions.

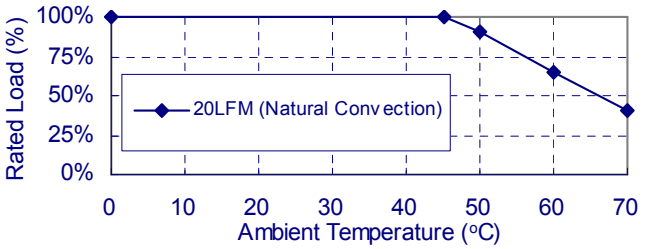
CFM40D/T Series Derating Curve

Open Frame versions:

CFM40D-01, 40D-02, 40T-01, 40T-02, 40T-03, 40T-04, 40T-05, 40T-06

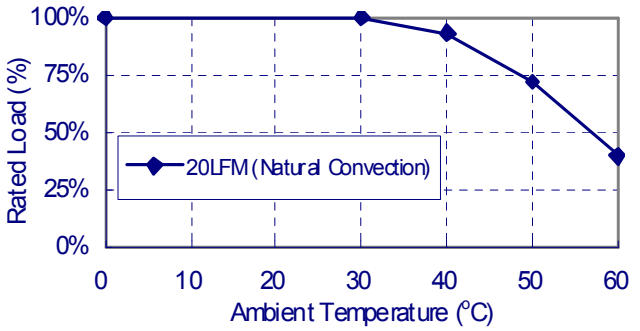


CFM40T-07

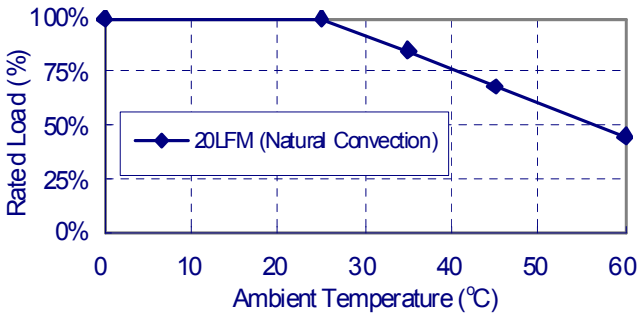


Covered versions: CFM40D/T-XX-CA

CFM40D-01, 40D-02, 40T-01, 40T-02, 40T-03, 40T-04, 40T-05, 40T-06



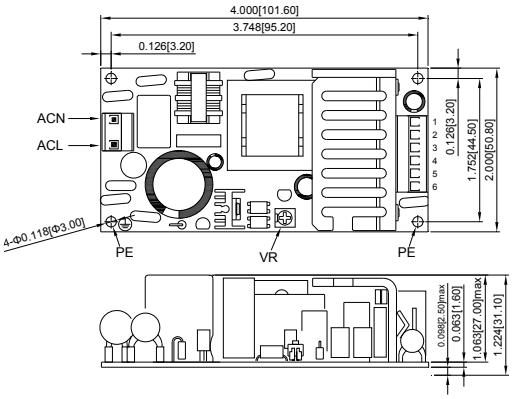
CFM40T-07



Mechanical Specification

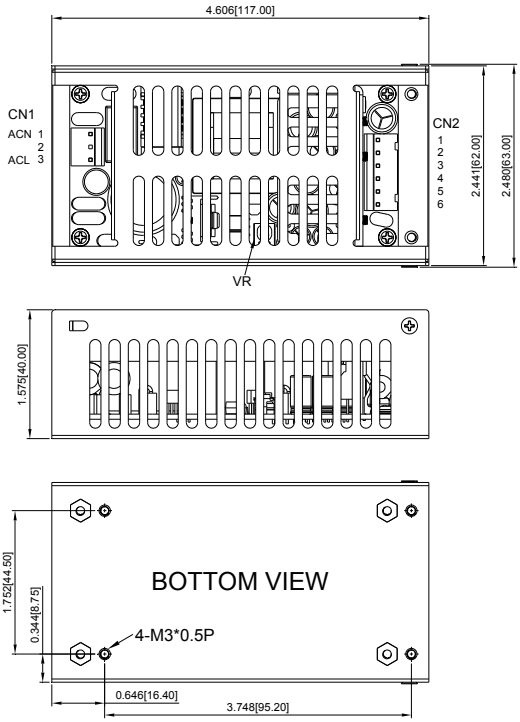
All Dimensions in Inches[mm]
Tolerance Inches:x.xxx±0.02
Millimeters:x.xx±0.5

CFM40D/T Open Frame



PIN CONNECTION	
Pin	Function
1	V2
2	V1
3	V1
4	GND
5	GND
6	V3

CFM40D/T with Cover



CN1

PIN CONNECTION	
Pin	Function
1	ACN
2	-
3	ACL

PIN CONNECTION	
Pin	Function
1	V2
2	V1
3	V1
4	GND
5	GND
6	V3

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