INDELAC CONTROLS, INC.

COVER VIEW

NAME TAGS (5) - USE ADHESIVE

3 POSITION SELECTOR SWITCH

NEMA 4X RED 24V LAMP

NEMA 4X GREEN 24V LAMP

LOCAL OFF REMOTE

CLOSE OPEN

4-20mA TRANSMITTER

BOTTOM VIEW

2 - 3/4" HUBS

RIGHT SIDE VIEW

CONTROL PANEL

Remote/Off/Local | 4-20mA Transmitter

Installation, Operation & Maintenance Manual
INTRODUCTION:
Thank you for selecting Indelac Controls, Inc. (ICI) for your valve or damper automation requirement. We at ICI are proud of our products and feel confident they will meet or exceed your expectations of quality and reliability.

Every precaution has been taken to insure that your equipment will arrive undamaged; however, accidents do occur. Therefore, the first thing you must do upon receipt of your package is to inspect it for damage. If the box is damaged there is a possibility that the equipment inside the box may be damaged as well. If this is the case YOU MUST FILE A CLAIM with the delivering CARRIER. All shipments are F.O.B. our factory and it is YOUR RESPONSIBILITY to file a claim for damages.

STORAGE:
If the actuators are scheduled for installation at a later date:
1. Store off the floor.
2. Store in a climate controlled building.
3. Store in a clean and dry area.

FOR FUTURE REFERENCE RECORD:
1. Control Panel model number
2. Control Panel enclosure type NEMA 4____, NEMA 4X____, NEMA 7____, NEMA 4 & 7____
3. Control Panel voltage __________________
4. Motor characteristics of Actuator, Voltage_____ Hertz______Phase____________________
5. Control Panel serial number ______________________________
6. Date of installation_________________________Put into operation_________________

INSTALLATION:
1. Check label for voltage, current and correct model number.
2. Check supply voltage to be sure model being used is correct for application.

CAUTION: MUST BE INSTALLED BY A LICENSED ELECTRICIAN.

4. Turn off supply power.
5. Loosen cover screws and open enclosure, cover is hinged for your connivance.

NOTE: It is necessary to have two conduit openings, one for supply power and one for power out to the actuator. When mounted to the actuator all wiring from the CPVP to the actuator is made at the factory. Model CPVP control panels not close coupled to the actuator are provided with mounting feet for wall mounting, use appropriate size screws to support the weight of the control panel.

6. See wiring diagram below for typical CPVP wiring for two position electric actuator control.
7. Close cover and secure cover screws.
8. Turn on supply power.
OUTLINE CPVPRL4XSS-ALT WITH REMOTE/OFF/LOCAL SWITCH & 4-20mA TRANSMITTER
WIRING DIAGRAM CPVPRL4XSS-ALT WITH REMOTE/OFF/LOCAL SWITCH & 4-20mA TRANSMITTER

REMOTE / LOCAL 4-20mA CONTROL PANEL

MLT-100A
0 to 100%

SELECTOR SWITCH

LOCAL

REMOTE

TO ACTUATOR COMMAND INPUT, 4-20mA

24VDC POWER SUPPLY

REMOTE 4-20mA INPUT
WIRING DIAGRAM CPVP WITH 4-20 TRANSMITTER & 4-20mA POSITIONER
CONNECTION DIAGRAM CPVPT-PS WITH INTERNAL POWER SUPPLY TO ACTUATOR WITH 4-20mA POSITIONER
CONNECTION DIAGRAM CPVPT WITH EXTERNAL POWER SUPPLY TO ACTUATOR WITH 4-20mA POSITIONER
CONNECTION DIAGRAM CPVP-TI-D WITH 4-20mA MONITOR (FEEDBACK) TO ACTUATOR WITH 4-20mA POSITIONER & 4-20mA POSITION TRANSMITTER

THERMOL OVER LOAD PROTECTION

BRAKE OPTIONAL

1K POT.

DC MOTOR

FIELD WIRING

12 TO 30 VDC POWER SUPPLY

XMA 105 POSITION TRANSMITTER

ACTUATOR SHIPPED IN OPEN POSITION UNLESS OTHERWISE SPECIFIED

DMC 100

CONTROLLER

1-5V or 4-20mA

MLT-100

4-20mA MONITOR

CPVP-TI-D

CONTROL PANEL
OPERATION:
To operate the actuator using the CPVP control first determine the desired valve position then rotate the knob on the front of the panel to open or close, the actuator will travel to the selected position. When the close position is selected the actuator will rotate 90° clockwise CW where the limit switch de-energizes the motor and travel stops. When the open position is selected the actuator will rotate 90° counter clockwise CCW where the limit switch de-energizes the motor and travel stops.

MAINTENANCE:
After proper installation, ICI’s control panels require no actual maintenance. ICI electric actuators are permanently lubricated and therefore under normal conditions require little or no maintenance.

The following chart has been provided for your record keeping should the unit ever require maintenance:

<table>
<thead>
<tr>
<th>DATE</th>
<th>REASON</th>
<th>BY</th>
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<tbody>
<tr>
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MAINTENANCE:

<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>PROBLEM</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valve does not respond to control signal.</td>
<td>Power not on.</td>
<td>Turn on power.</td>
</tr>
<tr>
<td></td>
<td>Power disconnect switch not on.</td>
<td>Switch to on position.</td>
</tr>
<tr>
<td></td>
<td>Wrong voltage.</td>
<td>Connect correct voltage.</td>
</tr>
<tr>
<td></td>
<td>Wired incorrectly.</td>
<td>Check wiring.</td>
</tr>
<tr>
<td></td>
<td>Valve torque exceeds actuator torque.</td>
<td>Check sizing.</td>
</tr>
</tbody>
</table>

Valve does not travel full stroke.  Actuator cam adjustment set incorrect.  Adjust cam.
INDELAC 1-YEAR STANDARD WARRANTY POLICY:

INDELAC CONTROLS, INC. (ICI) WARRANTS THAT FOR A PERIOD OF 1 YEAR FROM THE DATE OF SHIPMENT IT WILL EITHER REPAIR OR REPLACE, AT ITS OPTION, ANY OF ITS PRODUCTS, WHICH PROVE TO BE DEFECTIVE IN MATERIAL OR WORKMANSHIP.

THIS WARRANTY DOES NOT COVER DAMAGE RESULTING FROM CAUSES SUCH AS ABUSE, MISUSE, MODIFICATION OR TAMPERING.

THIS WARRANTY IS EXTENDED ONLY TO THE REGISTERED PARTY, FOR WHICH THE PRODUCT SERIAL NUMBER MATCHES. THE EXTENDED WARRANTY OF ICI’S PRODUCT AND IS NOT TRANSFERABLE.

TO OBTAIN SERVICE UNDER THIS WARRANTY, THE PURCHASER MUST FIRST OBTAIN A RETURN AUTHORIZATION NUMBER FROM ICI. PRODUCTS MUST BE RETURNED TO ICI FREIGHT PREPAID FOR EVALUATION.

IF THE UNIT FAILED DUE TO POOR WORKMANSHIP OR MATERIALS THE UNIT WILL BE REPAIRED OR REPLACED. THE UNIT WILL BE RETURNED GROUND/STANDARD FREIGHT PAID BY ICI, IF AIR/RUSH SHIPMENT IS REQUESTED THE PURCHASER SHALL PAY THE DIFFERENCE.

THIS WARRANTY IS IN LIEU OF ALL OTHER OBLIGATIONS, LIABILITIES OR EXRESSED WARRANTIES. ANY IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY ARE HEREBY EXPRESSLY EXCLUDED.

IN NO EVENT SHALL ICI BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING IN CONNECTION WITH THE USE OF ITS PRODUCTS, OR FOR ANY DELAY IN THE PERFORMANCE OF THIS WARRANTY DUE TO CAUSES BEYOND ITS CONTROL.
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