



CH-M2000 Series

Conduction Cooled AC/DC Power Supply



FEATURES

- Conduction cooled
- 2000 Watt
- 85~264 VAC input; 47~63Hz (400hz 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	A		55 A max at cold start Max
Power Factor	-		> 0.99 @ full load (115VAC & 22 VAC)
Leakage Current	mArms		< 3.3 mArms @ 115 VAC in

		CH-M2000-12	CH-M2000-24	CH-M2000-28	CH-M2000-48	
OUTPUT	Voltage	VDC	12	24	28	48
	Efficiency 110 VAC Full Load	%	85	88	89	90
	Current	A	167	83.5	71.6	42
	Max Power	W	2001	2001	2004.8	2016
	Regulation	%	+/-1.5	+/-1	+/-1	+/-1
	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, 40%RH & 500VDC				

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	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
Standards	MTBF Telecordia SR-22	>205,000 hrs. @ 40C ambient temp. Ground benign
	Conducted Emissions ² Susceptibility Radiated Emissions Immunity ³	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" / 9.5 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 Three Phase input Non-Standard Voltages (Factory Set 22~55VDC) MIL-DTL-901(E) Grade B shock enclosure Anodized or Power Coat Enclosure External potentiometer (Voltage Trim) Remote On/Off Status Reporting (I2C-Vout, Iout, Internal Temp)	

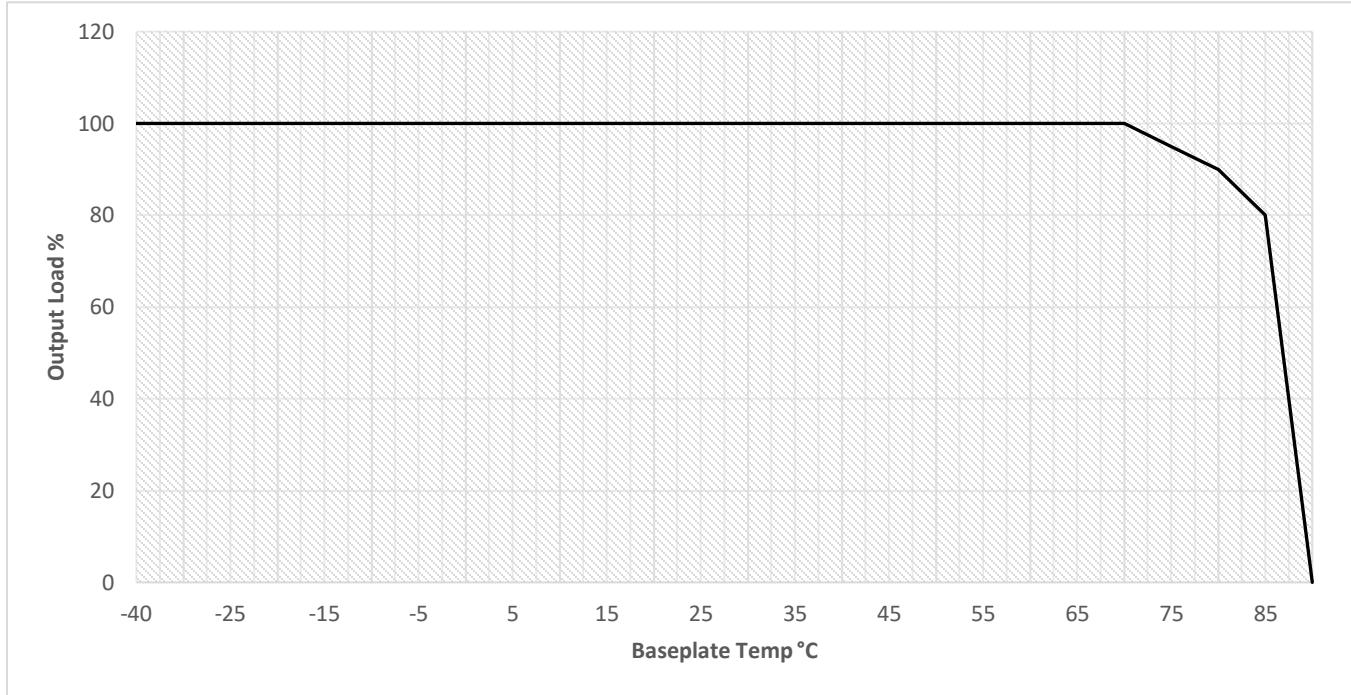


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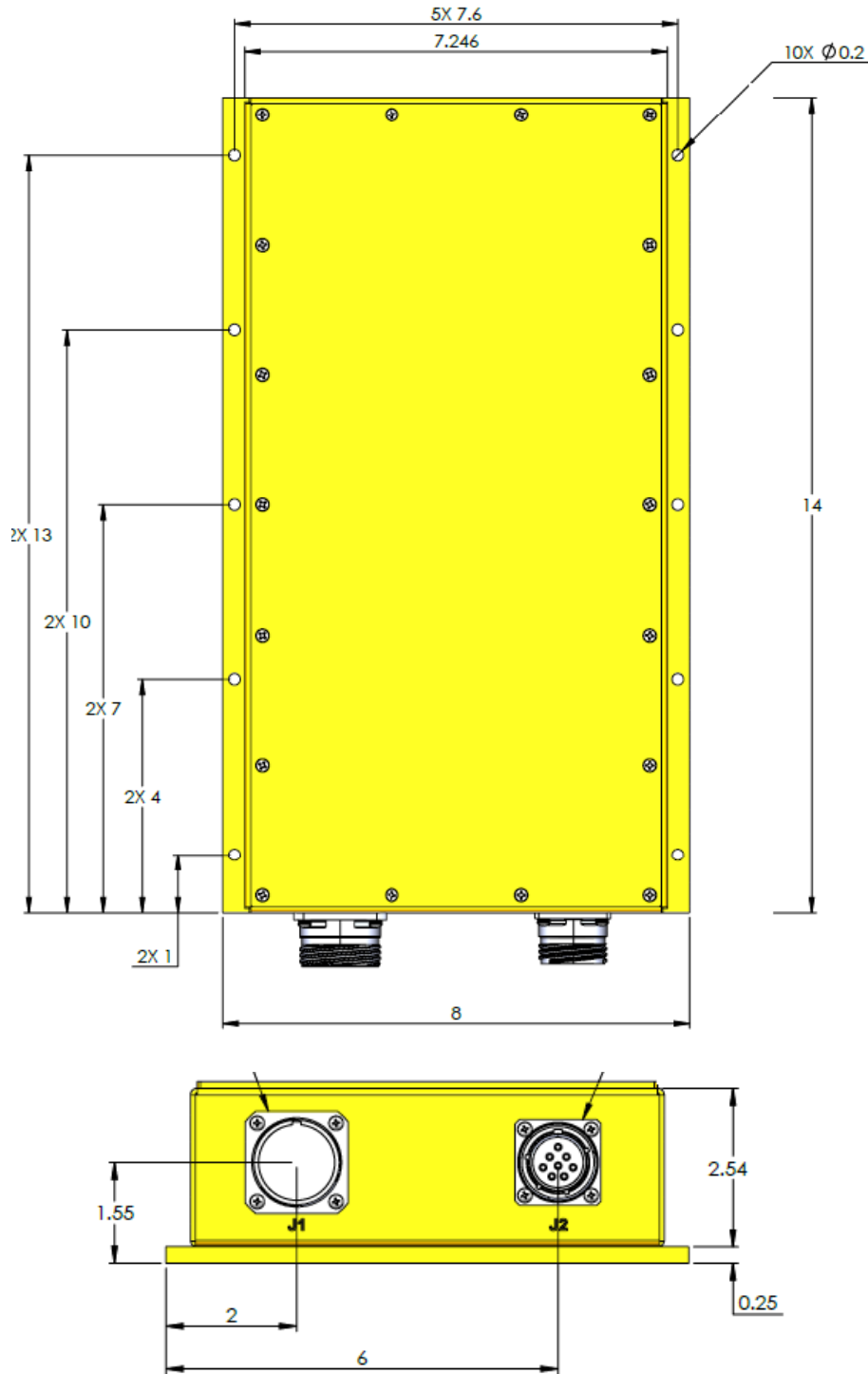


DERATING





DIMENSIONAL DRAWING



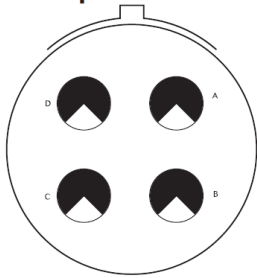
* Dimensions shown in inches



DIMENSIONAL DRAWING-INTERFACE CONNECTORS

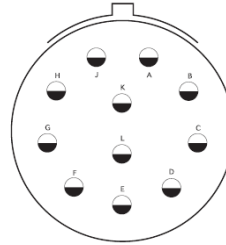
-752 Option

Standard Connector for CH-M2000-24, -28, -48



J1: D38999/20WG75PN

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

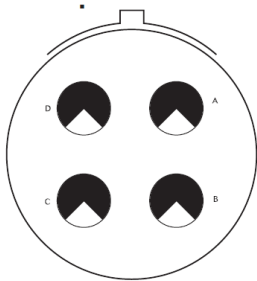


J2: D38999/20WF11SN

J2-A: +Vout
 J2-B: +Vout
 J2-C: +Vout
 J2-D: +Vout
 J2-E: +Vout
 J2-F: Vout RTN
 J2-G: Vout RTN
 J2-H: Vout RTN
 J2-I: Vout RTN
 J2-K: Vout RTN
 J2-L: N/C

-758 Option

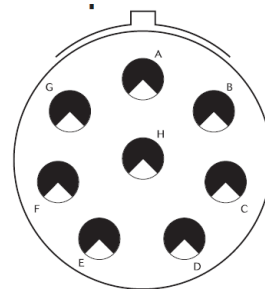
Standard Connector for CH-M2000-12



Standard Connector for CH-M1000-24, -28, -48 (No Secondary Voltage)

J1: D38999/20WG75PN

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



J2: 8D0-23W06SNL

J2-A: +Vout
 J2-B: +Vout
 J2-C: +Vout
 J2-D: Vout RTN
 J2-E: Vout RTN
 J2-F: Vout RTN

Specification subject to change without notification