

Installation, Operation and Maintenance Instructions

Flowserve Corporation Flow Control Division

765 South 100 East Provo, Utah 84606 www.flowserve.com Phone: 801 373 3028 Facsimile: 801 489 2228 Email: actuators@flowserve.com

Centura CE Extra-Switch & Heater & Thermostat Installation

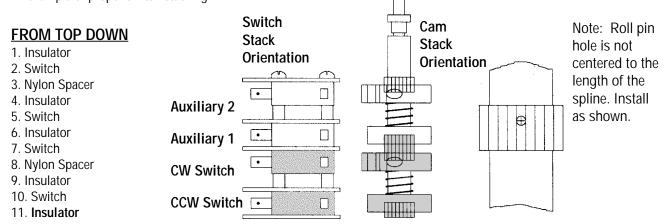
<u>Caution:</u> To prevent ignition of hazardous atmospheres, keep unit tight while circuits are alive. Disconnect supply circuit before opening.

SWITCHES

Adding extra switches to the CENTURA CE series actuator requires a Single Switch Kit (P/N 108474) or a Dual Switch Kit (P/N 108475).

- 1) Disconnect all power to the actuator.
- 2) Remove the actuator cover.
- 3) The accessory mounting bracket must first be removed. Remove the bolts that fasten the bracket to the motor and the base plate. Remove potentiometer gear (if installed) and any switch wires. Lift the bracket away from the base.

4) After the accessory mounting is removed, remove existing switches. Note the orientation of the switch stack. Here is an example of proper switch stacking:



- 5) After stacking the proper amount of desired switches, extra cams will need to be installed. The first extra cam is simply slid over the end of the cam shaft. Make sure the female side of the cam faces toward the actuator base, and slides securely over the male splines. Next slide the supplied spring over the camshaft. Now, if two extra switches are being installed, slide the second extra cam over the camshaft with the female side facing upward. While compressing the spring, slide the male spline over the camshaft as pictured above (with longer end of the spline facing downward towards the base) and insert the supplied roll pin to hold in place.
- 6) Re-install the accessory mounting bracket and re-connect the wires as per the schematic located inside the cover.
- 7) Attach the supplied terminal strip to the leg of the accessory bracket. The mounting holes are located near the "right" conduit entry (as shown in the drawing).
- 8) Wire the extra switches per the supplied schematic.
- 9) Attach the supplied schematic sticker to the inside of the actuator cover for future reference.
- 10) When replacing the cover, the machined joints must be clean and clear of any obstructions. The integrity of the explosion-proof rating depends on the care of these joints.
- * Refer to Installation Instructions for proper cam adjustment. (The micro adjust set screws in the cams are set as follows:

 Aux. Switch 1 is for CCW adjustment Aux. Switch 2 is for CW adjustment.)

HEATER & THERMOSTAT

- * Disconnect power to the actuator before installing heater and thermostat.*
- 1) The heater & thermostat come in a kit, with the wires already spliced together.
- 2) The heater is simply screwed into the left, front mounting hole on the gearmotor (as shown in the drawing).
- 3) The thermostat is then wire tied to the existing wire bundle near the leg of the accessory bracket.
- 4) The white wire is twisted to the motor common wire and both are inserted into the #1 terminal strip location.
- 5) The black lead of the thermostat is then inserted into the #6 terminal strip location.

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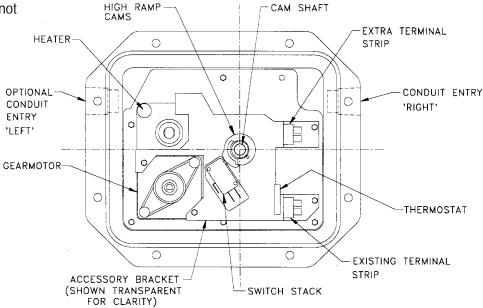
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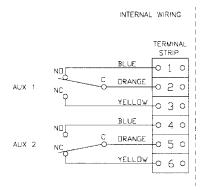
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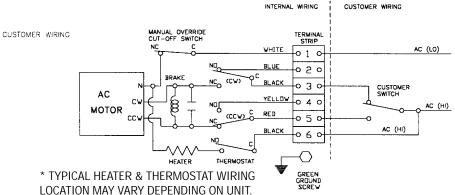
TOP VIEW OF ACTUATOR

Some components are not shown for clarity.



WIRING SCHEMATICS





PARTS LIST FOR 108474 - 1 EXTRA SWITCH KIT

QTY.	PART #	DESCRIPTION	
1	108096	SWITCH	
1	103675	INSULATOR	
2	104307	440x1.75" SCREW	
1	107622	HI-RAMP CAM	
1	103714	SPRING	
1	103572	SPLINE	
1	103621	ROLL PIN	
1	103687	MARKER STRIP	
1	103683	TERMINAL STRIP	
5	106574	CABLE TIE	
2	X00318	3-48x50" SCREW	

PARTS LIST FOR 108475 - 2 EXTRA SWITCH KIT

QTY.	PART #	DESCRIPTION
2	108096	SWITCH
2	103675	INSULATOR
2	103991	4-40X2.50" SCREW
2	107622	HI-RAMP CAM
1	103714	SPRING
1	103572	SPLINE
1	103621	ROLL PIN
1	103687	MARKER STRIP
1	103683	TERMINAL STRIP
1	815188	SCHEMATIC STICKER
2	X00318	3-48X.50" SCREW
5	106574	CABLE TIE
2	105679	NYLON SPACERS

PARTS LIST FOR 120V 106857-HEATER & STAT

QTY.	PART #	DESCRIPTION
1	100871	THERMOSTAT
1	105973	HEATER
1	100591	WHITE WIRE
2	100697	BUTT SPLICE
5	106574	CABLE TIE

PARTS LIST FOR 230V 108977-HEATER & STAT

	QTY.	PART #	DESCRIPTION		
	1	100871	THERMOSTAT		
R	1	108881	HEATER		
.1\	1	100591	WHITE WIRE		
	2	100697	BUTT SPLICE		
	5	106574	CABLE TIE		

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