

## M4916 SERIES

AC/DC POWER SUPPLY



### PRODUCT HIGHLIGHTS

- CE MARKING (IEC 60939-3)
- AC INPUT: 85-265VAC
- SINGLE PHASE
- 50/60/400HZ
- AC OUTPUT: FOLLOWING INPUT
- 10A MAX CURRENT
- HIGH DENSITY
- COMPACT



**Applications**

Military (Airborne, Mobile, Ground-Fix), Ruggedized, Telecom, Industrial

**Special Features**

- Universal AC Input
- Improves EMI performance
- CE Marking (IEC 60939-3)
- Intended for use with Single-Phase PFC CE Marking AC/DC power supplies M3916 and M1986.

**Electrical Specifications**

**AC Input**

**Option 1:**  
85 to 265 VAC ; 50/60Hz  
Single-phase, 10A max

**Option 2:**

103 to 127 VAC ; 400Hz  
Single-phase, 10A max

**AC Output**

Following input

**Isolation**

Input to Case: 2500 V<sub>DC</sub>  
Output to Case: 2500 V<sub>DC</sub>

**Environmental Conditions**

Designed to Meet MIL-STD-810F

**Temperature**

Methods 501.4 & 502.4  
Operating: -40°C to +85°C (at baseplate)  
Storage: -55°C to +125°C (ambient)

**Vibration**

MIL-STD 810F, Method 514.5, Procedure I, Category 24, General minimum integrity exposure, IAW Figure 514.5C-17, 1 hour per axis

**Altitude**

Method 500.4  
Procedures I – Storage/Air transport:  
up to 70,000 ft. (non-operational)  
Procedure II – Operation/Air Carriage:  
up to 40,000 ft. (operational)

**Shock**

Method 516.5  
Procedure I  
Functional shock, 40g, 15-23ms, Terminal peak  
Sawtooth shock pulse

**Humidity**

Method  
507.4 Up to  
95% RH

**Salt Fog**

Method 509.4

**Reliability**

150,000 hours, calculated IAW MIL-HDBK-217F Notice 2 at +85 °C baseplate, Ground Fixed environment.

**Environmental Stress Screening (ESS)**

Including random vibration and thermal cycles is also available. **Please consult factory for details.**

**Safety Requirements**

The M4916 EMI Line Filter was subjected to the following tests according to IEC 60939-3.

Group	Subclauses and test
0	4.2, 4.9, 4.3, 4.5, 4.8, 4.7
1A	4.2.4, 4.11, 4.30
2	4.18.5, 4.18.3, 4.19
3A	4.20, 4.21, 4.23

**Wire Assignment:**AC Input Wires

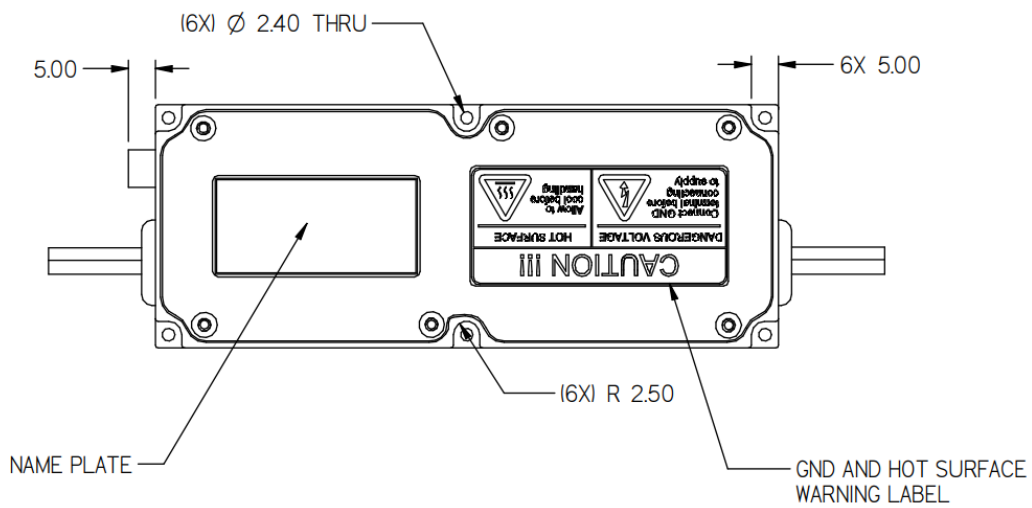
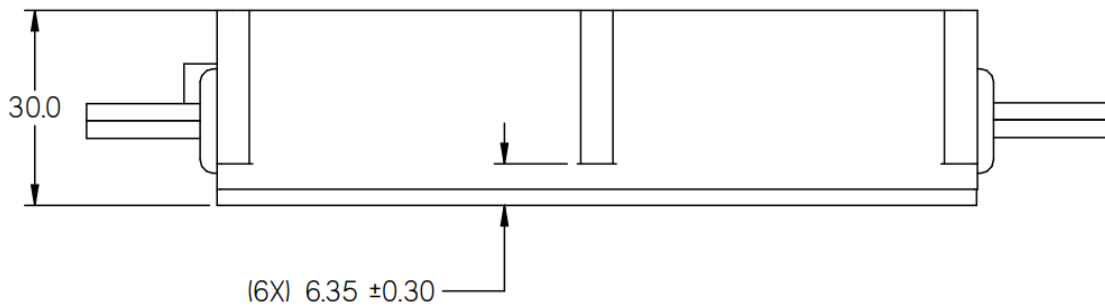
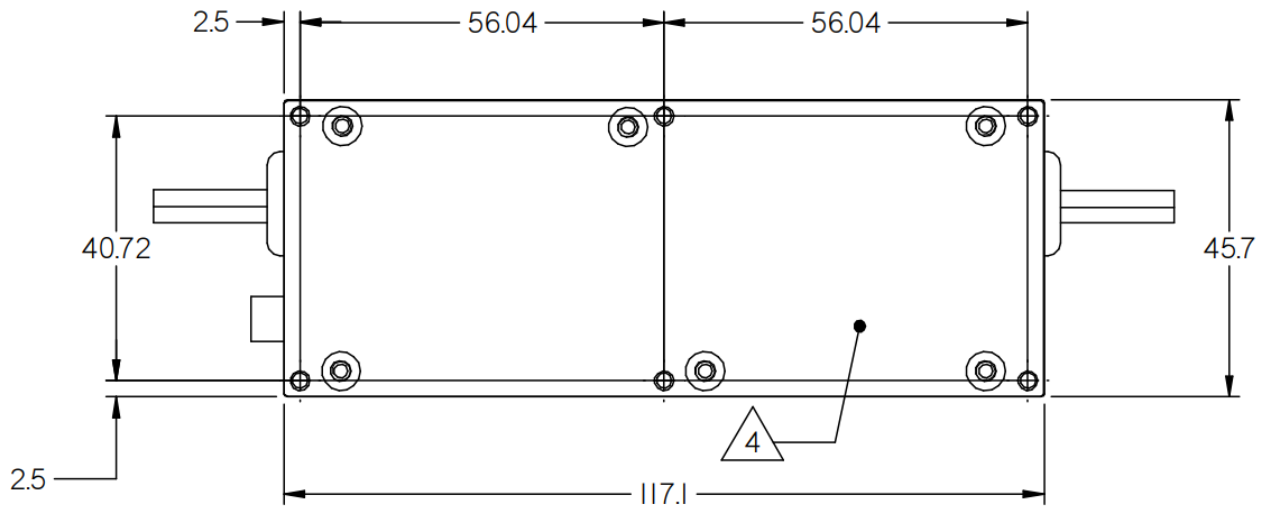
Wire Name	Color*	AWG#
PHASE	●	16
NEUTRAL	●	16
CHASSIS	●	16

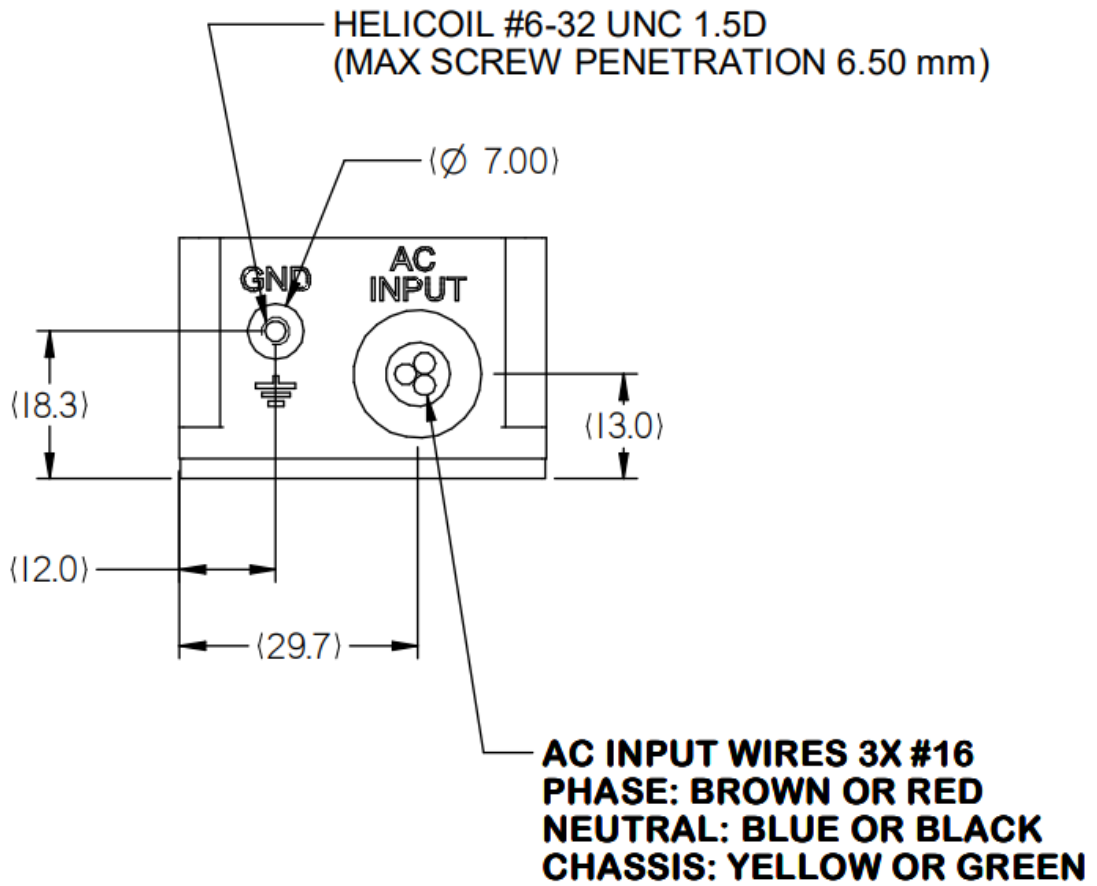
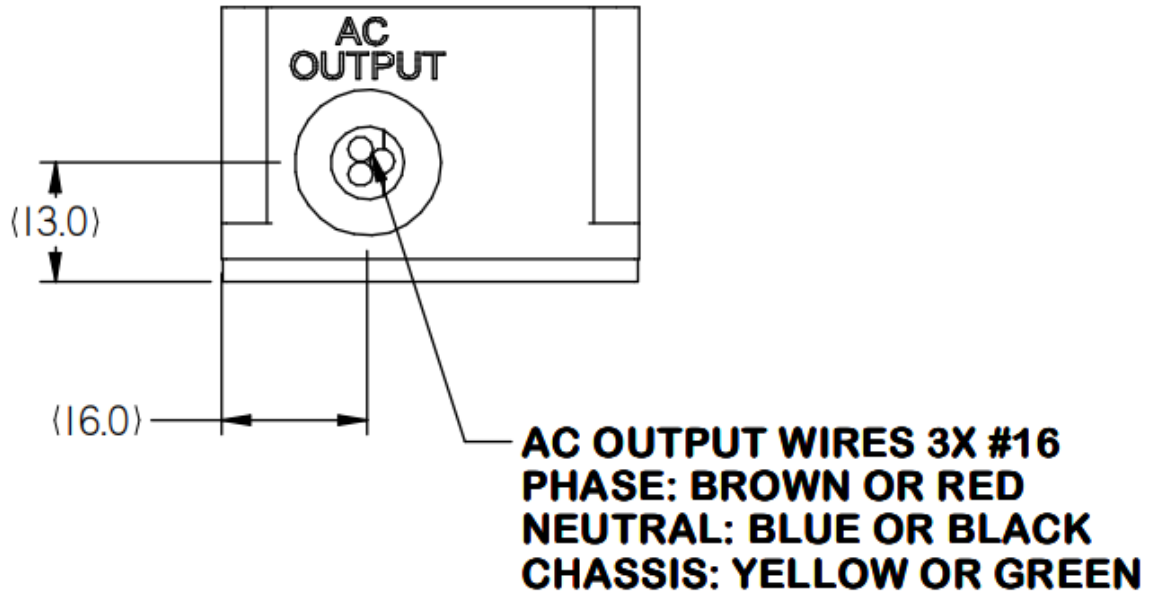
AC Output Wires

Wire Name	Color*	AWG#
PHASE	●	16
NEUTRAL	●	16
CHASSIS	●	16

\*Or equivalent color according to the outline drawing.

Outline Drawing





## NOTES :

1. WORKMANSHIP SHALL BE MIL-STD-454, REQT. 9
2. MTL. AL 6061-T651& AL 5052-H32
3. CHROMATE CONVERSION COATING PER MIL -DTL-5541F,TYPE 2 CLASS 1A
4. HEAT DISSIPATION AREA: 5,100 mm<sup>2</sup>
5. ENGRAVING:  
CHARACTERS HEIGHT: 3 (mm), DEPTH: 0.4 (mm).  
ENGRAVING FILLED WITH BLACK COLOR.

**Standard Configurations**

Part number	Input		Output
	Voltage range	Frequency	
M4916-800	Single-phase, 85 to 265 V <sub>AC</sub>	50/60/400 Hz	Following Input Up to 500W

**Special Features**

- **M4916-800:** Intended to work in front of M3916 CE Marking (IEC 62368-1) AC/DC converter. **Please consult factory for details.**
- **M4916-800:** This Product is REACH Compliant.
- **M4916-800:** The aluminum parts comprising this converter are chromate conversion coated per MIL-DTL-5541F, Type II CLASS 1A or eq

Additional standard configurations available. Consult factory for details.

**Notes**

1. Dimensions are in inches [mm]
2. Tolerance is:  
.X ± .3 in  
.XX ± .15 in
3. Weight: Typical 230 gram

**Note: Specifications are subject to change without prior notice by the manufacturer**