

# S E R I E S

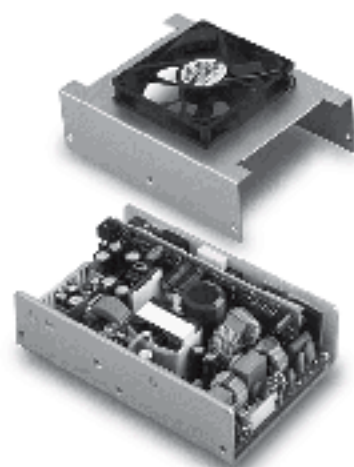
# CFM200Q

200 WATT 4 OUTPUT  
U FRAME AC-DC MODULES  
WITH PFC



CB

NEW



## Features

- 1.5" Low Profile, 4"X6" Footprint
- Universal Input : 90 – 264Vac
- Active PFC Meets EN61000-3-2
- EMI Meets CISPR/FCC Class B
- High Efficiency at 75% Typical
- Remote Voltage Sense
- AC OK Signal (Logic High)
- DC OK Signal (Logic High)
- PS ON/OFF Remote Control (Inhibit PSU by Adding Logic High)

## Specifications

### INPUT CHARACTERISTICS:

AC Input Voltage.....90 – 264Vac  
Frequency.....47 to 63Hz  
Inrush Current.....80A Max.  
EMI.....CISPR/FCC Class B  
Isolation.....Input to output =1,2kVdc  
Leakage Current.....3.5mA Max.

### ENVIRONMENTAL CHARACTERISTICS:

Operating Temperature.....0 – 70C  
50-70C with 2.5%/C derating  
PSU will be in thermal protection for exceeding the rated power output or the operating temperature  
Storage Temperature.....-20 – 85C

### NOTE:

- 1: Optional fan can be added when ordering. Top Cover with Fan (no external air is needed)
- 2: Add a 0.1uF ceramic capacitor and a 47uF E.L. capacitor to output for Ripple & Noise: measuring @20MHz BW.
- 3: Voltage accuracy is at 60% rated load and PFC On.
- 4: Line regulation is measured from High Line to Low Line with rated load.
- 5: Load regulation is measured at 60% ± 40% rated load and rated load for other outputs.

### OUTPUT CHARACTERISTICS:

Total Rated Output Power.....200W (with 30CFM air flow or optional fan)  
Total Peak Output Current (between.....35A for CFM200Q-1 Series  
V1 and V2.....25A for CFM200Q-2 Series  
Remote Voltage Sense.....Compensates for wire drops of V1 & V2  
Hold-up time.....18ms typ.  
Over Voltage Protection.....Recycle AC input to restart.  
Over Temperature Protection.....Auto Recovery  
Short Circuit Protection.....Auto Recovery

### MECHANICAL OUTLINE:

Standard U Frame.....150 x 100 x 38.1mm  
(5.91" x 3.94" x 1.5")  
With Optional Fan.....150 x 101.6 x 50.5mm  
(5.91" x 4" x 2.0")  
Weight.....770g

- 6: 30 seconds duration with 10% duty cycle for peak outputs currents (within 200W total rated output power).
- 7: Dimensions tolerance: ±0.1mm
- 8: Connectors:  
CK1(AC Input) : Molex 5273-05A or equivalent  
CK2(DC Output) : Molex 5273-12A or equivalent  
Optional Connectors :  
CK3(Signal) : Molex 4644-10 or equivalent  
CK4(CM) (Fan Output) : Molex 5045-09A or equivalent

MODEL	Output		Output Current (A)			Ripple & Noise	Voltage Accuracy	Line Reg.	Load Reg.	O/P Power Total Rated
	n/p	Voltage	Min.	Rated	Max.					
CFM200Q-111 (CFM200Q-112)	V1	+5V	1.5	15	25	2%	±3%	±1%	±2%	200W
	V2	+3.3V	1.5	15	20	2%	±3%	±1%	±2%	
	V3	+12V	3.5	5	10	2%	±4%	±1%	±5%	
	V4	-5V/-12V	0	1	-	2%	±3%	±1%	±5%	
CFM200Q-121 (CFM200Q-123)	V1	+5V	1.5	15	25	2%	±3%	±1%	±2%	200W
	V2	+3.3V	1.5	15	20	2%	±3%	±1%	±2%	
	V3	+15V	0.5	1	1	2%	±4%	±1%	±5%	
	V4	+5V/-15V	0	1	-	2%	±3%	±1%	±5%	
CFM200Q-221 (CFM200Q-222)	V1	+5V	1.5	15	25	2%	±3%	±1%	±2%	200W
	V2	+12V	3.5	5	10	2%	±3%	±1%	±2%	
	V3	+15V	3.5	4	5	2%	±4%	±1%	±5%	
	V4	-5V/-12V/-15V	0	1	-	2%	±3%	±1%	±5%	
CFM200Q-231 (CFM200Q-232)	V1	+5V	1.5	15	25	2%	±3%	±1%	±2%	200W
	V2	+12V	3.5	5	10	2%	±3%	±1%	±2%	
	V3	+24V	0.5	2.5	3	2%	±4%	±1%	±5%	
	V4	-5V/-12V	0	1	-	2%	±3%	±1%	±5%	

## Mechanical Specification

All dimensions are in millimeter.  
Tolerances: (X±0) (X±.1) Unless otherwise noted

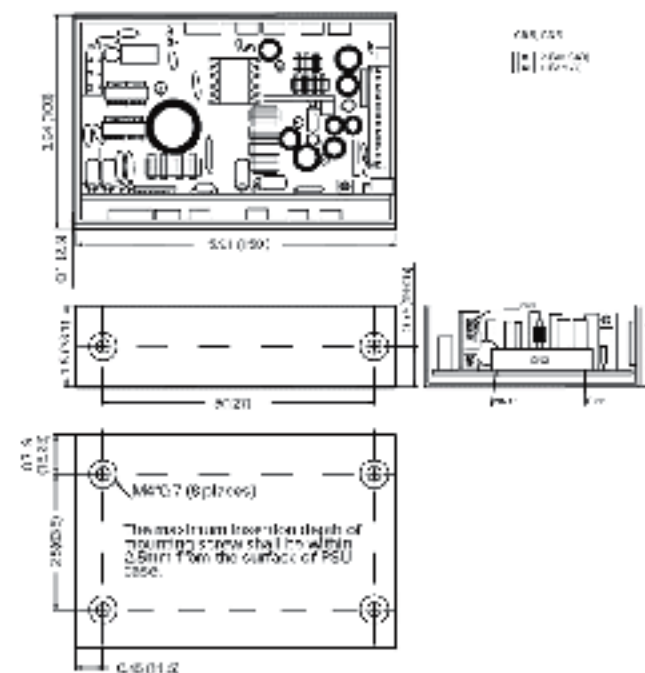


Fig.1. Mechanical Outline of CFM200Q

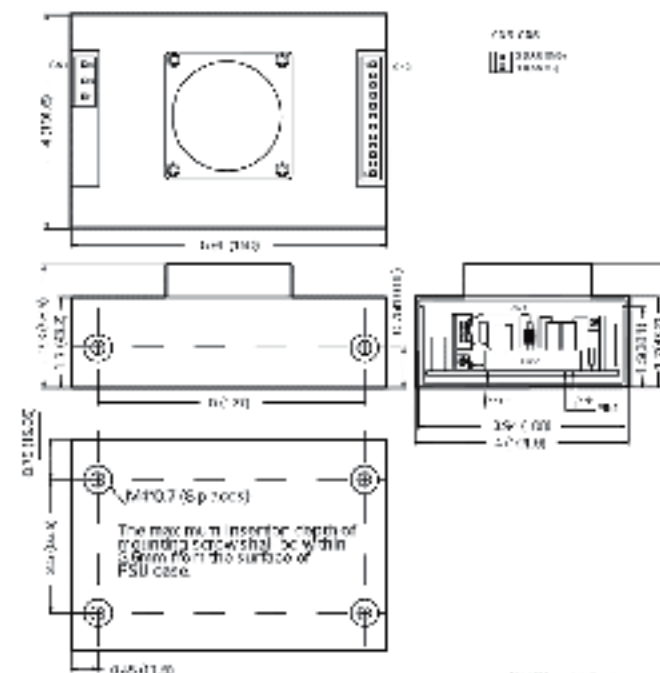


Fig.2. Mechanical Outline of CFM200QA (With Optional Fan)

PIN CONNECTION CK2 (DC Output)	
Pin	ASSIGNMENT
1	V1 (+)
2	V1 PWR GND
3	PWR GND
4	PWR GND
5	V1 (+)
6	V2 (+)
7	PWR GND
8	PWR GND
9	V1 (+)
10	V1 (+)
11	V2 (+)
12	V2 (+)

PIN CONNECTION CK5,CK6 (FAN Output)	
Pin	ASSIGNMENT
1	+12V(FAN)
2	GND (FAN)

PIN CONNECTION CK1 (AC Input)	
Pin	ASSIGNMENT
1	Earth Ground
2	NC
3	Neutral
4	NC
5	Line

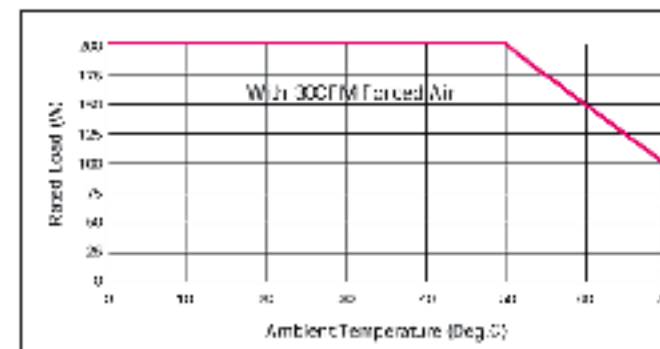


Fig.3. Output Derating Curve

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