

# 200 Watt Enclosed AC-DC Switchers for Extreme Environments

## FEATURES

- Power Factor Correction
- Fully compliant with MIL-STD 461D, CE101, CE102
- Meets MIL-S-901 (High Impact shock)
- Meets MIL-STD-810F
- FCC 20780 class A EMI compliance
- Fully sealed to meet IP65  
(Optional connectors available to meet IP67)



## SPECIFICATIONS

### AC INPUT:

95-260 VAC 47-880 Hz single phase. Power factor corrected. Meets MIL-STD-1399, Section 300, type I requirements (spike voltage test).

### EFFICIENCY:

80% minimum or greater.

### 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 combines ripple and noise does not exceed 2% of nominal on the output measured with a 20 MHz bandwidth.

### OPERATING TEMPERATURE RANGE:

Storage, transportation and handling: - 50° to +85°C.  
Ambient temperature: -40°C to +70°C baseplate with no power derating.

### ISOLATION:

Input to Output: 1500 VDC  
Input to Case: 1500 VDC  
Output to Case: 500 VDC

### SHORT CIRCUIT PROTECTION:

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

### INPUT PROTECTION:

Internal fuse. In-rush current limiting.

**REMOTE ERROR SENSING:** Standard.

### CONTROL FEATURES:

"INHIBIT", "ENABLE" (STANDARD) (TTLLOW = TRUE)

### BUILT-IN-TEST FEATURE:

OUTPUT FAULT ALARM (TTLLOW = FAULT)

### RELIABILITY:

MTBF 40,000 hours calculated per MIL-HDBK-217F in naval sheltered environment.

### ELECTROMAGNETIC COMPATIBILITY:

Meets the following MIL-STD-461D requirements: CE101, CE102.

### OUTLINE DIMENSIONS:

Refer to mechanical drawings.

**WEIGHT:** 2 lbs typical.

### ENVIRONMENTAL CONDITIONS:

**Shock test:** Unit meets MIL-S-901 requirements (light weight).

**Vibration test:** Unit meets MIL-STD-167, type I requirements.

**Humidity:** Power supply operates without any evidence of degraded performance in non-condensing relative humidity up to 95%.

## MAXIMUM OUTPUT CURRENT RATINGS

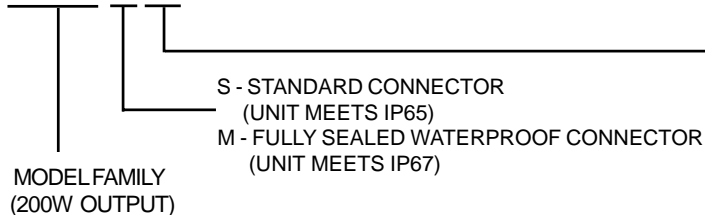
| Output Voltage | Output Current |
|----------------|----------------|
| 12V            | 16.66A         |
| 13.6V          | 14.7A          |
| 15V            | 13.33A         |
| 24V            | 8.33A          |
| 28V            | 7.14A          |
| 48V            | 10.42A         |

### VOLTAGE OUTPUT

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

## MODEL NUMBER SYSTEM

**AM200 X 28**



Specifications are subject to change without notice



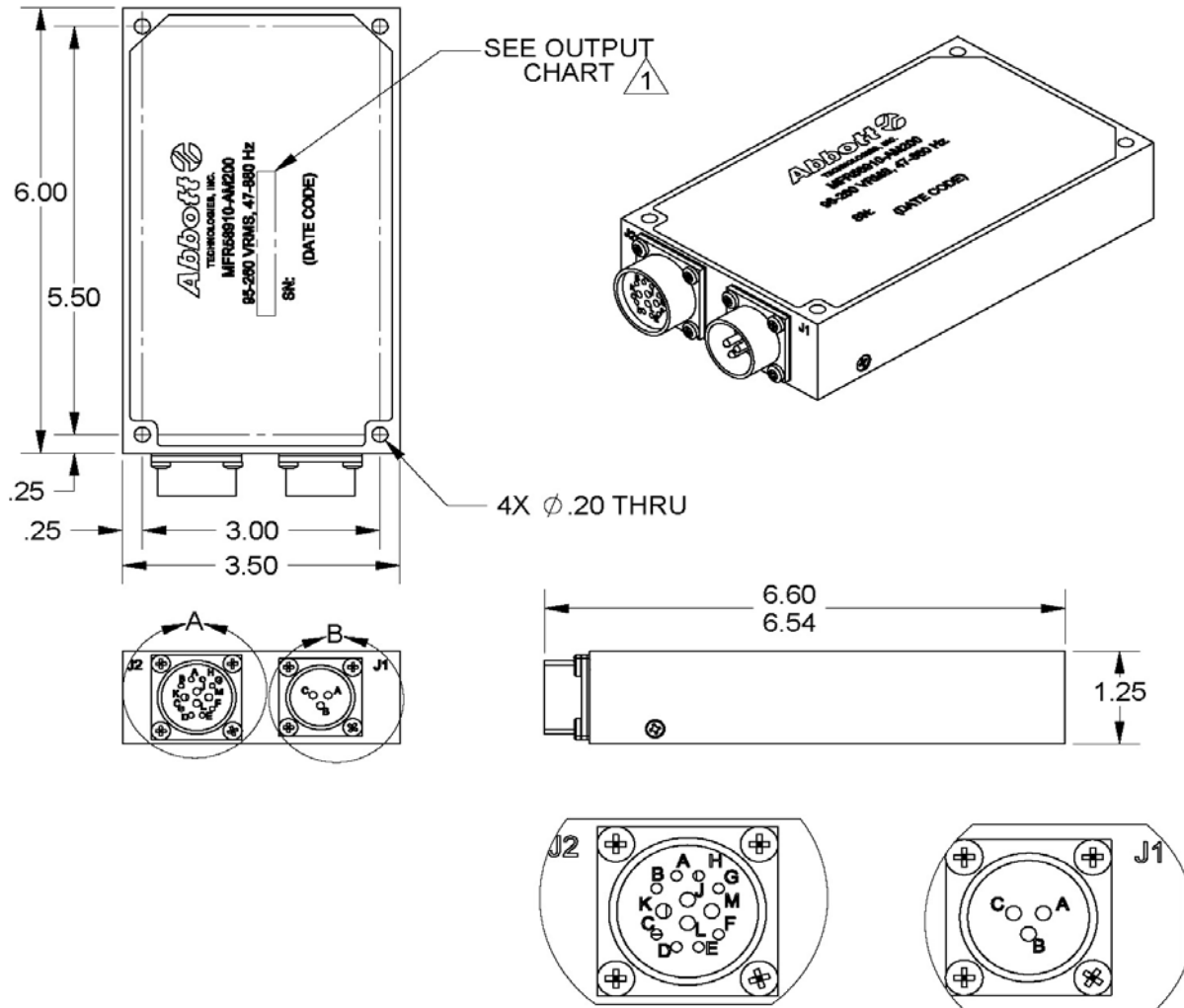
8203 Vineland Avenue  
Sun Valley, CA 91352  
Tel. 818-504-0644  
Fax. 818-768-0395

Call us toll-free **1-800-367-8200**  
or visit us on-line at: **www.abbott-tech.com**

# 200 Watt Enclosed AC-DC Switchers

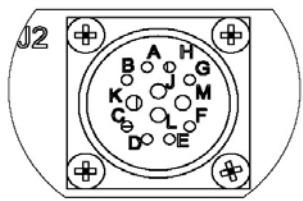
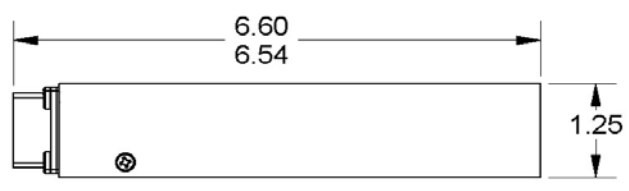
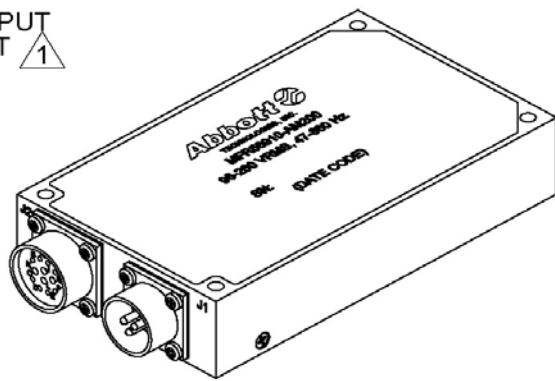
## MECHANICAL DIMENSIONS

### (Standard Connector)

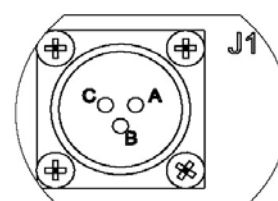


SEE OUTPUT CHART

4X  $\phi$  .20 THRU



DETAIL A



DETAIL B

**J2 MS3470W14-12S**

**J1 MS3470W12-3P**

1. INPUT: 95-260 VRMS, 47-880 Hz

| OUTPUT          | MODEL    |
|-----------------|----------|
| 12 VDC @ 16.67A | AM200S12 |
| 15VDC @ 13.33A  | AM200S15 |
| 24VDC @ 8.33A   | AM200S24 |
| 28VDC @ 7.14A   | AM200S28 |

- J2-A ENABLE
- J2-B INHIBIT
- J2-C (OPTION C)
- J2-D +SENSE
- J2-E FAULT
- J2-F (OPTION F)
- J2-G (OPTION G)
- J2-H -SENSE
- J2-J +OUTPUT
- J2-K -OUTPUT
- J2-L -OUTPUT
- J2-M +OUTPUT

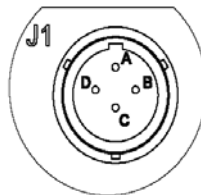
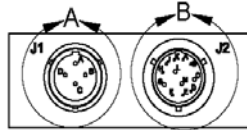
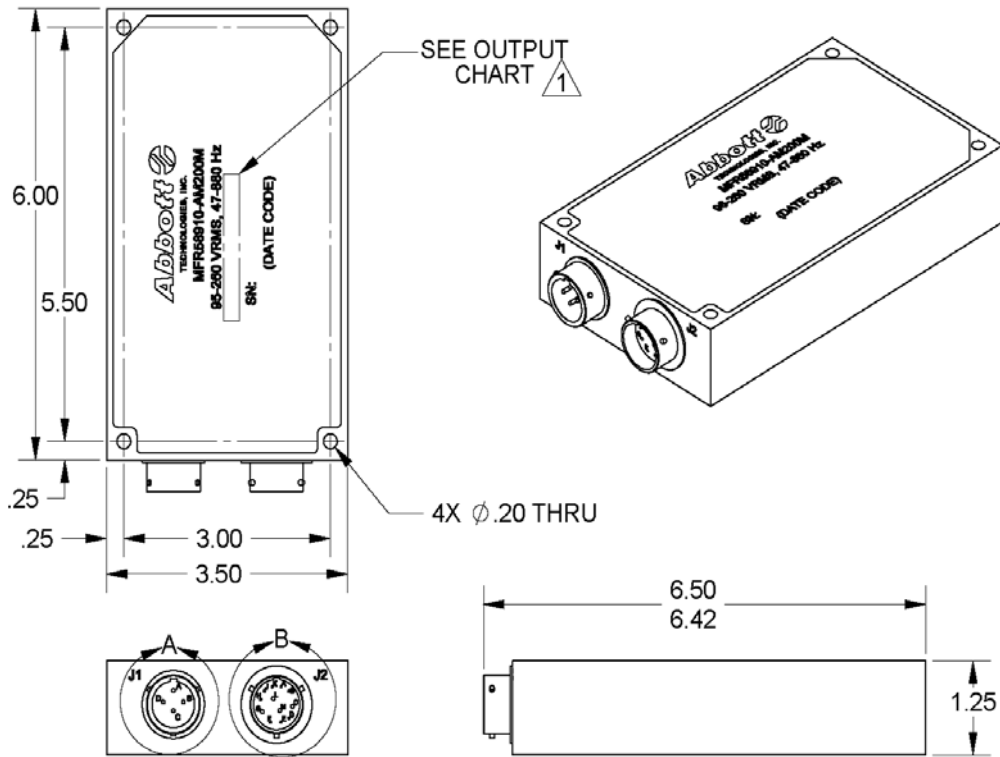
- J1-A AC INPUT (HOT)
- J1-B AC INPUT (NEUTRAL)
- J1-C CHASSIS GROUND

2. ENVIRONMENTALLY-SEALED TO MEET IP65.
3. FINISH: BLACK PAINT.
4. MARKING: WHITE EPOXY INK, LOCATED APPROXIMATELY AS SHOWN.
5. MATING CONNECTORS:  
 (J1) MS3476W12-3S  
 (J2) MS3476W14-12P

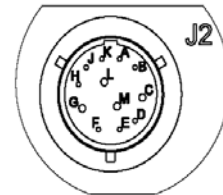
# 200 Watt Enclosed AC-DC Switchers

## MECHANICAL DIMENSIONS

### (Fully Sealed Waterproof Connector)



DETAIL A



DETAIL B

#### J1 MS27478Y12D4P

- J1-A AC INPUT (HOT)
- J1-B AC INPUT (NEUTRAL)
- J1-C CHASSIS GROUND
- J1-D (OPTION D)

#### J2 MS27478Y14D97S

- J2-A ENABLE
- J2-B INHIBIT
- J2-C (OPTION C)
- J2-D +SENSE
- J2-E FAULT
- J2-F (OPTION F)
- J2-G (OPTION G)
- J2-H -SENSE
- J2-J +OUTPUT
- J2-K -OUTPUT
- J2-L -OUTPUT
- J2-M +OUTPUT

1. INPUT: 95-260 VRMS, 47-880 Hz

| OUTPUT          | MODEL    |
|-----------------|----------|
| 12 VDC @ 16.67A | AM200M12 |
| 15VDC @ 13.33A  | AM200M15 |
| 24VDC @ 8.33A   | AM200M24 |
| 28VDC @ 7.14A   | AM200M28 |

- 2. ENVIRONMENTALLY-SEALED TO MEET IP67.
- 3. FINISH: BLACK PAINT.
- 4. MARKING: WHITE EPOXY INK, LOCATED APPROXIMATELY AS SHOWN.

#### NOTES:

- 1. FUNCTIONS WITH "BAR" DESIGNATION (i.e."INHIBIT") ARE "LOW FOR TRUE" (TTL) REFERENCED TO - OUTPUT.
- 2. MATING CONNECTOR:  
(J1) MS27473E12D4S  
(J2) MS27473E14D97P