



# CFM40D/T SERIES

## 40W DUAL/TRIPLE OUTPUT AC-DC OPEN FRAME



### 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)	0.4	3.2	5.0	50	±3%	±1%	±3%	40.0W	80%
	12V(V2)	0.2	2.0	2.5	120	±4%	±2%	±5%		
CFM40D-02	5V(V1)	0.4	3.2	5.0	50	±3%	±1%	±3%	40.0W	81%
	24V(V2)	0.2	1.0	1.5	240	±4%	±2%	±5%		
CFM40T-01	5V(V1)	0.4	3.0	5.0	50	±3%	±1%	±3%	40.5W	78%
	12V(V2)	0.2	2.0	2.5	120	±4%	±2%	±5%		
	-5V(V3)	0	0.3	0.5	50	±3%	±1%	±1%		
CFM40T-02	5V(V1)	0.4	3.0	5.0	50	±3%	±1%	±3%	42.6W	78%
	12V(V2)	0.2	2.0	2.5	120	±4%	±2%	±5%		
	-12V(V3)	0	0.3	0.5	120	±3%	±1%	±1%		
CFM40T-03	5V(V1)	0.4	3.0	5.0	50	±3%	±1%	±3%	42.0W	78%
	15V(V2)	0.2	1.5	2.3	150	±4%	±2%	±5%		
	-15V(V3)	0	0.3	0.5	150	±3%	±1%	±1%		
CFM40T-04	5V(V1)	0.4	3.0	5.0	50	±3%	±1%	±3%	42.6W	78%
	24V(V2)	0.2	1.0	1.5	240	±4%	±2%	±5%		
	-12V(V3)	0	0.3	0.5	120	±3%	±1%	±1%		
CFM40T-05	5V(V1)	0.4	3.0	5.0	50	±3%	±1%	±3%	40.5W	78%
	24V(V2)	0.2	1.0	1.5	240	±4%	±2%	±5%		
	-5V(V3)	0	0.3	0.5	50	±3%	±1%	±1%		
CFM40T-06	5V(V1)	0.4	3.0	5.0	50	±3%	±1%	±3%	42.6W	78%
	24V(V2)	0.2	1.0	1.5	240	±4%	±2%	±5%		
	12V(V3)	0	0.3	0.5	120	±3%	±1%	±1%		
CFM40T-07	3.3V(V1)	0.4	5.0	7.0	100	±3%	±1%	±3%	30.0W	71%
	5V(V2)	0.2	2.0	3.5	100	±4%	±3%	±5%		
	-12V(V3)	0	0.3	0.5	120	±3%	±1%	±1%		

## Specifications

### INPUT SPECIFICATIONS:

Voltage ..... 90~264Vac  
 120~370Vdc  
 Frequency ..... 47 to 63Hz  
 Inrush Current ..... Cold Start@25°C ..... 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%/°C

### GENERAL SPECIFICATIONS:

Isolation ..... Input to output = 4,242VDC  
 Operating Temperature ..... 0 ~ 70°C (see Derating Curve)  
 Storage Temperature ..... -20 ~ 85°C  
 Humidity ..... 93% RH max. Non-Condensing  
 Cooling ..... Natural Convection  
 Switching Frequency ..... 62.5KHz Typical  
 MTBF ..... MIL-HDBK-217F, GB, 25°C/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

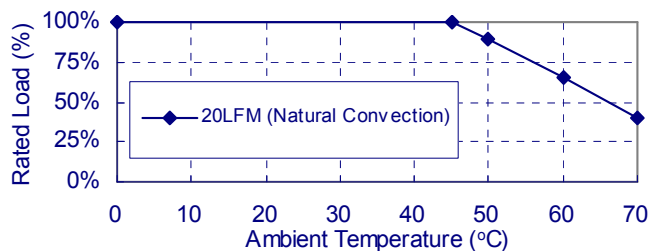
### NOTE:

1. Voltage accuracy is set at full load and 25°C 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.

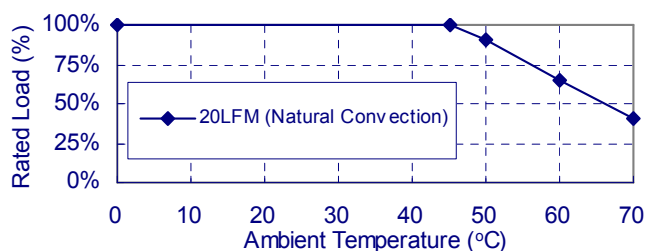
## CFM40D/T Series Derating Curve

### Open Frame versions:

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

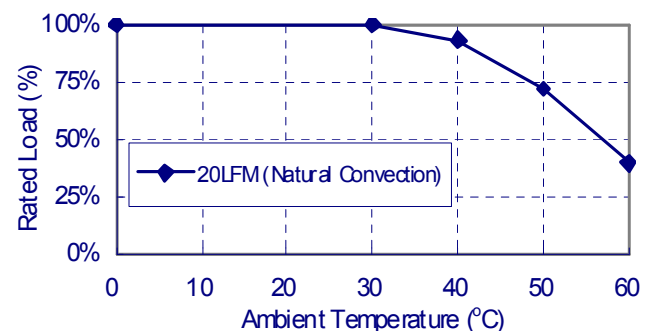


### CFM40T-07

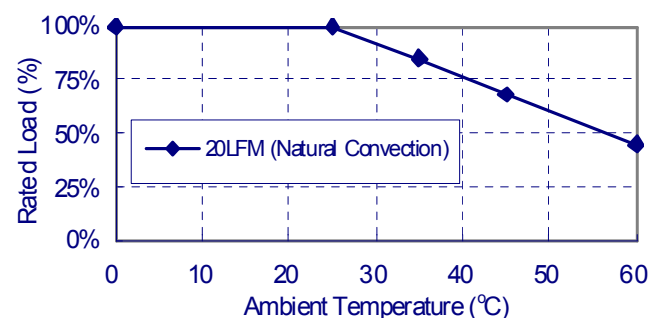


### Covered versions: CFM40D/T-XX-CA

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



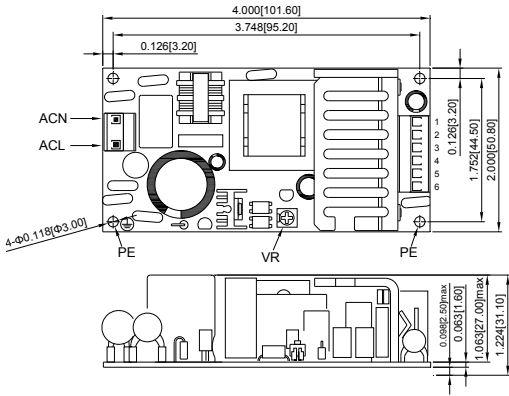
### CFM40T-07



# Mechanical Specification

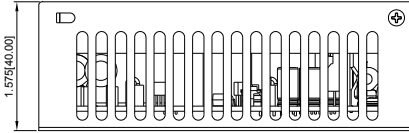
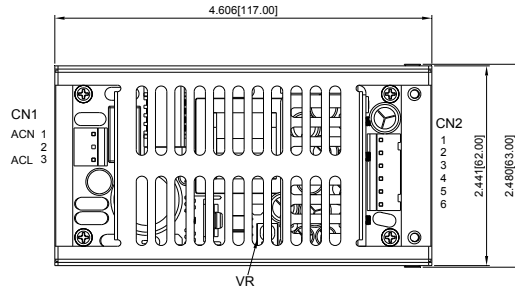
All Dimensions in Inches[mm]  
 Tolerance Inches:x.xxx±0.02  
 Millimeters:x.xx±0.5

CFM40D/T Open Frame



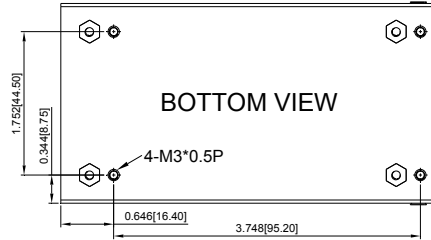
PIN CONNECTION	
Pin	Function
1	V2
2	V1
3	V1
4	GND
5	GND
6	V3

CFM40D/T with Cover



CN1

PIN CONNECTION	
Pin	Function
1	ACN
2	-
3	ACL



CN2

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