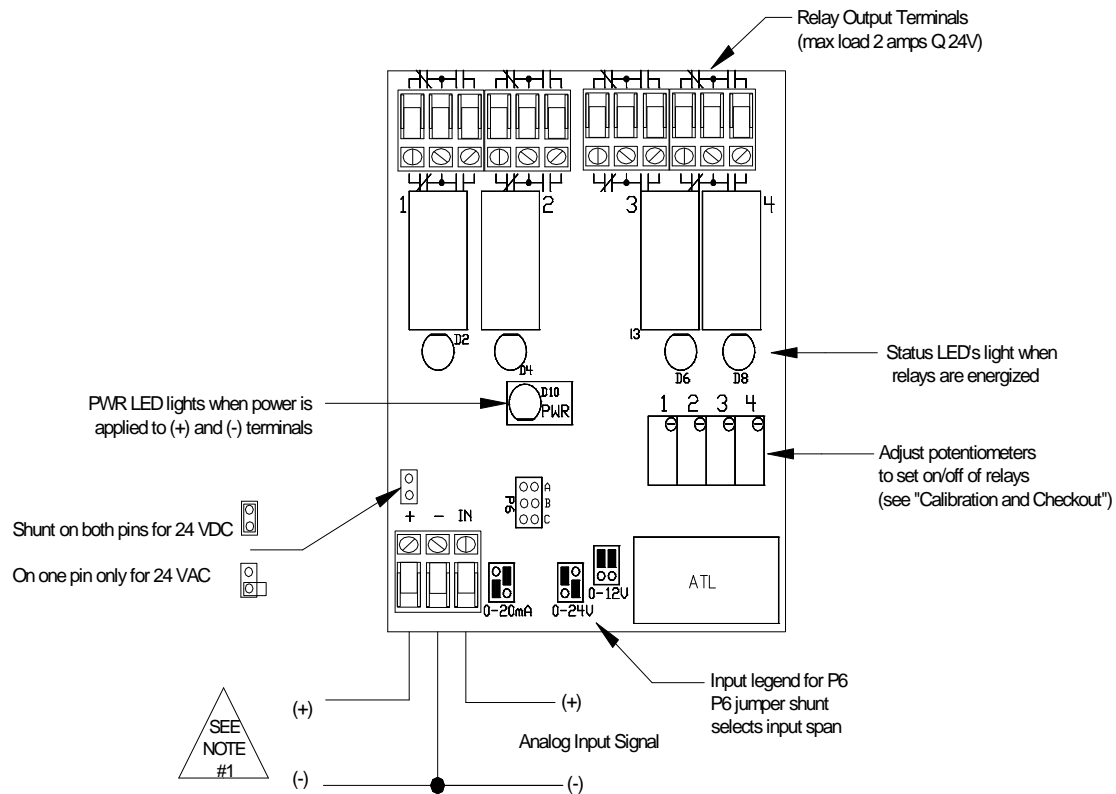




Installation and Operation Instructions ATL

Analog Current / Voltage Input to Four Adjustable Trip Level Relay Outputs



INSTALLATION

READ THESE INSTRUCTIONS BEFORE YOU BEGIN INSTALLATION.

Ground yourself before touching the board. Some components are static sensitive.

Mounting:

Circuit board may be mounted in any position. If circuit board slides out of snap track, a non-conductive "stop" may be required. Use only fingers to remove board from snap track. Slide out of snap track or push against side of snap track and lift that side of the circuit board to remove. Do not flex board or use tools.

POWER CONNECTIONS – THIS PRODUCT ACCEPTS 24 VDC OR 24 VAC POWER. SEE JUMPER SHUNT ABOVE INPUT TERMINAL BLOCK TO SELECT THE POWER TYPE YOU ARE USING.

Be sure to follow all local electrical codes. Refer to wiring diagram for connection information. Be sure to make all connections with the power off.

1. DC Power - Refer to wiring diagram for connection information.
If the 24 VDC power is shared with devices that have coils such as relays, solenoids, or other inductors, each coil must have an MOV, DC Transorb or diode, connects to the positive side of the power supply.
2. AC Power - Refer to wiring diagram for connection information.
Check the wiring configuration of any other loads that may be connected to this transformer. If required by BAS or controller specification, the 24 VAC neutral can be earth grounded at the transformer. Analog input, digital input, and analog output circuits should not be earth grounded at two points. Any field device connected to this transformer must use the same common. If you are not sure of other field device configuration, use separate transformers for isolation.

If the 24 VAC power is shared with devices that have coils such as relays, solenoids, or other inductors, each coil must have an MOV, AC Transorb, or other spike snubbing device across each of the shared coils. Without these snubbers, coils produce very large voltage spikes when de-energizing that can cause malfunction or destruction of electronic circuits. Refer to wiring diagram for connection information.

3. You should measure the actual voltage output of the secondary. If the output is not fully loaded you may read a higher voltage than the circuit board can handle.

CALIBRATION AND CHECKOUT

Place the jumper shunts as shown in diagrams printed on ATL (between input power/signal terminals and label space) for the input signal span selected. Connect input signal to IN and (-). Also place jumper shunt above power terminal block for 24 VAC or 24 VDC power (see drawing, page 1).

Turn all trim pots clockwise (minimum value) for making relay. You will hear a slight “clicking” when you reach the end of the adjustment, before calibrating.

Apply power to terminals “+” and “-“. The “POWER” LED should light. If you are working in the 0-12 VDC signal input range and no signal is connected, all relays will go high (or energize).

Adjust each trim pot as follows: Input the desired signal level and adjust the respective pot counterclockwise until the corresponding relay turns on. LED 1, 2, 3 or 4 will turn on when the respective relay is energized. Turning the potentiometer counterclockwise increases the voltage or current level at which the relay energizes.

Pot 1 sets the point at which relay 1 turns on

Pot 2 sets the point at which relay 2 turns on

Pot 3 sets the point at which relay 3 turns on

Pot 4 sets the point at which relay 4 turns on

Note: To cascade several ATL’s together, connect power, signal and common in parallel. If using current input, select current on one board only and set other ATL(s) to the 0-12 VDC span.

EU Commission Directive 2002/95/EC (RoHS) Compliant

Power Consumption: 180 mA Maximum	Contact Ratings: 2 Amps @ 24V
Input Impedance: 0-12 VDC / 10M Ohms 0-24 VDC / 20K Ohms 0-20 mA / 500 Ohms	Standard Dead Band 3%: 0-12 VDC – 0.3 volts 0-24 VDC – 0.6 volts 0-24 mA – 0.6 mA (10% and 1% dead bands also available)