Abbott TECHNOLOGIES®

WHEN RELIABILITY IS IMPERATIVE™

CM500

500 WATT AC TO DC POWER
FOR EXTREME ENVIRONMENTS

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 MIL-DTL-26482 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).

PARALLEL OPERATION:
Two units can be operated in parallel; the LOAD SHARE signal (J3-G) forces equal sharing of output load current. Connect J3-G (share) and J3-C (signal return) between units, routed as a twisted pair.

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 "EC" configuration for 100% condensing environment)
Altitude: Method 500.4, Procedure I & II
Salt Fog: Method 509.4
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
Acceleration: Method 513.5, Procedure I & II

REV 20261111

**Specifications subject to change without notice*

MADE IN THE USA

AS9100D

SBA WOSB
Woman Owned Small Business

8203 VINELAND AVENUE, SUN VALLEY, CALIFORNIA 91352
800-367-8200 | WWW.ABBOTT-TECH.COM

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MECHANICAL DRAWING:

Model Number System

CM500 EC 28 H -303

CONFIGURATION:
S = STANDARD
E = EMI ENHANCED
EC = EMI CONDENSING ENVIRONMENT
M = IP67 SEALED

OUTPUT VOLTAGE:
(SEE AVAILABLE OUTPUTS)

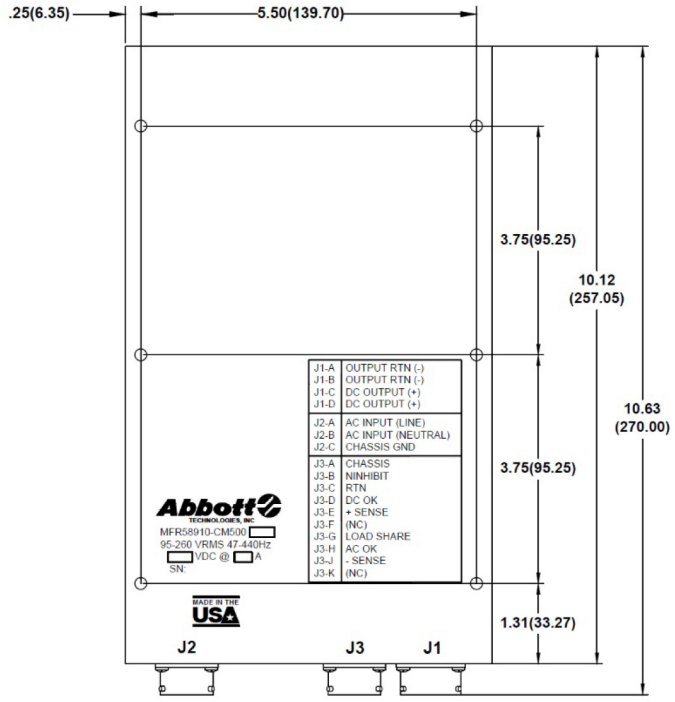
HARDWARE:
H = HEATSINK
HB = HEATSINK/BRACKET
HBD = HEATSINK/BRACKET/DUST CAPS

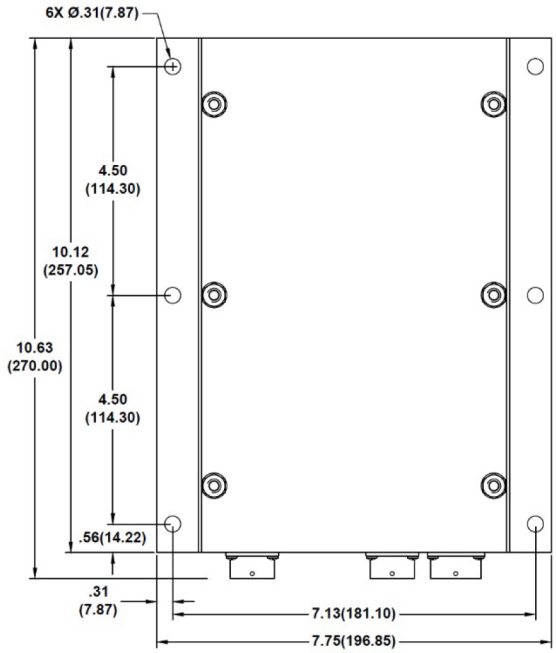
COLOR:
(NONE) = BLACK 27041
303 = SAND 33303
383 = GREEN 383
151 = GRAY 151

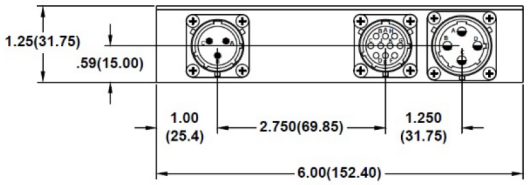
Maximum Output Current Ratings

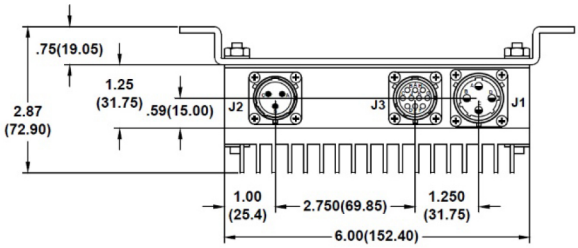
Output Voltage	Output Current
12V	35.0A*
13.6V	35.0A*
15V	33.3A
24V	20.8A
28V	17.9A
48V	10.4A

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

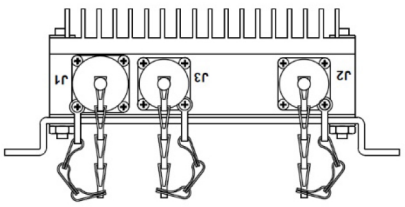








NOTES UNLESS OTHERWISE SPECIFIED
1. J1 (DC OUTPUT) = MS3470W14-4S / PT06E-14-4S
   CAUTION: 17.5A MAX CONTINUOUS / 23A MAX PEAK LOAD CURRENT PER INDIVIDUAL OUTPUT PIN. (PARALLEL CONNECTIONS FOR FULL LOAD OPERATION).
   J2 (AC INPUT) = MS3112E12-3P / PT02E-12-3P
   J3 (SIGNAL) = MS3112E12-10S / PT02E-12-10S
2. BUILT TO MEET ENVIRONMENTAL REQUIREMENTS OF IEC IP-65 (IP-67 WITH M CONFIGURATION).
3. DIMENSION IN PARENTHESIS ( ) ARE IN MILLIMETERS.



DUST CAPS

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