# CH-M2400 Series

## Conduction Cooled Multiple Output AC/DC Power Supply

#### FEATURES

- Conduction cooled
- Two Isolated Outputs, 2400 Watts Max
- 85~264 VAC input; 47~63 Hz (400 Hz Optional)
- D38999 Connectors
- Conformal Coated
- >20 msec holdup time
- Aluminum Enclosure-Conductive Chromate treated

INPUT	Voltage/ Freq	Vrms	AC 85~264/ 47~63Hz,
	Current	A(rms)	23A (typical at maximum output power, 110VAC in)
	Inrush Current	А	55 A max at cold start Max
Power Factor - > 0.99 @	> 0.99 @ full load (115VAC & 22 VAC)		
	Leakage Current	mArms	< 3.3 mArms @ 115 VAC in

			CH-M2000-12xx	CH-M2400-24xx	CH-M2400-28xx	CH-M2400-48xx	
OUTPUT	Voltage 1st	VDC	12	24	28	48	
	Current 1 <sup>st</sup>	А	84	50	46	25	
	Voltage 2nd	VDC	12	22~25.5	26~33.5	9~55	
	Current	А	84	46	46	25	
	Efficiency 110 VAC Full Load	%	85	88	89	90	
	Current	А	167	83.5	71.6	42	
	Max Power	W	1425~2400				
	Regulation	%	+/-1.5	+/-1.5	+/-1.5	+/-1.5	
	Ripple/Noise	% Pk-Pk	1.5	1.00	1.00	1.00	
	Hold-up Time	mS	>20mS @ full load, 115 VAC				
	Insulation And Dielectric	Primary- Secondary	4242 VDC (3000 VAC)				
		Primary to Ground (Mounting holes or chassis)		>1500 VDC for 30 seconds			
		Output to Ground		>100MΩ at 25°C, 4	40%RH & 500VDC		

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Note: Full performance data information available upon request.

Protection	Overvoltage	Shutdown and latch off; AC recycle to restart		
	Overload	Constant Current to Hiccup, Auto recovery		
	Over temperature	Output shutoff until base plate temp reaches 85C, Thermal cutoff is 90°C (measured at baseplate)		
	Short Circuit	Auto Recovery		
Environment	Operating Temp	-40~85C		
	Storage Temp	-55 to +105 C		
	Operating Humidity	10~95% , non-condensing		
	Operating Altitude	ng Altitude 15,000 ft max (30,000 ft in pressurized cabin)		
	Vibration	MIL-STD810H, Method 514.8, Category 24, Figure 514.8E-1.		
	Shock	MIL-STD-810H, Procedure 1, 20G 11ms		
	MTBF Telecordia SR-22	>205,000 hrs.@ 40C ambient temp. Ground benign		
Standards	Conducted Emissions <sup>2</sup> Susceptibility Radiated Emissions Immunity <sup>3</sup>	MIL-STD-461F/G: CE 101, CE 102 (10Khz~10Mhz) MIL-STD-461F/G: CS114, CS115 MIL-STD-461F/G: RE102, RE103 8 kV (contact discharge) or 15 kV (air discharge) electrostatic discharge		
Size	Inches/lbs	14" x 8" x 2.60" / 7.5 lbs		

1. Ripple and noise are measured at oscilloscope 20MHz bandwidth by a 10uF electrolytic capacitor and a 0.1uF ceramic capacitor in parallel at output connector.

2. Standards: Unit has been designed to meet the standards listed. It is the responsibility of the customer to test in system. Conducted emissions (CE101, C102) using shielded 3 conductor cable (L,N,G) with unit mounted to chassis ground.

3. Contact factory for test conditions.

## OPTIONS

#### Connectors

Customer may request connector change with MOQ •D38999 or equivalent •MIL/SAE 5015 or equivalent

#### **Additional Options**

400Hz input MIL-DTL-901(E) Grade B shock enclosure Anodized or Power Coat Enclosure Remote On/Off Status Reporting (I2C-Vout, Iout, Internal Temp)

## DERATING

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#### **DIMENSIONAL DRAWING-INTERFACE CONNECTORS J1-Input Connector J2-Output Connector**



J1: D38999/20WG75PN J1-A: Line J1-B: Neutral J1-C: Ground J1-D: N/C

Contact Factory for Output connector Options and interface

## **DIMENSIONAL DRAWING**

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\* Dimensions shown in inches

Specification subject to change without notification

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