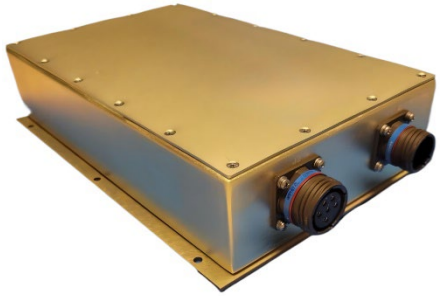
CH-M1000 Series Conduction Cooled AC/DC Power Supply



FEATURES

- Conduction cooled
- 1000 Watt
- 85~264 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)	12A (typical at maximum output power, 115VAC in)
	Inrush Current	A	35 A max at cold start
	Power Factor	-	> 0.99 @ full load (115VAC & 22 VAC)
	Leakage Current	mArms	< 3.3 mArms @ 115 VAC in

			CH-M1000-12	CH-M1000-24	CH-M1000-28	CH-M1000-48
OUTPUT	Voltage	VDC	12	24	28	48
	Efficiency 110 VAC Full Load	%	85	88	89	90
	Current	A	83.4	41.7	35.8	20.84
	Max Power	W	1001	1001	1002	1000
	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
	MTBF Telecordia SR-22	>205,000 hrs.@ 40C ambient temp. Ground benign
Standards	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	11” x 7.5" x 2.60” / 7.5 lbs

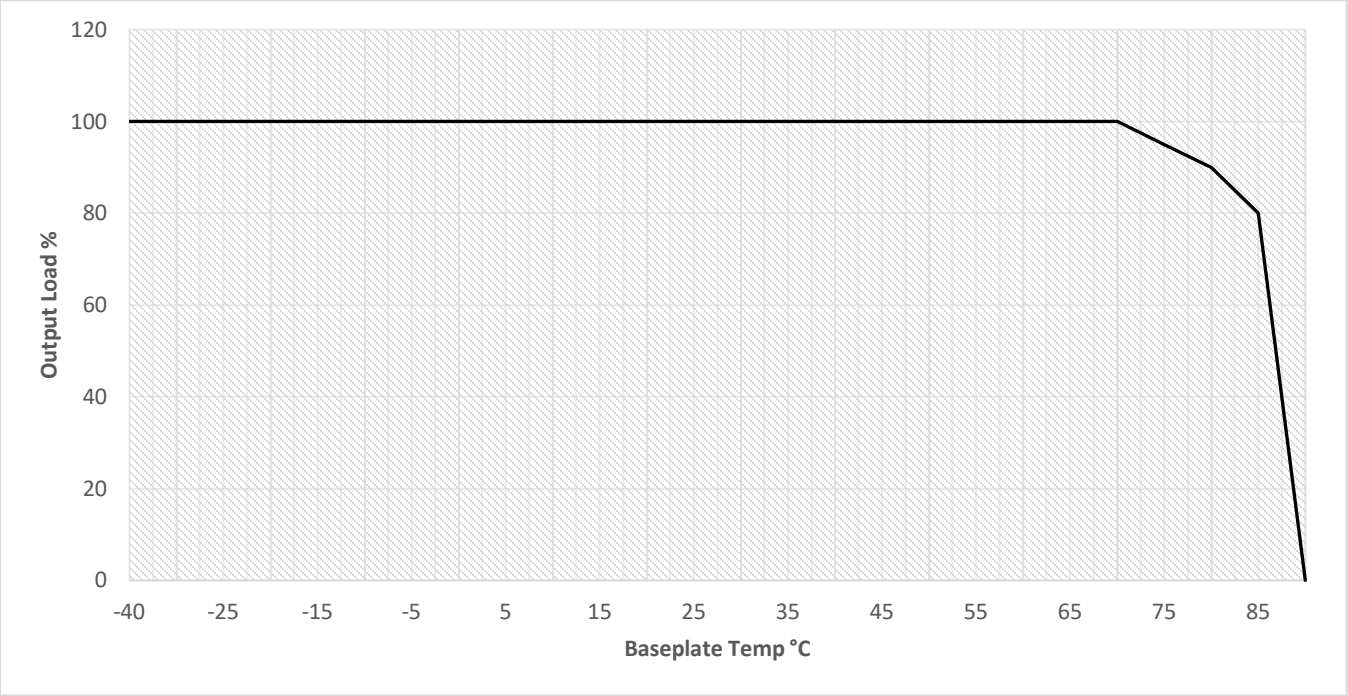
1. Ripple and noise are measured at oscilloscope 20MHz bandwidth by a 10uF electrolytic capacitor and a 0.1uF ceramic capacitor in parallel at output connector.
2. Standards: Unit has been designed to meet the standards listed. It is the responsibility of the customer to test in system. Conducted emissions (CE101, C102) using shielded 3 conductor cable (L,N,G) with unit mounted to chassis ground.
3. Contact factory for test conditions.

OPTIONS

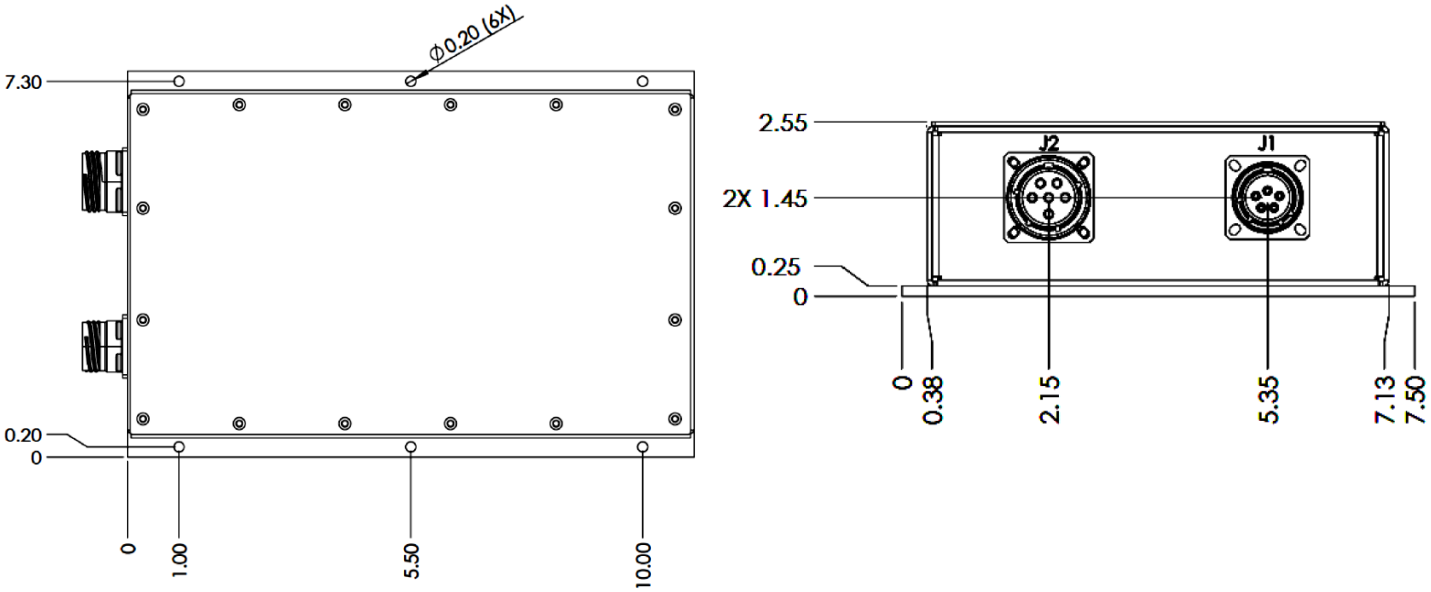
Connectors
Customer may request connector change with MOQ ▪D38999 or equivalent ▪MIL/SAE 5015 or equivalent

Additional Options
400Hz input Three Phase input Non-Standard Voltages (Factory Set 22~55VDC) MIL-DTL-901(E) Grade B shock enclosure Anodized or Power Coat Enclosure Secondary Voltage (5, 12, 15, 24 VDC, 10W max) External potentiometer (Voltage Trim) Remote On/Off Status Reporting (I2C-Vout, Iout, Internal Temp)

DERATING



DIMENSIONAL DRAWING

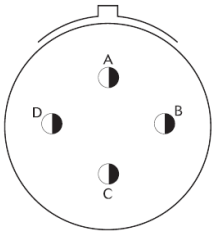


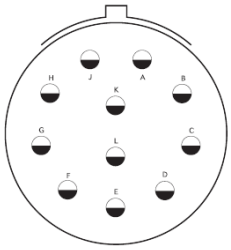
* *Dimensions shown in inches*

DIMENSIONAL DRAWING-INTERFACE CONNECTORS

-411 Option

Standard Connector for CH-M1000-12, 24, -28, -48 with Secondary Output Voltage



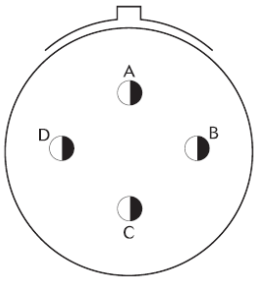


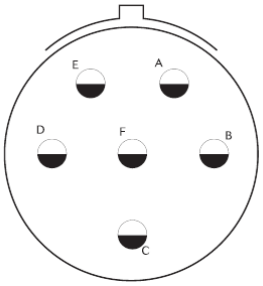
J1: D38999/20WC04PN
J1-A: Line
J1-B: Neutral
J1-C: Ground
J1-D: N/C

J2: D38999/20WF11SN
J2-A: +Vout
J2-B: +Vout
J2-C: +Vout
J2-D: +Vout
J2-E: N/C
J2-F: Vout RTN
J2-G: Vout RTN
J2-H: Vout RTN
J2-I: Vout RTN
J2-K:+Vout (Secondary) or N/C
J2-L: Vout RTN (Secondary) or N/C

-420 Option

Standard Connector for CH-M1000-24, -28, -48 Single DC Output





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

J1: D38999/20WC04PN
J1-A: Line
J1-B: Neutral
J1-C: Ground
J1-D: N/C

J2: D38999/20WE6SN (24~48Vout)
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