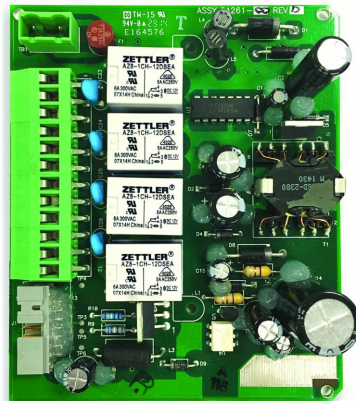
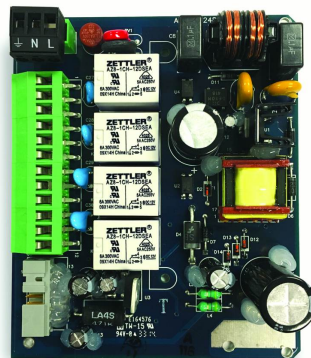


Figure 2-3: 24 Vdc power supply (02 ordering code)



This power supply automatically detects DC power and accepts 20 Vdc to 30 Vdc inputs. Four programmable alarm relays are included.

Figure 2-4: Switching AC power supply (03 ordering code)



This power supply automatically detects AC line conditions and switches to the proper line voltage and line frequency.

Four programmable relays are included.

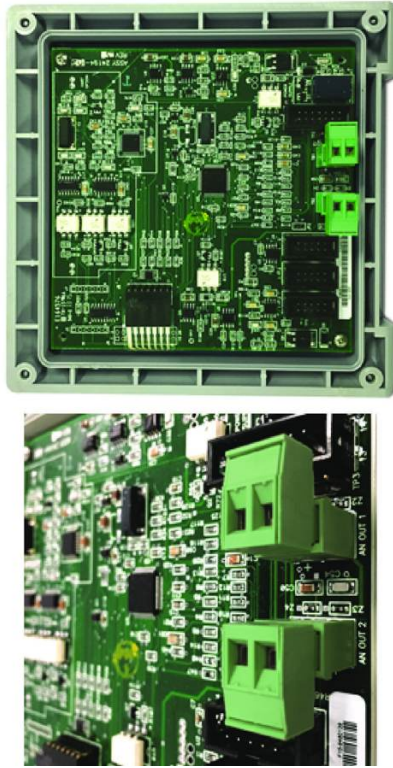
2.4.2 Current output wiring

Wiring locations for the outputs are on the main board, which is mounted on the hinged door of the transmitter. Wire the relay leads on each of the independent relays to the correct position on the main board using the lead markings (+/positive, -/negative) on the board. Emerson provides male mating connectors with each unit.

NOTICE

Twisted pairs are required to minimize noise pickup in the flow and current sensor inputs. For high electromagnetic interference/radio frequency interference (EMI/RFI) environments, use shielded sensor wire. Emerson also recommends using shielded sensor wire in other installations.

Figure 2-5: Current output wiring



2.4.3 Alarm relay wiring

Emerson supplies four alarm relays with the switching power supply (85 to 265 Vac, 03 order code) and the 24 Vdc power supply (20-30 Vdc, 02 order code).

Wire the relay leads on each of the independent relays to the correct position on the power supply board using the printed lead markings (**NO**/Normally open, **NC**/Normally closed, or **Com**/Common) on the board. See [Figure 2-6](#)

Figure 2-6: Alarm relay wiring for Rosemount 1056 switching power supply (03 ordering code)

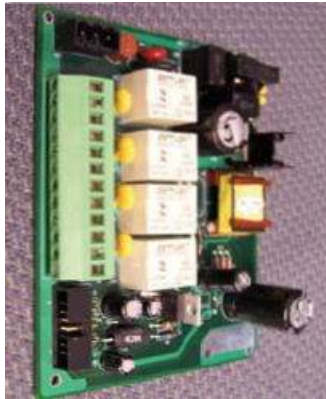


Table 2-1: Relays

NO1	Relay 1
COM1	
NC1	
NO2	Relay 2
COM2	
NC2	
NO3	Relay 3
COM3	
NC3	
NO4	Relay 4
COM4	
NC4	

2.4.4 Wire sensor to signal boards

Procedure

1. Wire the correct sensor leads to the main board using the lead locations marked directly on the board.
2. Carefully slide the wired board fully into the enclosure slot and take up the excess sensor cable through the cable gland.

For best electromagnetic interference (EMI) and radio frequency interference (RFI) protection, use shielded output signal cable enclosed in an earth-grounded metal conduit. AC wiring should be 14 gauge or greater.

3. Provide a switch or breaker to disconnect the transmitter from the main power supply. Install the switch or breaker near the transmitter and label it as the disconnecting device for the transmitter.

⚠ WARNING

Electrical shock

Installation and servicing of this product may expose personnel to dangerous voltages.

Electrical installation must be in accordance with the National Electrical Code (ANSI/National Fire Protection Agency-70) and/or any other national or local codes.

The equipment is protected throughout by double insulation.

Disconnect main power, wired to separate power source, before servicing.

Ensure that all equipment doors are closed and protective covers are in place, except when maintenance is being performed by qualified personnel.

Signal wiring must be rated at least 240 V.

Non-metallic cable strain reliefs do not provide grounding between conduit connections. Use grounding type bushings and jumper wires.

Make sure that the instrument is connected and properly grounded through a three-wire power source.

Proper use and configuration is the operator's responsibility.

Install all protective equipment covers and safety ground leads after installation.

Operate only with front panel fastened and in place.

Disconnect and lock out power before connecting the power supply.

Keep sensor and output signal wiring separate from loop power wiring. Do not run sensor and power wiring in the same conduit or close together in a cable tray.

NOTICE

Twisted pairs are required to minimize noise pickup in the flow and current sensor inputs. For high electromagnetic interference/radio frequency interference (EMI/RFI) environments, use shielded sensor wire. Emerson also recommends using shielded sensor wire in other installations.

Figure 2-7: Contacting conductivity signal board and sensor cable leads

