## RCS Actuators Sure 100



NEMA 4/6/7 Enclosure
Approvals
A.C. Models Only

Canadian Standards Association
CSA NRTL/C—Enclosure 4/4X/6
CSA NRTL/C—Class I, Divisions 1 and 2, Groups C and D
CSA NRTL/C—Class II, Divisions 1 and 2, Groups E, F and G
CSA NRTL/C—Approved to UL standard
No. 429, Electrically
Operated Valves
CSA NRTL/C—Approved to UL Standard No.
1203, Electrical Equipment for use in Explosion-proof
And Dust-Ignition-proof
Hazardous (Classified) Locations


## Model

Sure 100

## Typical Application

For on/off and modulating control of:

- Part turn ball, butterfly, plug valves or rotary dampers when emergency shutdown or shutoff capability is required in the event of a loss of power.


## Temperature Range

Standard:
$-40^{\circ} \mathrm{F}$ to $+150^{\circ} \mathrm{F}$
$-40^{\circ} \mathrm{C}$ to $+65^{\circ} \mathrm{C}$
Optional: $-60^{\circ} \mathrm{F}$ to $+150^{\circ} \mathrm{F}$ $-50^{\circ} \mathrm{C}$ to $+65^{\circ} \mathrm{C}$
Optional: Compliance to NFPA 130 and NFPA 502, capable of operation after exposure to ambient temperature of $482^{\circ} \mathrm{F}\left(250^{\circ} \mathrm{C}\right)$ for a minimum of 1 hour.

## Voltage

115 VAC, 1 Phase, $50 / 60$ Hz
230 VAC, 1 Phase, 50/60 Hz

## Torque Range

1200 pound inches spring end (136 newton meters)

## Speed Range

10 and 30 seconds for $90^{\circ}$ revolution, motor operation 5 to 7 seconds, spring operation

## Spring

Helical torsion spring, spring steel, $\mathrm{XYLAN}{ }^{\circledR}$ coated

## Special Features

AC Voltages
4 - SPDT Switches,
PTC Heater, Motor Brake

115 and 230 VAC, 1 Phase, $50 / 60 \mathrm{~Hz}$


## 24 VAC

| Model | Output Torque Inch Pounds (N.m) | $\begin{aligned} & \text { Electrical Speed } \\ & \text { of Operation } \\ & 60 \mathrm{~Hz} .(50 \mathrm{~Hz} .) \end{aligned}$ | Spring Speed of Operation | Duty Cycle Rating 24 VAC | Current Ratings 24 VAC |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | N.L.A.* | L.R.A.* |
| Sure 49-30 | 600 (68) | 30 seconds $/ 90^{\circ}$ <br> ( 35 seconds $/ 90^{\circ}$ ) | 2 seconds $/ 90^{\circ}$ | $\begin{gathered} 25 \% \\ (2) \end{gathered}$ | 4.50 | 5.00 |

## 24 VDC

| Model | Output Torque Inch Pounds (N.m) | Electrical Speed of Operation 60 Hz ( 50 Hz .) | Spring Speed of Operation | Duty Cycle Rating 115 VAC | Duty Cycle <br> Rating $230 \text { VAC }$ | Current Ratings$12 \mathrm{VDC}$ |  | Current Ratings$24 \mathrm{VDC}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | N.L.A.* | L.R.A.* | N.L.A.* | L.R.A.* |
| Sure 49-5 | 600 (68) | 5 seconds $/ 90^{\circ}$ <br> ( 6 seconds/ $90^{\circ}$ ) | 2 seconds/90 ${ }^{\circ}$ | 50\% <br> (1) | 50\% <br> (1) | 1.00 | 22.00 | 1.00 | 12.30 |

## Limit Switches (Sure 24 and 25)

Standard: Two-single-pole, double throw type (SPDT) with an option: for 2 or 4 additional.

## Limit Switches (24 VDC Models)

Ratings: UL and CSA listed.
MIL-PRF-8805 Qualified Listing.
25 amp at $277 \mathrm{VAC} ; 1$ H.P. at 125 VAC ; 2 H.P. at 250 VAC

## Isolation Relays

To operate multiple actuators in parallel from a single signal requires isolating relays in the field wiring. Consult factory.

## Limit Switches (Sure 49 and 100)

Standard: Four-single-pole, double throw type (SPDT) with an option: for 2 additional Ratings: UL and CSA listed. 15 amp and $1 / 2$ H.P.at 125 or 250 VAC; $1 / 2 \mathrm{amp}$ at $125 \mathrm{VDC} ; 1 / 4 \mathrm{amp}$ at 250 VDC;
Lamp Load - 5 amp at 120 VAC
Optional: All double-pole, double throw type (DPDT).
Ratings: UL and CSA listed.
10 amp at $125 / 250 \mathrm{VAC}$ (form ZZ);
$1 / 2$ H.P. at 125 VDC; $3 / 4$ H.P. at 250 VAC

## Heater

PTC (Positive Temperature Coefficient) Heater Standard in all AC Voltage Models

## Duty Cycle

The percentage of time the electric motor is energized vs. the time it is at rest, in reversing duty and with the actuator running at its rated load - maximum published torque.

## Standard Modulating Duty Rating

- 12 motor starts (corrections) per minute.
- At the rated duty cycle for that model.
- With the speed of operation a minimum of 15 seconds for $90^{\circ}$ or slower.
- With positioning accuracy of (+/-) $1 \%$ of total span.


## RCS Actuators

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