

M914 SERIES

AC/DC LINEAR POWER SUPPLY



PRODUCT HIGHLIGHTS

- **MINIATURE**
- **HIGH DENSITY**
- **3-PHASE 400HZ INPUT**
- **SINGLE/DUAL OUTPUT**
- **UP TO 90 W**

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Applications

Military, Ruggedized, Telecom, Industrial

Special Features

- Miniature size
- Low noise non-switching linear regulator
- High Reliability Components
- Input / Output isolation
- EMI filters included
- Indefinite short circuit protection with auto-recovery
- Over Voltage Protection

Environmental

Temperature

Operating:

-55 °C to +85 °C (at baseplate)

Storage:

-55 °C to +125 °C (ambient)

Altitude

Method 500.4

Procedure I (non-operational): Up to 70,000 ft.

Procedure II (operational):

Up to 40,000 ft.

Salt Fog

Method 509.4

Humidity

Method 507.4

Up to 95% RH

Vibration

Method 514.5

Category 24 - General minimum integrity exposure

1 hour per axis

Shock

Method 516.5

Saw-tooth, 20 g peak, 11 ms.

Reliability

150'000 hours, calculated per

MIL-STD-217F at +85°C

baseplate, ground fixed.

Electrical Specifications

AC INPUT

AC Input range:

115VAC, 3-Phase, 400 Hz

EMC:

Designed to meet or exceed MIL-STD-461D:

CE03, CE07

RE02

RS02,

RS03

CS01, CS02, CS06

Isolation:

500V between Input and Output

500V between Input and Case

DC OUTPUT (floating)

Line/Load regulation:

Less than 1%

(No load to full load, -40°C to +90°C)

Ripple and Noise:

30 mV_{p-p}, typical (max. 1%)

Current limiting (Fold Back):

Continuous protection for unlimited time

Overvoltage protection: Passive

transorb on outputs.

Isolation:

500V between Output and Input

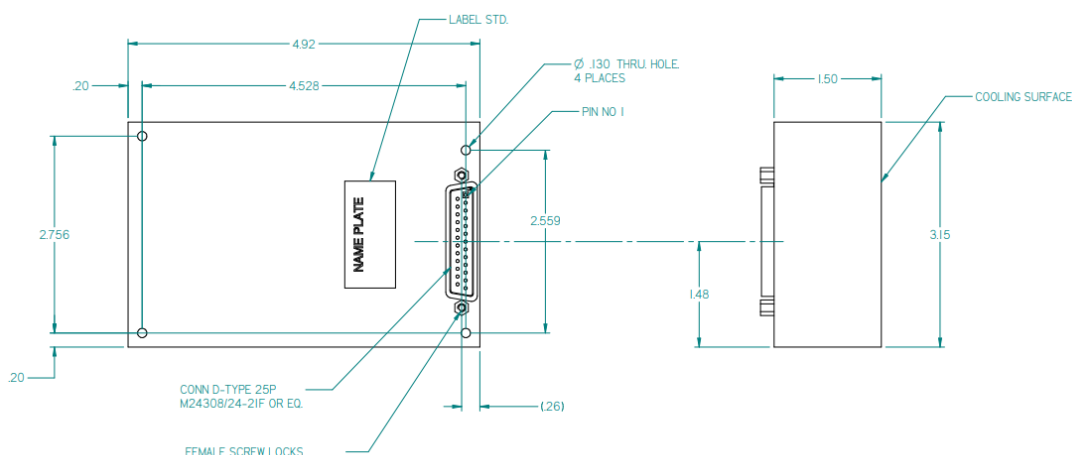
100V between Output and Case

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Typical Pin Assignment for Single Output

| PIN NUMBER | PIN DESIGNATION |
|------------|-----------------|
| 1 | Vout RTN |
| 14 | Vout RTN |
| 2 | Vout RTN |
| 15 | Vout RTN |
| 3 | Vout RTN |
| 16 | Vout RTN |
| 4 | Vout RTN |
| 17 | Vout RTN |
| 5 | Vout RTN |
| 18 | Vout |
| 6 | Vout RTN |
| 19 | Vout |
| 7 | Vout |
| 20 | Vout |
| 8 | Vout |
| 21 | Vout |
| 9 | Vout |
| 22 | Vout |
| 10 | Vout |
| 23 | Vout |
| 11 | N.C |
| 24 | N.C |
| 12 | Phase B |
| 25 | Phase C |
| 13 | Phase A |

Outline Drawing Single Output



- NOTES:
1. MTL AL 6061-T651, AL 5052.
 2. FINISH: CHROMATE CONVERSION COATING PER MIL -DTL-5541, LAST REVISION, TYPE I, CLASS IA.

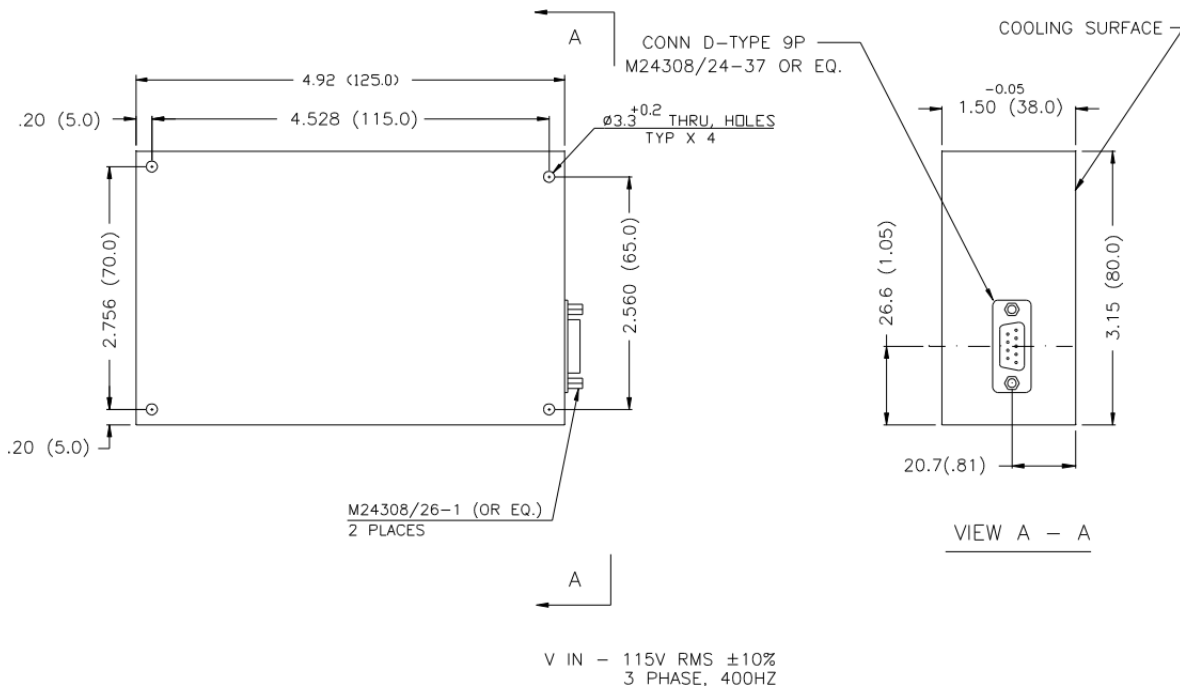
| UNLESS OTHERWISE SPECIFIED | |
|----------------------------|--------------------|
| DIMENSIONS ARE IN [IN] | GENERAL TOLERANCES |
| DO NOT SCALE DRAWING | .XX ± .02 |
| | .XXX ± .010 |
| | ANGLES ± .5° |

M914 SERIES AC/DC LINEAR POWER SUPPLY

Typical Pin Assignment for Dual Output

| PIN NUMBER | PIN DESIGNATION |
|------------|--------------------|
| 1 | 115VAC PH. A INPUT |
| 2 | V OUT 1 RTN |
| 3 | V OUT 1 |
| 4 | 115VAC PH. B INPUT |
| 5 | V OUT 2 |
| 6 | V OUT 2 RTN |
| 7 | 115VAC PH. C INPUT |
| 8 | N.C. |
| 9 | |

Outline Drawing Dual Output



Notes

1. Dimensions are in Inches [mm]
2. Tolerance is:
.XX ± 0.01 IN
.XXX ± 0.005 IN
3. Weight (Typical): 33Oz (950gr)
4. Add suffix "S" for side connector model (replacing the top connector)

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