



CH-M500 Series

Conduction Cooled AC/DC Power Supply



FEATURES

- Conduction cooled
- 85~245 VAC input; 47~63Hz
- 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)		6A (typical at maximum output power, 115VAC in)
Inrush Current	A		25 A max at cold start
Power Factor	-		> .96 @ 115vac; > .93@230vac @ full load
Leakage Current	mArms		< 3.3 mArms @ 115 VAC in

		Unit	CH-M500AC-12	CH-M500AC-24	CH-M500AC-28
OUTPUT	Voltage	VDC	12	24	28
	Efficiency 110 VAC Full Load	%	84	87	87
	Current	A	41.6	20.5	18
	Max Power	W	500	500	500
	Regulation	%	+/-1.5	+/-1.5	+/-1.5
	Ripple/Noise	% Pk-Pk	1.5	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	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	-20~85C (-40~85C options available upon Request)
	Storage Temp	-55 to +100 C
	Operating Humidity	10~95% , non-condensing
	Operating Altitude	10,000 ft max
	Vibration	MIL-STD810H, Method 514.8, Category 24, Figure 514.8E-1.
	Shock	MIL-STD-810H, Procedure 1, 20G 11ms
	MTBF Telecordia SR-22	>158,000 hrs.@ 40C ambient temp. Ground benign
Standards	Conducted Emissions ²	MIL-STD-461F/G: CE 101, CE 102 (10Khz~10Mhz)
	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
Size	Inches/lbs	8" x 5" x 2.60" / 4.9 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 vendor 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.

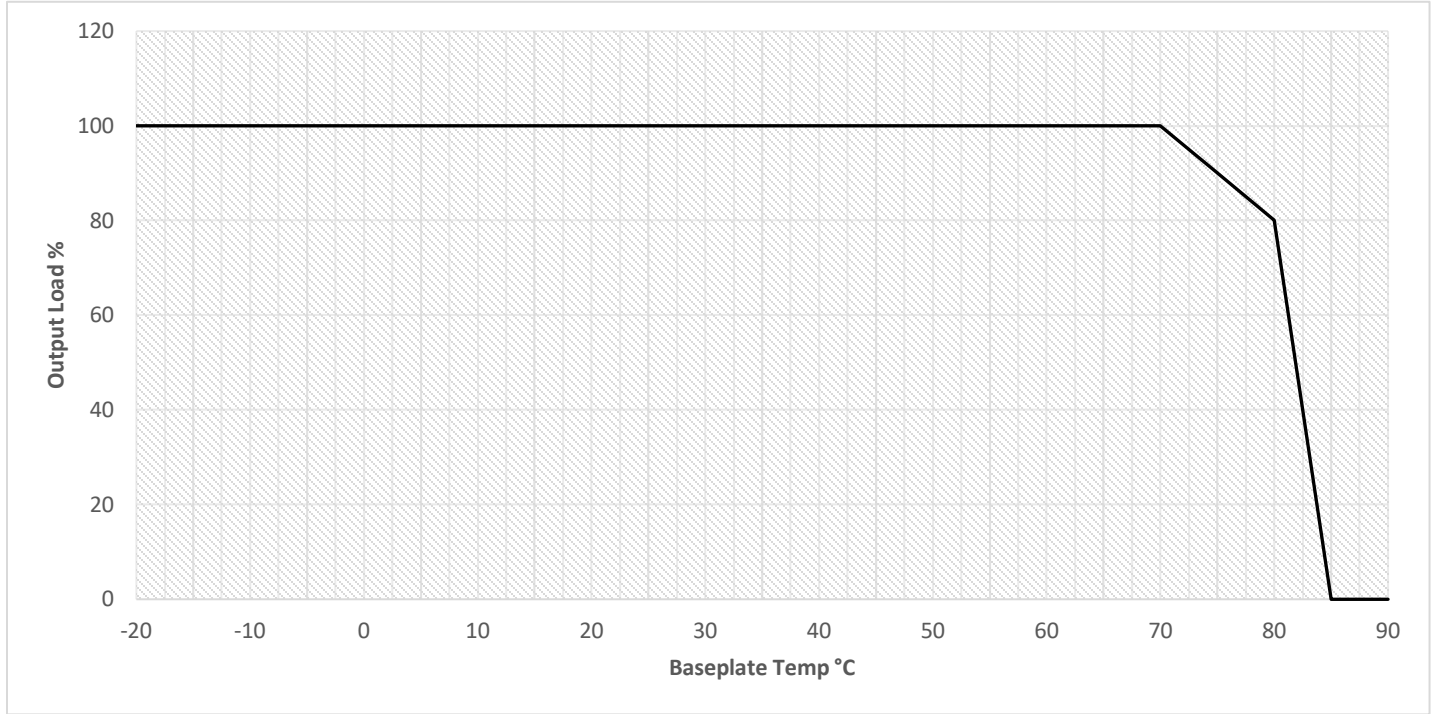
OPTIONS

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

Additional Options	
Low temp (-40°C) 400Hz input MIL-DTL-901(E) Grade B shock enclosure Anodized Enclosure Powder coat painted External potentiometer (Voltage Trim)	

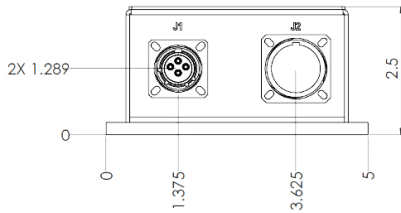
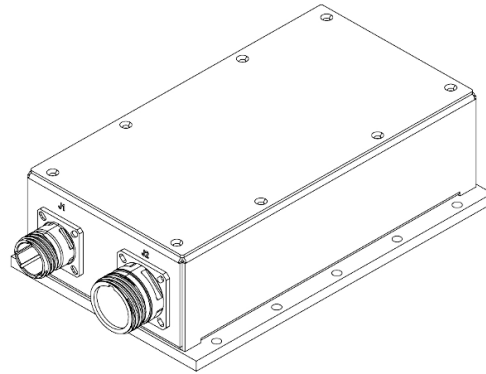
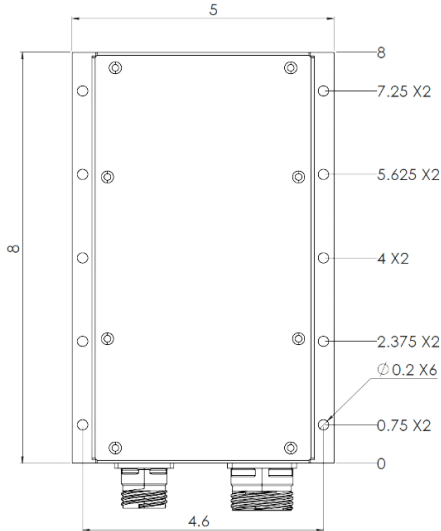


DERATING

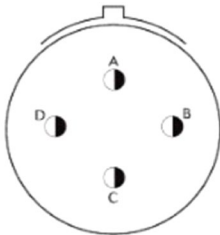




DIMENSIONAL DRAWING



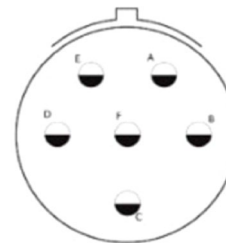
J1: D38999/20WC04PN



J1: D38999/20WC04PN

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

J2: D38999/20WE6SN



J2: D38999/20WE6SN

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

Standard Connector

Specification subject to change without notification