



CH-M2000 Series

Conduction Cooled AC/DC Power Supply



FEATURES

- Conduction cooled
- 2000 Watt
- 85~264 VAC input; 50/60/400Hz
- D38999 Connectors
- Conformal Coated
- >20 msec holdup time
- Aluminum Enclosure-Conductive Chromate treated
- Mil-Std 461, 704, 810, 1275, 1399 Compliant
- **110V Output Option Available for Order**

INPUT			
Voltage/ Freq	Vrms	AC 85~264/ 47~440Hz,	
Current	A(rms)	22A (typical at maximum output power, 110VAC in)	
Inrush Current	A	46 A peak at cold start (Full Load)	
Power Factor	-	> 0.99 @ full load (115VAC & 220 VAC) Meets Mil-Std 1399 Sec 300 @ 10% load @ 115 VACin 20% load and higher for 220VACin	
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	%	85	88	89	90
			86	89	90	92
	Current	A	167	83.5	71.6	42
	Max Power	W	2001	2001	2004.8	2016
	Regulation	%	+/-1.00	+/-0.5	+/-0.5	+/-0.5
	Ripple/Noise	% Pk-Pk	1.00	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				



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 75°C,
	Short Circuit	Auto Recovery
Environment	Operating Temp	-40~85°C Ambient
	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
	MTBF Telecordia SR-22	>205,000 hrs.@ 40C ambient temp.
Standards	Conducted Emissions ²	MIL-STD-461F/G: CE101 CE 102
	Susceptibility	MIL-STD-461F/G: CS114, CS115
	Radiated Emissions	MIL-STD-461F/G: RE102, RE103
	Immunity ³	8 kV (contact discharge) or 15 kV (air discharge) electrostatic discharge
	Transient	MIL-STD 704
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	
Three Phase input	
Non-Standard Voltages (Factory Set 22~55VDC, 110V)	
MIL-DTL-901(E) Grade B shock enclosure	
Anodized or Power Coat Enclosure	
External potentiometer (Voltage Trim 20%, Not Available at Non-Standard Voltage setting)	
Remote On/Off	
Status Reporting (I2C: Vout, Iout, Internal Temp)	

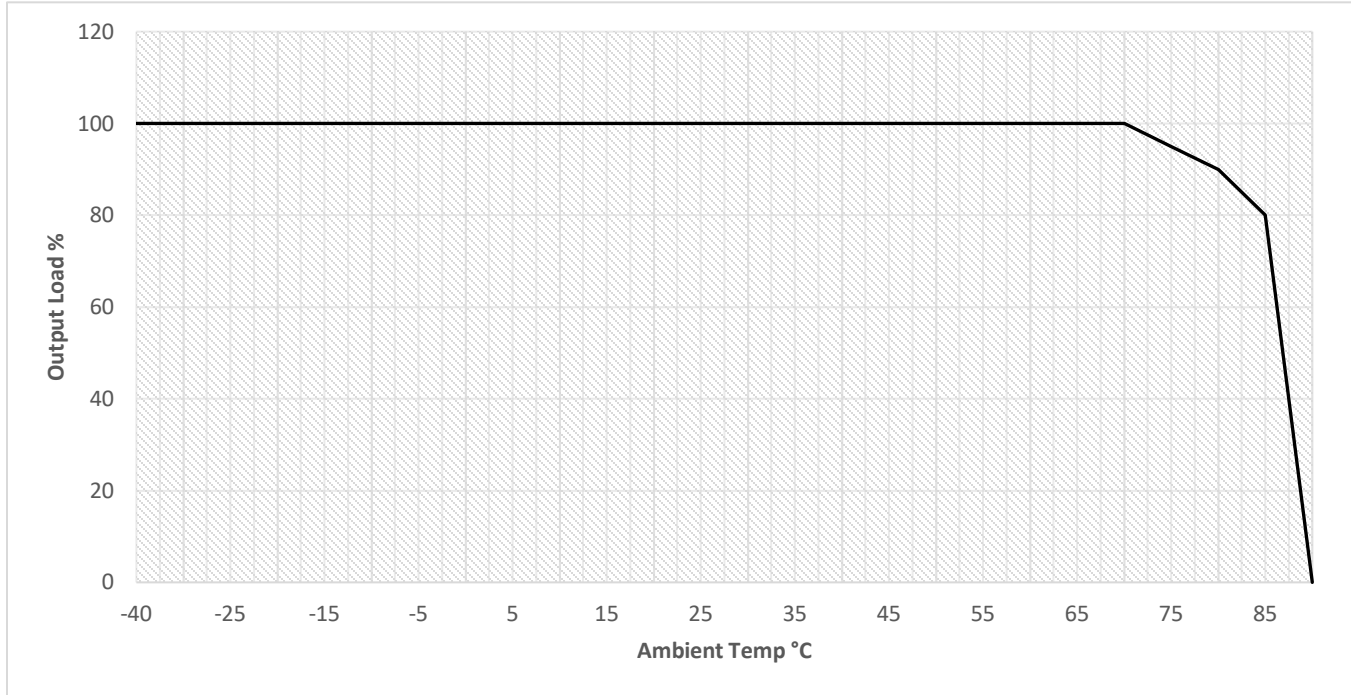


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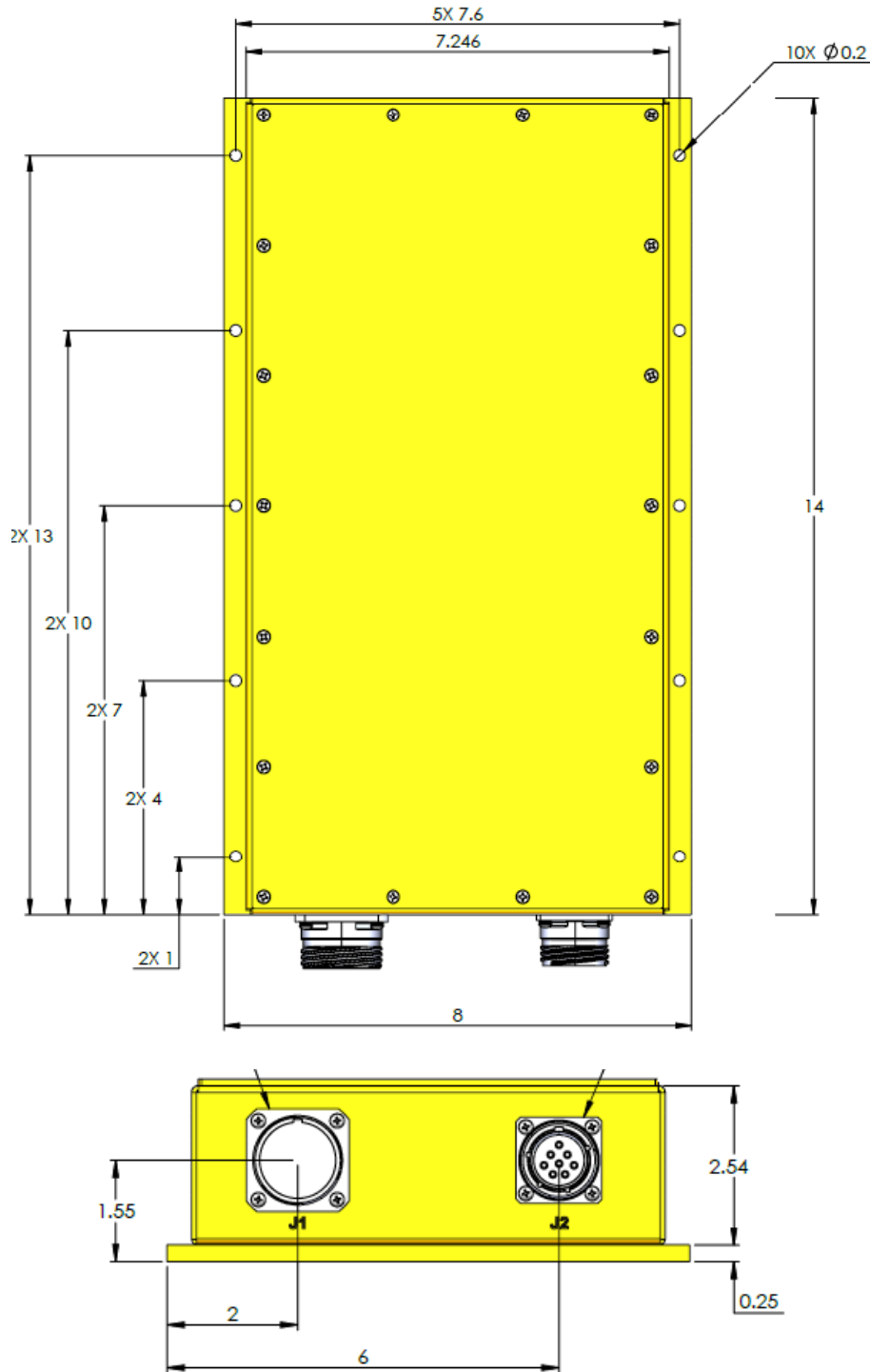


DERATING





DIMENSIONAL DRAWING



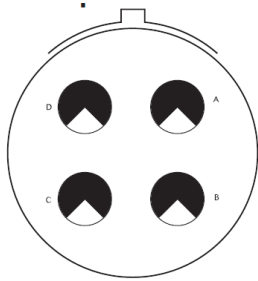
* Dimensions shown in inches



DIMENSIONAL DRAWING-INTERFACE CONNECTORS

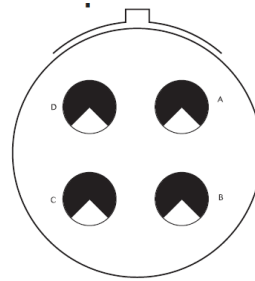
-750 Option

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



J1: D38999/20WG75PN

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

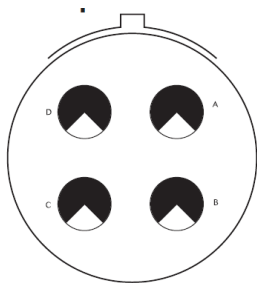


J2: D38999/20WG75PN

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

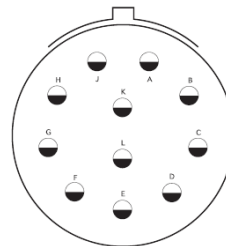
-752 Option

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



J1: D38999/20WG75PN

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

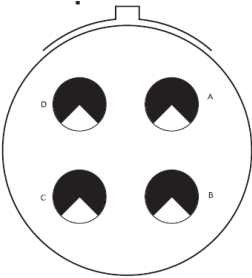


J2: D38999/20WF11SN

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

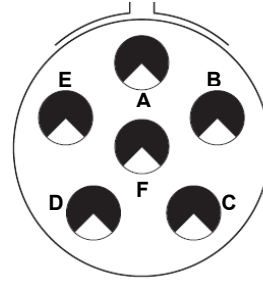


-758 Option Standard Connector for CH-M2000-12



J1: D38999/20WG75PN

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



J2: 8D0-23W06SNL (MFR Souriau)

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