INSTRUMENTS

49-4000RK and 49-4000RK-SS M2/M2A AC-DC Power Supply Operator's Manual

Part Number: 71-0247RK

Revision: B

Released: 8/13/20

Product Warranty

RKI Instruments, Inc. warranties gas alarm equipment sold by us to be free from defects in materials, workmanship, and performance for a period of one year from date of shipment from RKI Instruments, Inc. Any parts found defective within that period will be repaired or replaced, at our option, free of charge. This warranty does not apply to those items which by their nature are subject to deterioration or consumption in normal service, and which must be cleaned, repaired, or replaced on a routine basis. Examples of such items are:

a) Absorbent cartridges

b) Pump diaphragms and valves

c) Fuses

d) Batteries

e) Filter elements

Warranty is voided by abuse including mechanical damage, alteration, rough handling, or repair procedures not in accordance with the operator's manual. This warranty indicates the full extent of our liability, and we are not responsible for removal or replacement costs, local repair costs, transportation costs, or contingent expenses incurred without our prior approval.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY AND ALL OTHER WARRANTIES AND REPRESENTATIONS, EXPRESSED OR IMPLIED, AND ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF RKI INSTRUMENTS, INC. INCLUDING BUT NOT LIMITED TO, THE WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL RKI INSTRUMENTS, INC. BE LIABLE FOR INDIRECT, INCIDENTAL, OR CONSEQUENTIAL LOSS OR DAMAGE OF ANY KIND CONNECTED WITH THE USE OF ITS PRODUCTS OR FAILURE OF ITS PRODUCTS TO FUNCTION OR OPERATE PROPERLY.

This warranty covers instruments and parts sold to users by authorized distributors, dealers, and representatives as appointed by RKI Instruments, Inc.

We do not assume indemnification for any accident or damage caused by the operation of this gas monitor, and our warranty is limited to the replacement of parts or our complete goods.

Description

The M2/M2A AC-DC power supply is enclosed in either an aluminum junction box or a stainless steel junction box and converts 115 VAC to 24 VDC. This allows a standalone M2/M2A to run from AC.

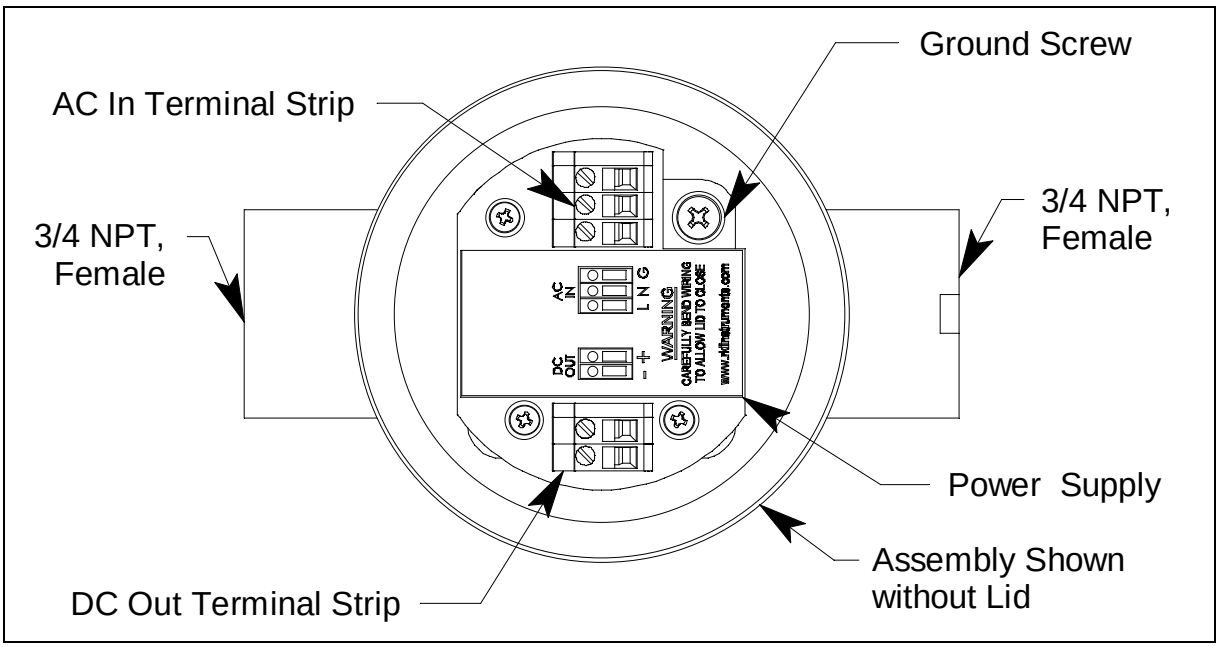

Figure 1: 49-4000RK Aluminum Junction Box Component Location

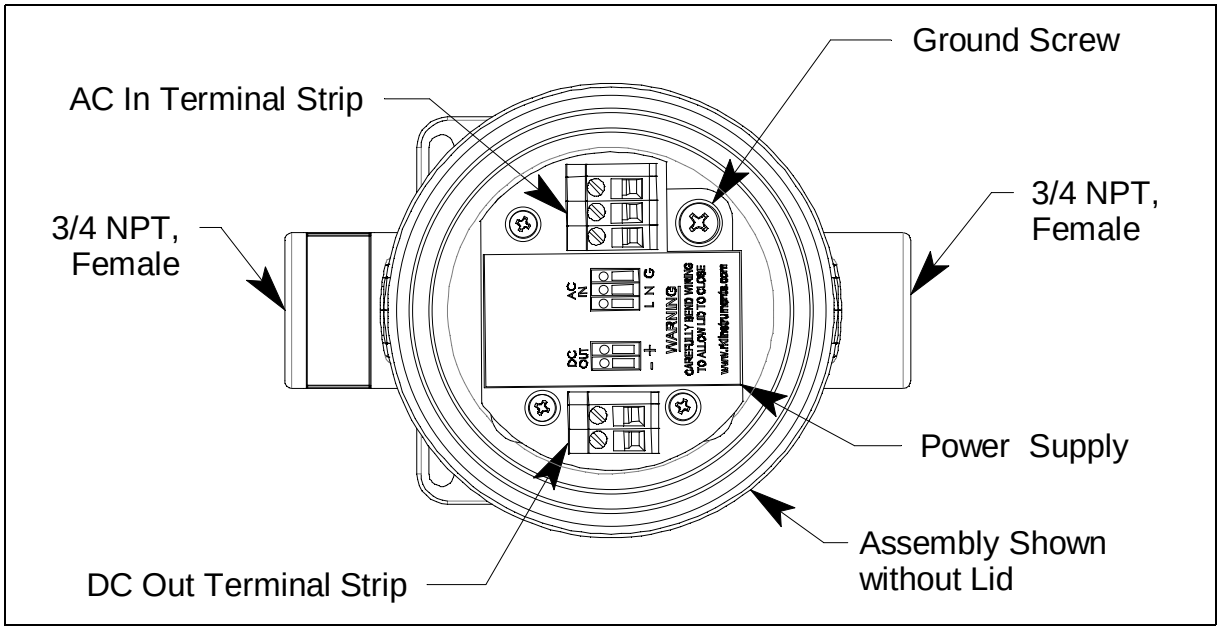

Figure 2: 49-4000RK-SS Stainless Steel Junction Box Component Location

Installation

This section describes procedures to mount the AC-DC power supply and wire it to the M2/M2A.

Mounting the AC-DC Power Supply

1. Select an appropriate mounting site where the power supply is not likely to be bumped or disturbed. Make sure there is sufficient room to wire the power supply back to the M2/M2A.

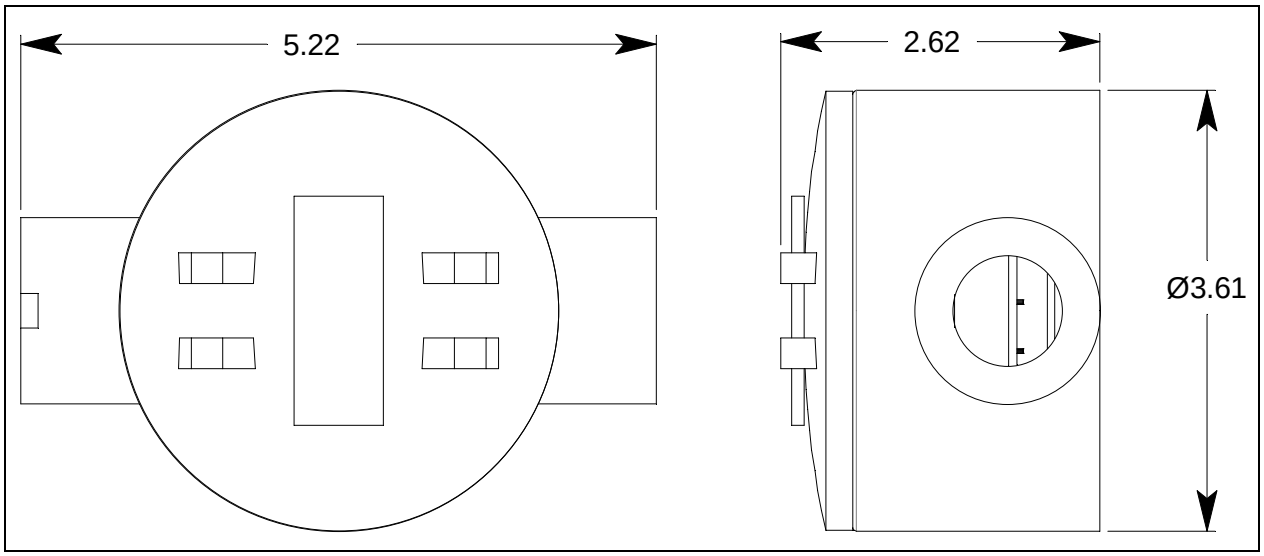

Figure 3: 49-4000RK Aluminum Junction Box Outline and Mounting Dimensions

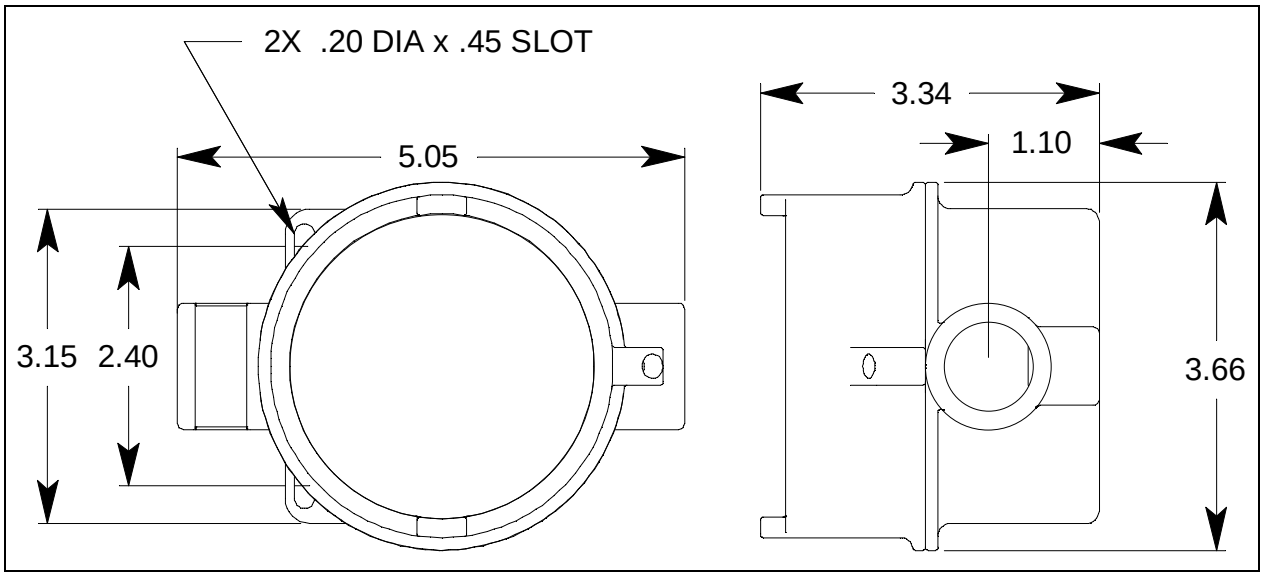

Figure 4: 49-4000RK-SS Stainless Steel Junction Box Outline and Mounting Dimensions

Wiring the AC-DC Power Supply to an M2/M2A

WARNING: Always verify that the power to the controller is off before you make wiring connections.

1. Turn off all incoming power.
2. Remove the junction box cover from the power supply junction box.
3. Guide a three conductor, shielded cable, or three wires in conduit through one of the conduit hubs on the power supply.
4. Connect the wires to the AC In Terminal Strip.
5. Guide a two conductor, shielded cable, or two wires in conduit through the unused conduit hub of the power supply.
6. Connect the wires to the DC Out Terminal Strip.
7. Remove the junction box cover from the M2/M2A junction box and carefully pull the display off of its standoffs.
8. Guide the two conductor, shielded cable, or two wires in conduit from the power supply junction box through the unused conduit hub of the M2/M2A.
9. Connect the wires to the power terminal strip as shown in Figure 5 and Figure 6 below.
10. Secure the power supply junction box cover to the junction box.
11. Push the M2/M2A display back onto the jacks and secure the M2/M2A junction box cover to the junction box.

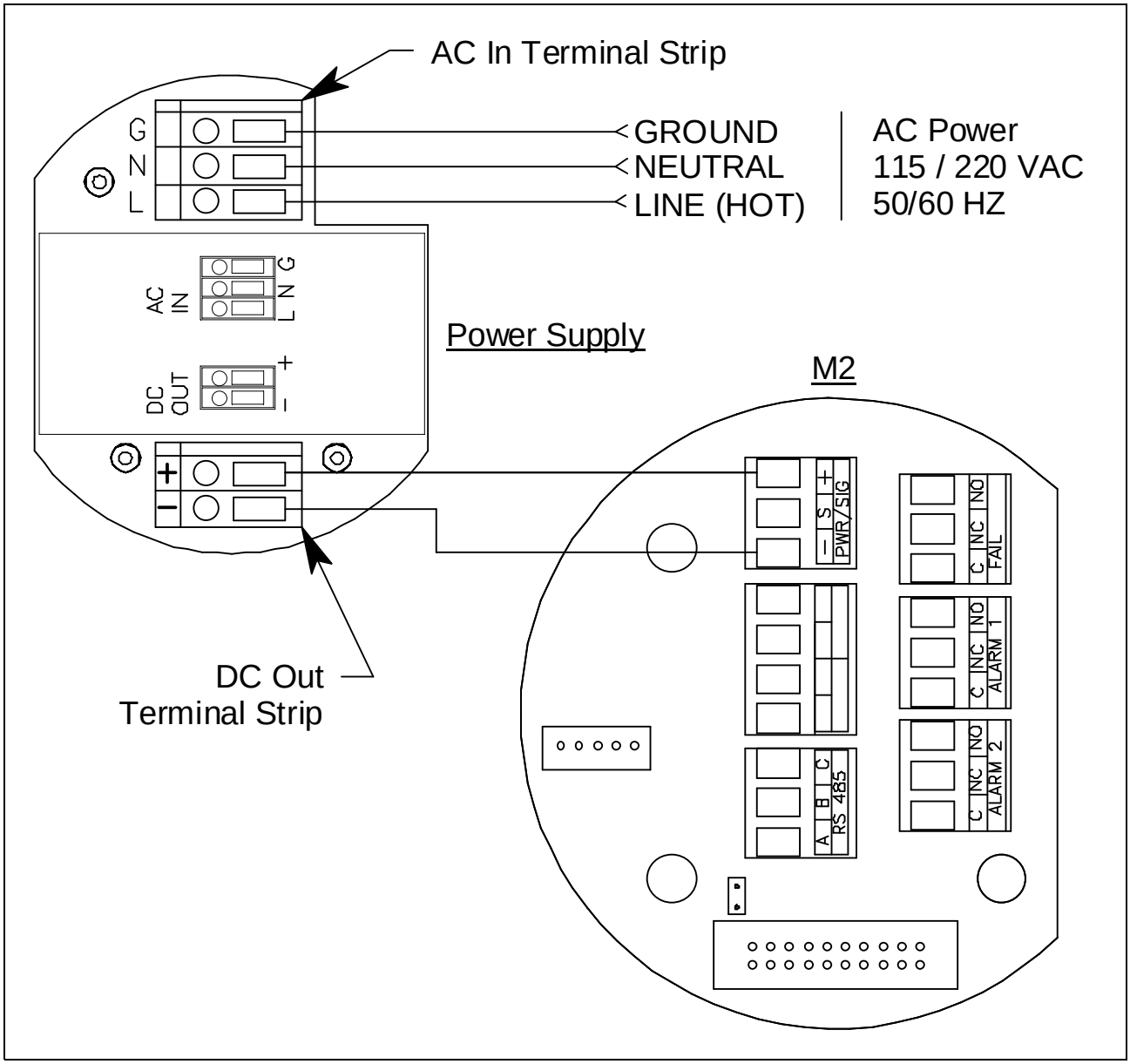

Figure 5: Wiring to an M2

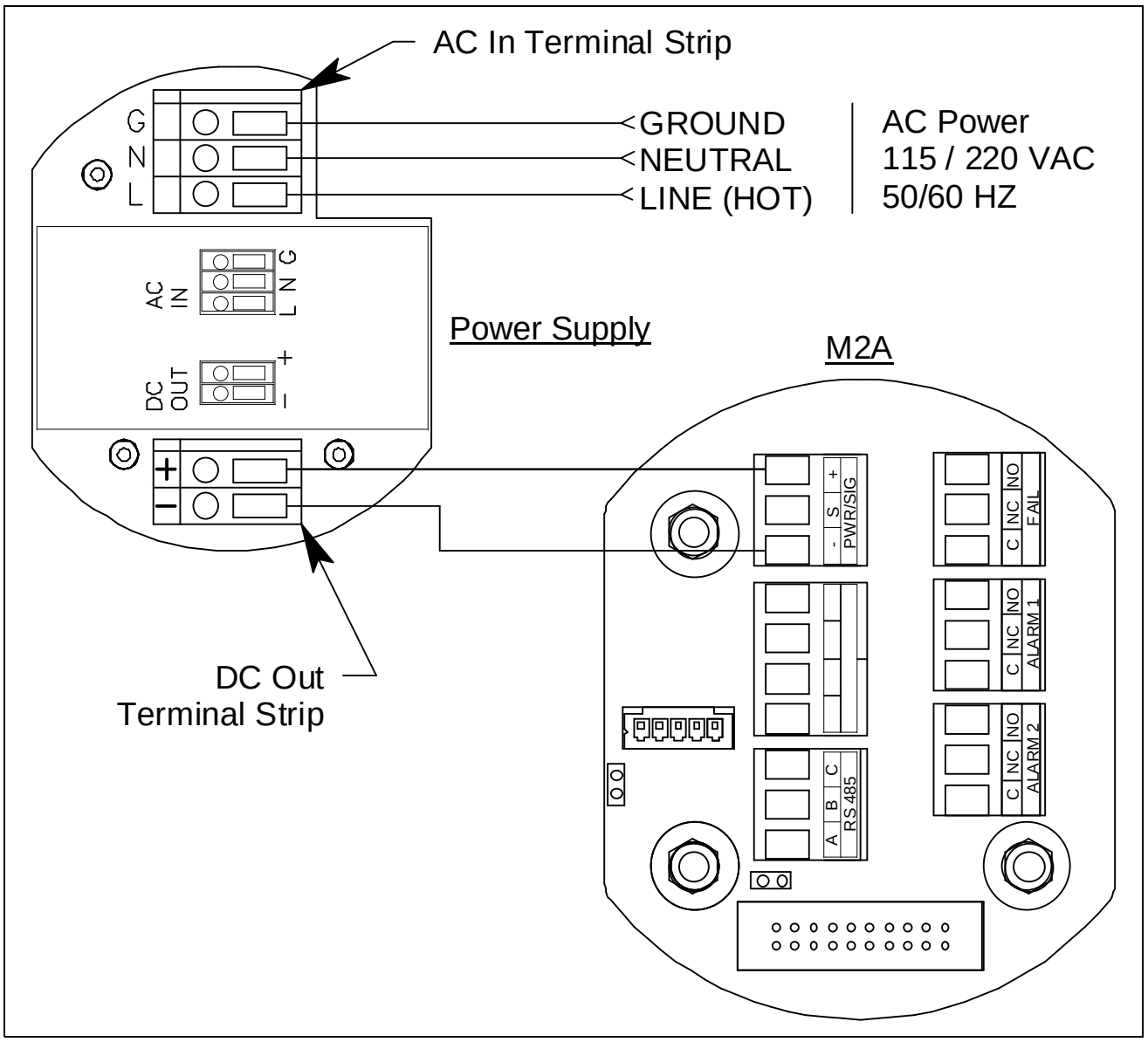

Figure 6: Wiring to an M2A

Start Up/Operation

Turn on the AC power. Once all wiring is complete and the AC power has been turned on, the AC-DC power supply is functioning and the M2/M2A is receiving power. See the M2 Operator's Manual or the M2A Operator's Manual for M2 or M2A operation, respectively.