

HIGH EFFICIENCY, LOW PROFILE.

Currently serving in many active programs, the CM500 Series is proven to perform in extreme environments.

Featuring full Power Factor Correction in a rugged, compact chassis, the CM500 Series is designed to meet MIL-S-901 High Impact Shock, MIL-STD-810 Environmental Requirements, MIL-STD-1399 Input Requirements, MIL-STD-461 CE101, CE102 EMI Requirements.

The CM500 series is IP65 sealed (IP67 available) and features MS3470 connectors as standard. Factory Configurable.



SPECIFICATIONS:

AC INPUT:

95-260 VAC, 47-440Hz, single phase. Power factor corrected. Meets MIL-STD-1399, Section 300, type 1 requirements.

EFFICIENCY:

80% minimum.(88% typ, 28 VDC Model at 100% load)

LINE REGULATION:

±1% of nominal over the full range of line input voltage.

LOAD REGULATION:

±1% for change from no load to full load.

RIPPLE AND NOISE:

Peak-to-peak combined ripple and noise does not exceed 2% of nominal output measured with a 20 MHz bandwidth.

ELECTROMAGNETIC COMPATIBILITY:

MIL-STD-461 requirements: CE101, CE102

ISOLATION:

Input to output: 1500 VDC
Input to case: 1500 VDC
Output to case: 500 VDC

TEMPERATURE RANGE:

Storage: -50°C to +85°C.
Operating temperature: -40°C to +70°C baseplate with no power derating.

CIRCUIT PROTECTION:

Each unit is completely protected against a short circuit of any duration. The current is nominally set at 120% of full load. The output voltage automatically restores to normal when the short is removed.

INPUT PROTECTION:

Internal fuse; In-rush current limiting; Transient protection

OVER TEMPERATURE PROTECTION:

Output shut down if maximum case temperature limit is exceeded.

REMOTE SENSING:

Standard.

CONTROL FEATURES:

"INHIBIT"
(TTL LOW=TRUE).

BUILT-IN TEST FEATURE:

OUTPUT FAULT ALARM
(TTL LOW=FAULT).

RELIABILITY:

MTBF 15,438 hours calculated per MIL-HDBK-217Fn.2/25C/Full Load Naval Sheltered Environment

WEIGHT: 4.4 to 5 lbs typical.

ENVIRONMENTAL CONDITIONS:

MIL-STD-810

Shock: Method 516.6, Procedure IV, MIL-S-901 requirements (light weight)

Vibration: Method 514.5, MIL-STD-167, type 1 requirements

Humidity: Method 507 (Power supply operates without any evidence of degraded performance in non-condensing relative humidity up to 95% (Select "C" option for 100% condensing environment)

Altitude: Method 500.4, Procedure I & II

Salt Fog: Method 509.4

Altitude: Method 500.4, Procedure I & II

High Temperature: Method 501.4, Procedure I & II

Low Temperature: Method 502.4, Procedure I

Sand and Dust: Method 510.4, Procedure I & II

Explosive Atmosphere: Method 511.4, Procedure

Acceleration: Method 513.5, Procedure I & II



REV 20220214

*Specifications subject to change without notice

MECHANICAL DRAWING:

Model Number System
CM500 S 28 H - 151

COLOR
(NONE) = BLACK 27041
303 = SAND 33303
383 = GREEN 383
151 = GRAY 151

MOUNTING KIT OPTIONS

H = HEATSINK
HB = HEATSINK / BRACKET
HBD = HEATSINK / BRACKET / DUST CAPS

OUTPUT VOLTAGE
12 = 12 VDC
13.6 = 13.6 VDC
15 = 15 VDC
24 = 24 VDC
28 = 28 VDC
48 = 48 VDC

S = STANDARD CONNECTOR
(UNIT MEETS IP65)

M = FULLY SEALED

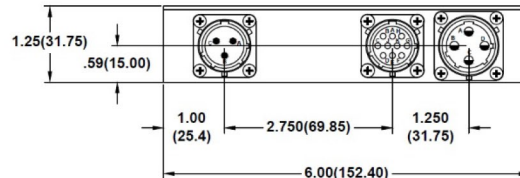
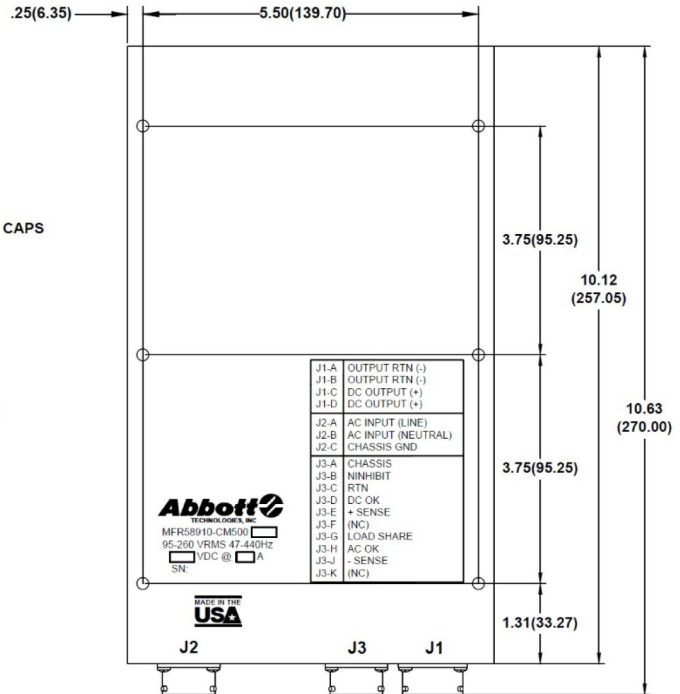
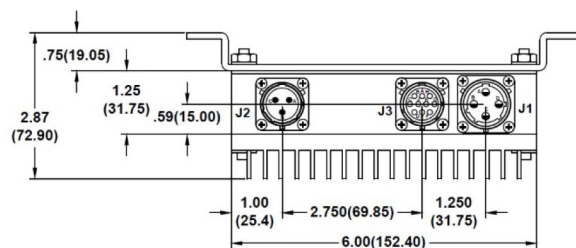
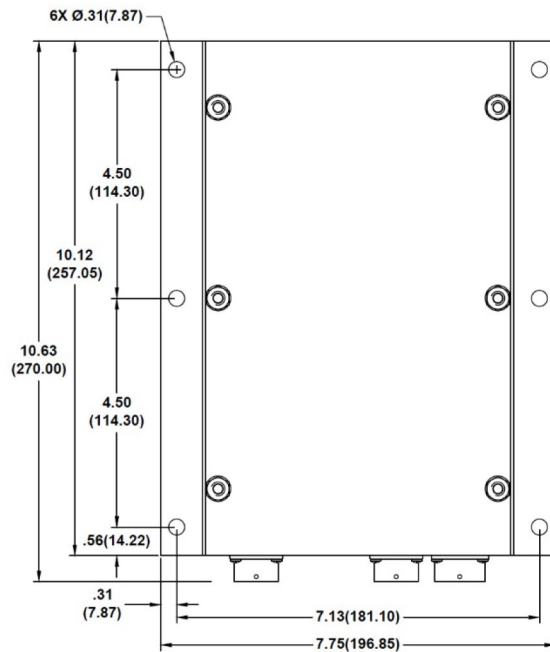
WATERPROOF CONNECTOR
(UNIT MEETS IP67, Consult factory)

MODEL FAMILY
(500W OUTPUT)

Maximum Output Current Ratings

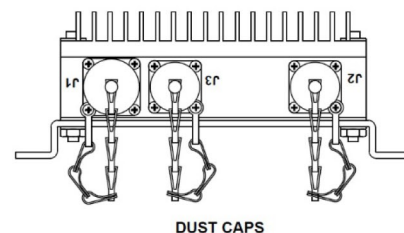
Output Voltage	Output Current
12V	35.0A*
13.6V	35.0A*
15V	33.3A
24V	20.8A
28V	17.9A
48V	10.4A

* Output power limited by connector current rating. Please contact factory for alternative connector information.



NOTES UNLESS OTHERWISE SPECIFIED

- J1 (DC OUTPUT) = MS3470W14-4S / PT06E-14-4S
CAUTION: 17A MAX CONTINUOUS / 23A MAX PEAK
LOAD CURRENT PER INDIVIDUAL OUTPUT PIN. (PARALLEL
CONNECTIONS FOR FULL LOAD OPERATION).
- J2 (AC INPUT) = MS3112E12-3P / PT02E-12-3P
- J3 (SIGNAL) = MS3112E12-10S / PT02E-12-10S
- BUILT TO MEET ENVIRONMENTAL REQUIREMENTS OF IEC IP-67.
- DIMENSION IN PARENTHESIS () ARE IN MILLIMETERS.



DUST CAPS