

Valvcon™ LCU-series option "S2" additional limit switches

Installation, maintenance and
operating instructions

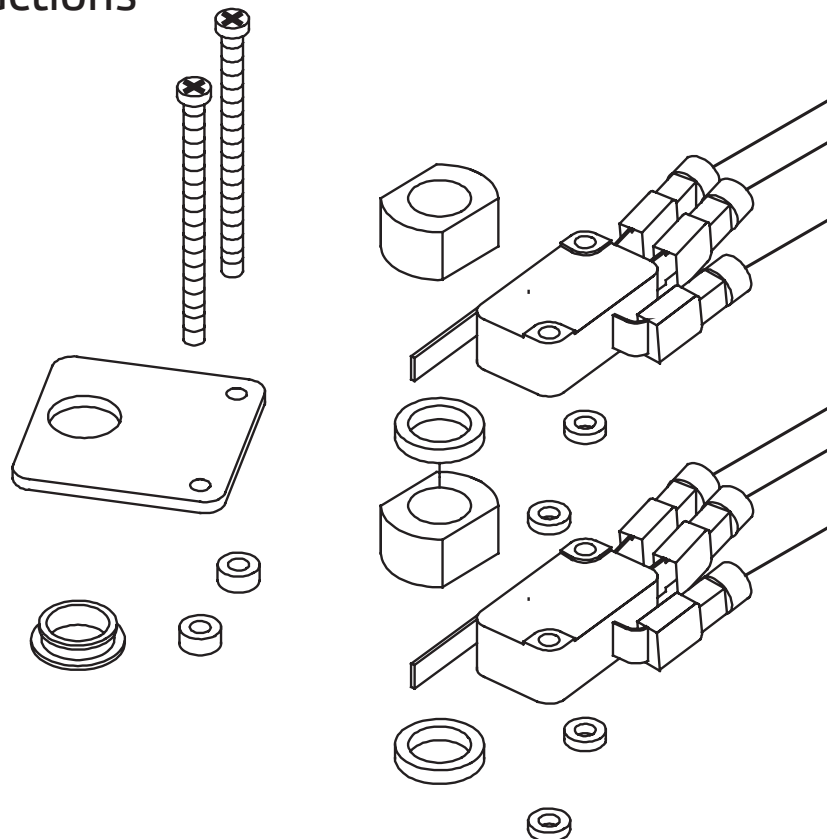


Table of contents

GENERAL	3
Description	3
Applicability	3
PARTS LIST	3
TOOLS REQUIRED	3
INSTALLATION	3

READ THESE INSTRUCTIONS FIRST!

These instructions provide information about safe handling and operation of the valve.

If you require additional assistance, please contact the manufacturer or manufacturer's representative.

SAVE THESE INSTRUCTIONS!

Addresses and phone numbers are printed on the back cover.

1. GENERAL

1.1 DESCRIPTION

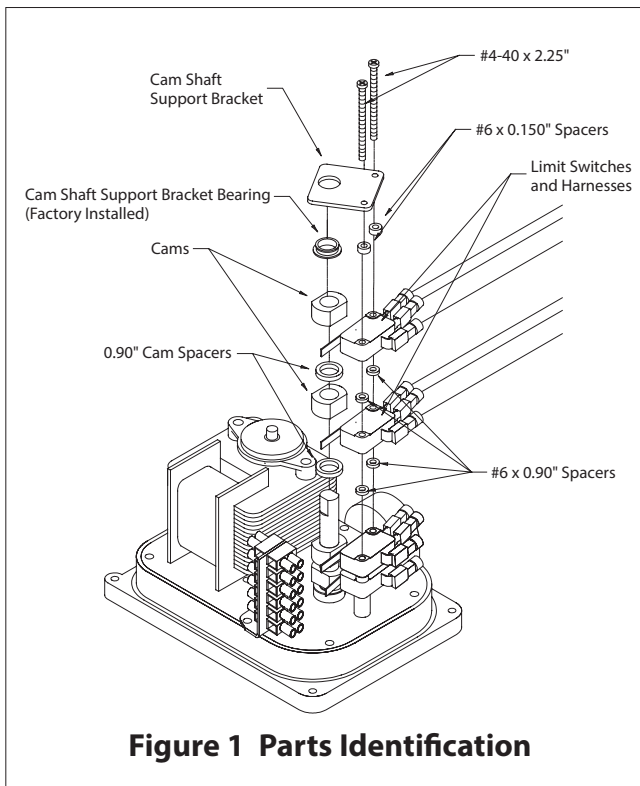
The LCU-Series Limit Switch Kit adds two additional limit switches to an actuator. Standard actuators are shipped from the factory with two limit switches installed—one to control the end of travel in the fully open position and one to control the end of travel in the fully closed position. Two additional limit switches may be installed to provide contact closure at any actuator position.

1.2 APPLICABILITY

This Limit Switch Kit is intended for use with any LCU- Series Electric Actuator.

2. PARTS LIST

- 2 Limit Switches
- 2 Cams
- 2 #4-40 x 2.25" screws
- 2 Limit Switch Wiring Harnesses 2 Wire Ties
- 4 #6 x .090" spacers
- 2 #6 x .150" spacers
- 2 .090" Cam spacers 3/8" ID, 17/32" OD
- 1 Cam Shaft Support Bracket



3. TOOLS REQUIRED

Medium Phillips Screwdriver
Small flat blade Screwdriver
3/32" Hex Wrench

4. INSTALLATION

CAUTION:

DANGEROUS VOLTAGES ARE PRESENT INSIDE THE ACTUATOR COVER UNLESS THE POWER SUPPLY TO THE ACTUATOR HAS BEEN SHUT OFF OR DISCONNECTED. USE EXTREME CAUTION WHENEVER WORKING ON THE ACTUATOR WITH THE COVER REMOVED.

A. Remove Actuator Cover

Remove the actuator cover by removing the screws securing the cover to the base.

B. Install the Limit Switches, Cams and Cam Shaft Support Bracket

Remove the Limit Switch screws, which secure the existing Limit Switches in place, retaining the spacers between the existing two limit switches.

Replace Limit Switch screws with the #4-40 X 2.25" Screws, (provided) ; refer to Figure 1 for proper switch, spacer, cam and cam shaft support bracket orientation.

C. Install Wiring Assembly

1. Attach the faston end of the White Wire to the Common (COM) connector on the Limit Switch. Connect the stripped end of the White Wire to terminal number 8 on the terminal strip.
2. Attach the faston end of the Black Wire to the Normally Open (NO) connector on the Limit Switch. Connect the stripped end of the Black Wire to terminal number 9 on the terminal strip.
3. Attach the faston end of the Red Wire to the Normally Closed (NC) connector on the Limit Switch. Connect the stripped end of the Red Wire to terminal number 7 on the terminal strip.
4. Using the supplied Wire Tie, secure the Limit Switch wires to avoid contact with any moving parts.

D. Install Cam

1. Slide the additional Cam down the actuator cam shaft on top of the existing Cams.
2. Drive the actuator to the desired trip point.
3. Rotate the cam counterclockwise until the limit switch lever passes through one of the flats on the cam and operates the limit switch (pushes the lever in). Now rotate the cam clockwise until the limit switch just clicks open.
4. Re-tighten the set screw in the limit switch cam. (Do not over-tighten the screws, use less than 8 in/lbs of tightening torque)
5. Operate the actuator to verify proper setting of the Cam.

E. Replace Actuator Cover

NOTE: When reinstalling the cover, follow the normal practice of tightening the cover screws in a cross pattern to insure that the cover is pulled down flat without over- stressing a corner.

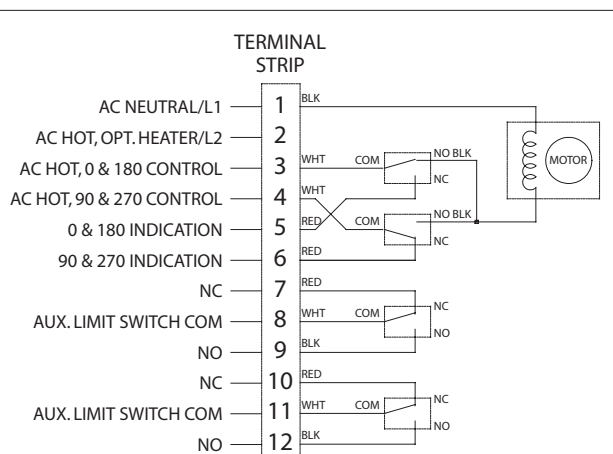


Figure 2 LCU-Series AC Wiring

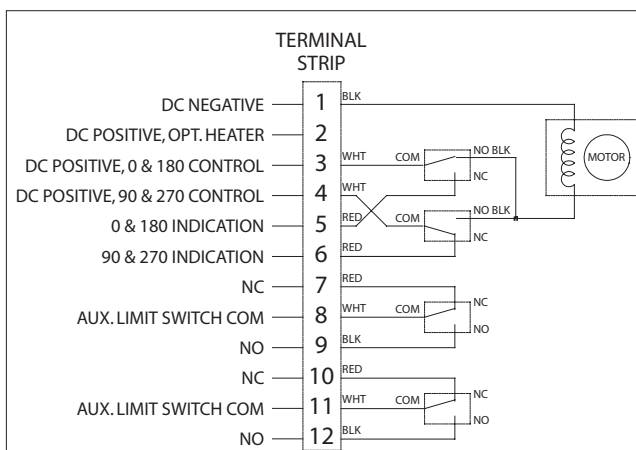


Figure 3 LCU-Series DC Wiring

Subject to change without prior notice.

Neles, Neles Easyflow, Jamesbury, Stonel, Valcon and Flowrox, and certain other trademarks, are either registered trademarks or trademarks of Valmet Oyj or its subsidiaries in the United States and/or in other countries.

For more information www.neles.com/trademarks

Valmet Flow Control Oy

Vanha Porvoontie 229, 01380 Vantaa, Finland.

flowcontrol@valmet.com

Tel. +358 10 417 5000.

www.valmet.com/flowcontrol

