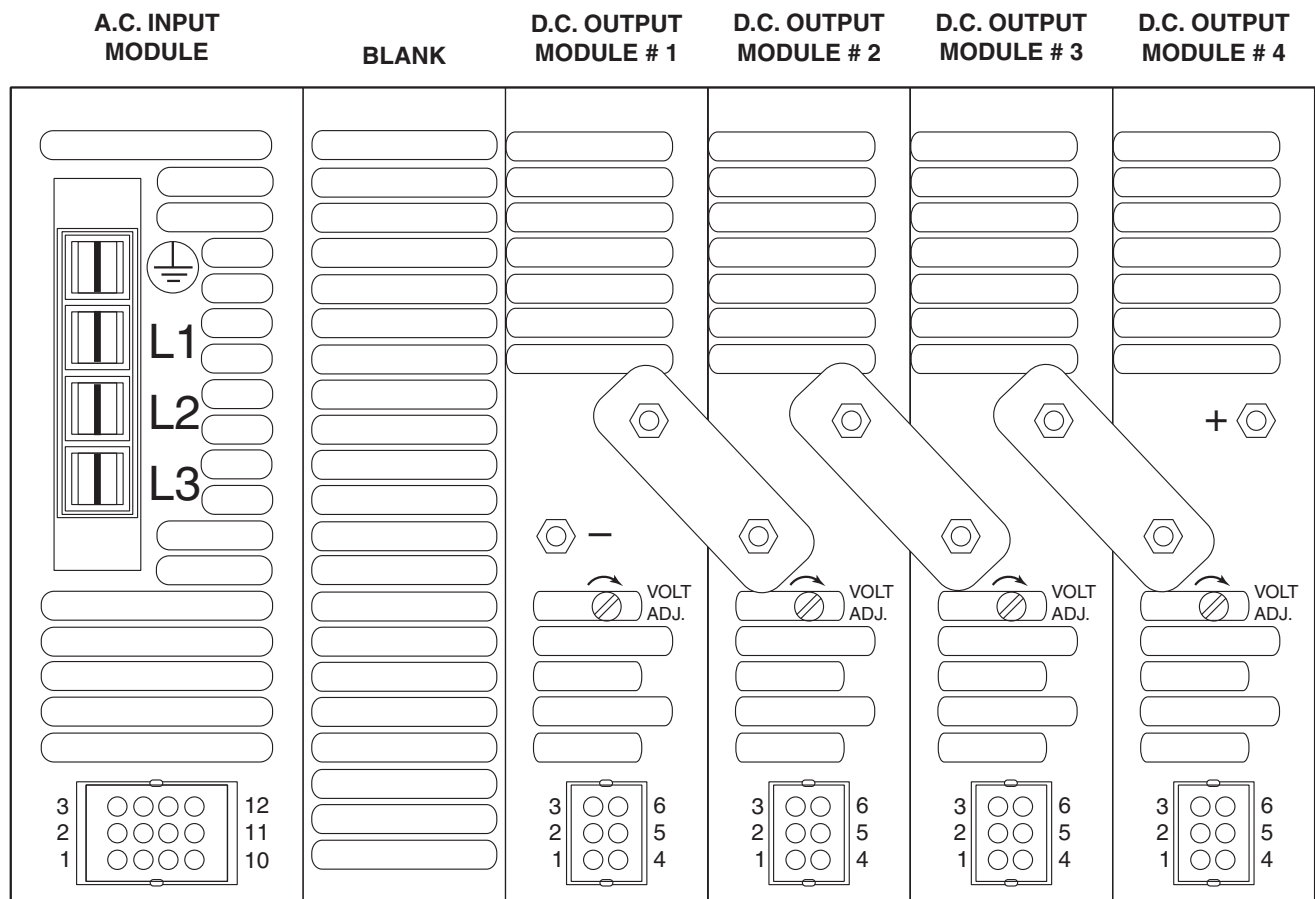




## SYNRAD DC-96 DC Power Supply (Power-One RPM5)



\* **CHASSIS SIZE (HxWxL) 5 x 8 x 15 inches.**

\* **The AC Input mating connector is AMP # 556879-4 with four contacts, AMP # 556880-2.**

\* **For single phase operation, connect the two AC hot leads to L1 and L2.**

\* **Safety ground (earth) should be attached to the Ground (⊕) terminal.**

\* **Four 24V output modules connected in series provide 96VDC between negative terminal on Output Module # 1 and positive terminal on Output Module # 4.**

Rev 3 / 23 Jan 2003  
P/N 900-18563-01

# RPM5

## INPUT

PARAMETER	CONDITIONS	MIN.	NOM.	MAX.	UNITS
Input Voltage	AC Input Three Phase with Ground Phase to Phase	180	230	264	VAC
	DC Input	250	300	350	VDC
Input Current	180 VAC			23	ARMS
	208 VAC			20	
	220 VAC			19	
	250 VDC			23	Adc
Inrush Surge Current	Vin = 264 VAC (one cycle)			38	APK
Input Frequency	With AC Input	47		63	Hz
Hold-up Time	After last AC line peak				
	208 VAC	20			mS
	220 VAC	25			
Input Power Fail Warning	Logic signal before regulation dropout due to loss of input power	5			mS
Overtemperature Shutdown	System shutdown due to excessive internal temperature	70	80		°C
Thermal Warning	Advanced warning before shutdown	10			mS

## SAFETY AND EMI

Agency Approvals	UL1950 CSA 22.2 No. 950 EN60950 (TUV)				
Dielectric Withstand Voltage	Input to Output	4300			VDC
	Input to Chassis	2300			
	Output to Chassis	300			
Insulation Resistance	Input to Output	10			Meg Ω
	Input to Chassis	10			
	Output to Chassis	2			
Leakage Current	Per UL1950 and CSA 22.2 No. 950 Per EN60950			1.5 2.5	mA
Electromagnetic Interference	FCC CFR title 47 Part 15, Sub-Part B Conducted EN55022/CISPR 22, Conducted			Level A	

## GENERAL

Output Power	Full Load, 230 VAC			4000	Watts
Efficiency	Full Load, 230 VAC		75		%
Power Factor	> 2000 watts @ 60 Hz, > 3000 watts @ 50 Hz		0.9		W/VA
Vibration	Random vibration from 10Hz to 2 KHz, (3 axis)			6	GRMS
Shock	Operating, peak acceleration			20	GPK
Operating Temp.	At 100% Load	0		50	°C
	Derate linearly above 50°C to 50%			70	
Storage Temp.		-40		85	°C
Altitude	Operating			10,000	Feet
	Non-operating			50,000	
Relative Humidity	Non-condensing			95	%
Acoustical Noise	"A" weighted at 1 meter			60	dB
Cooling	Static pressure through system closure			0.05	In of H <sub>2</sub> O

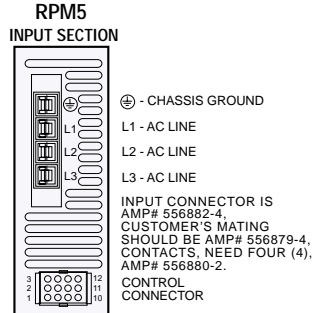
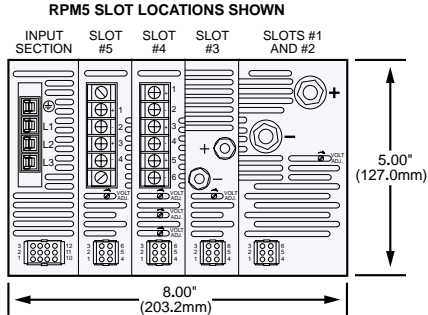
\*Metric mounting chassis meet all specifications of non-metric models.



# RPM5

**OVERALL SIZE: 15.00" x 8.00" x 5.00" (381.0mm x 203.2mm x 127.0mm)**

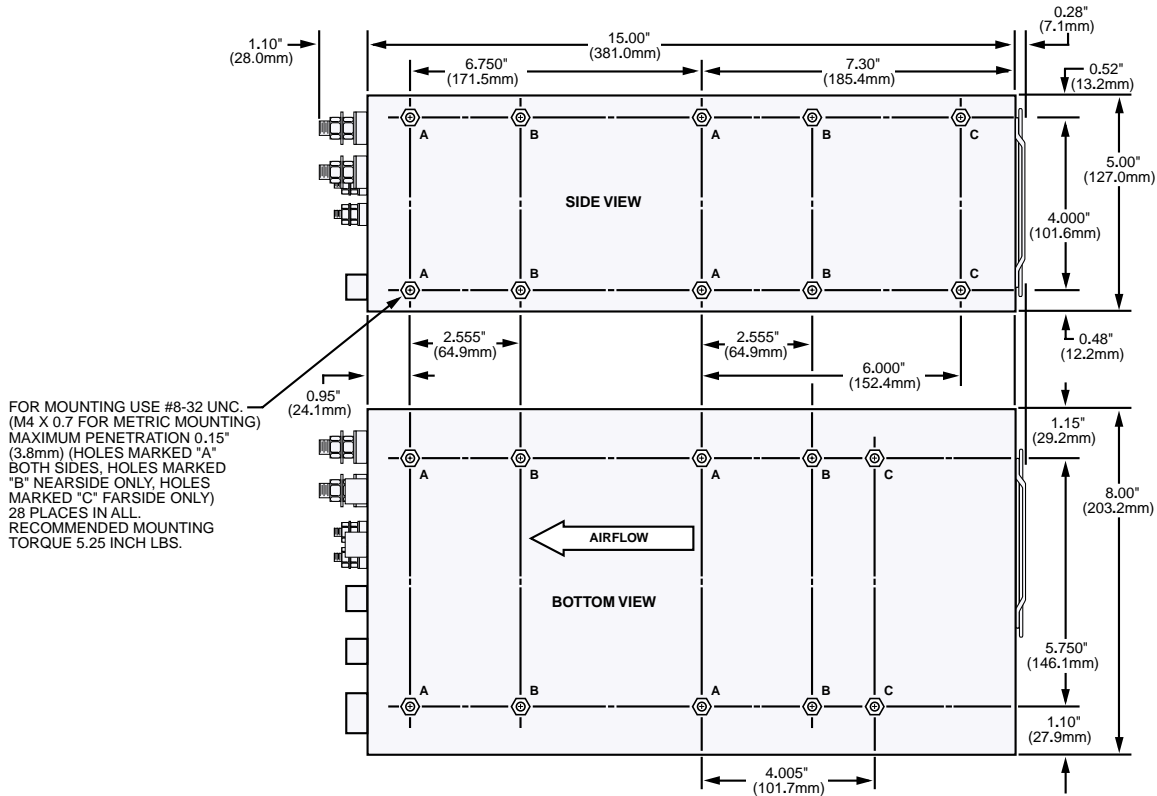
**WEIGHT: 21.0 LBS (9.60 kg)**



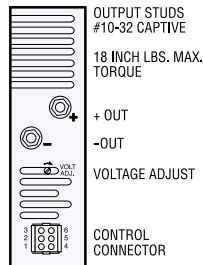
**CONTROL FUNCTIONS**

PIN	FUNCTION
5	POWER FAIL WARNING
6	OVER TEMP WARNING
7	5V @ 100mA*
10	SIGNAL GROUND
11	INHIBIT

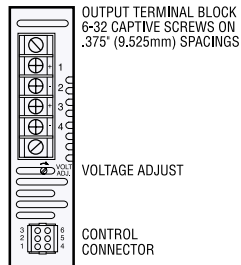
MOLEX SERIES 1625-12 #03-06-1121  
MATING: 1625-12 #03-06-2122  
CONSULT FACTORY FOR OTHER AVAILABLE CONTROL FUNCTIONS  
\* A lesser current is available if a logic option board is used. Consult factory.



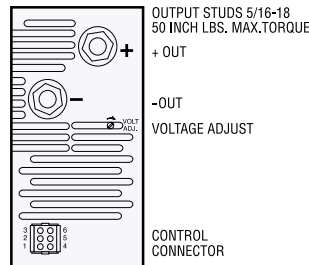
## OUTPUT MODULES—CONFIGURATIONS AND INTERFACE SIGNALS



**SINGLE WIDTH TYPE I #10-32 STUDS**



**SINGLE WIDTH TYPE II BARRIER BLOCK**



**DOUBLE WIDTH TYPE III 5/16-18 STUDS**

**CONTROL FUNCTIONS**

PIN	FUNCTION
1	+SENSE
2	MARGIN/REMOTE VOLTAGE ADJUST
3	OUTPUT GOOD SIGNAL
4	-SENSE & LOGIC GROUND
5	CURRENT SHARE CONTROL
6	INHIBIT

MOLEX SERIES 1625-6 #03-06-1061  
MATING: 1625-6 #03-06-2061  
CONSULT FACTORY FOR OTHER AVAILABLE CONTROL FUNCTIONS

\*Metric mounting chassis meet all specifications of non-metric models.