



**Technical data sheet** 







## **Technical data**

| Electrical data | Nominal voltage                     | AC/DC 24 V  |
|-----------------|-------------------------------------|---|
|                 | Nominal voltage frequency           | 50/60 Hz  |
|                 | Nominal voltage range               | AC 19.228.8 V / DC 21.628.8 V   |
|                 | Power consumption in operation      | 1.5 W   |
|                 | Power consumption in rest position  | 0.2 W   |
|                 | Transformer sizing                  | 2.5 VA  |
|                 | Auxiliary switch                    | 1x SPDT, 3 A resistive (0.5 A inductive) @ AC 250 V, adjustable 0100%                             |
|                 | Switching capacity auxiliary switch | 3 A resistive (0.5 A inductive) @ AC 250 V  |
|                 | Electrical Connection               | 18 GA plenum cable, 3 ft [1 m], with 1/2" NPT conduit connector                                   |
|                 | Overload Protection                 | electronic thoughout 090° rotation  |
|                 | Electrical Protection               | actuators are double insulated  |
| Functional data | Direction of motion motor           | selectable with switch 0/1  |
|                 | Manual override                     | external push button  |
|                 | Angle of rotation                   | 90°   |
|                 | Angle of rotation note              | adjustable with mechanical stop   |
|                 | Running Time (Motor)                | 90 s / 90°  |
|                 | Noise level, motor                  | 35 dB(A)  |
|                 | Position indication                 | Mechanical, pluggable   |
| Safety data     | Power source UL                     | Class 2 Supply  |
|                 | Degree of protection IEC/EN         | IP54  |
|                 | Degree of protection NEMA/UL        | NEMA 2  |
|                 | Enclosure                           | UL Enclosure Type 2   |
|                 | Agency Listing                      | cULus acc. to UL60730-1A/-2-14, CAN/CSA<br>E60730-1:02  |
|                 |                                     | CE acc. to 2014/30/EU and 2014/35/EU  |
|                 | Quality Standard                    | ISO 9001  |
|                 | UL 2043 Compliant                   | Suitable for use in air plenums per Section<br>300.22(C) of the NEC and Section 602 of the<br>IMC |
|                 | Ambient humidity                    | Max. 95% RH, non-condensing   |
|                 | Ambient temperature                 | -22122°F [-3050°C]  |
|                 |                                     |   |



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| afety data | Storage temperature | -40176°F [-4080°C]                   |
|------------|---------------------|--------------------------------------|
|            | Servicing           | maintenance-free                     |
| Weight     | Weight              | 1.3 lb [0.60 kg]                     |
| /laterials | Housing material    | Galvanized steel and plastic housing |

Accessories

| Electrical accessories | Description   | Туре       |
|------------------------|---|------------|
|                        | Battery backup system, for non-spring return models | NSV24 US   |
|                        | Battery, 12 V, 1.2 Ah (two required)                | NSV-BAT    |
|                        | Auxiliary switch 1x SPDT add-on                     | S1A        |
|                        | Auxiliary switch 2x SPDT add-on                     | S2A        |
|                        | Feedback potentiometer 140 $\Omega$ add-on, grey    | P140A GR   |
|                        | Feedback potentiometer 1 k $\Omega$ add-on, grey    | P1000A GR  |
|                        | Feedback potentiometer 10 k $\Omega$ add-on, grey   | P10000A GR |
|                        | Feedback potentiometer 2.8 kΩ add-on, grey          | P2800A GR  |
|                        | Feedback potentiometer 500 $\Omega$ add-on, grey    | P500A GR   |
|                        | Feedback potentiometer 5 k $\Omega$ add-on, grey    | P5000A GR  |

**Electrical installation** 

### X INSTALLATION NOTES

 $\bigwedge$  Provide overload protection and disconnect as required.

 $\Delta$  Actuators may be connected in parallel. Power consumption and input impedance must be



Actuators may also be powered by DC 24 V.

Actuators Hot wire must be connected to the control board common. Only connect common to neg. (-) leg of control circuits. Terminal models (-T) have no-feedback.

Actuators with plenum cable do not have numbers; use color codes instead.

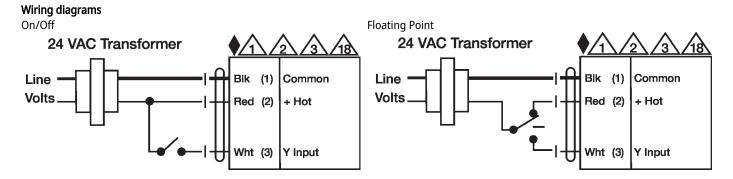
A One built-in auxiliary switch (1x SPDT), for end position indication, interlock control, fan startup, etc.

Apply only AC line voltage or only UL-Class 2 voltage to the terminals of auxiliary switches. Mixed or combined operation of line voltage/safety extra low voltage is not allowed.

Meets cULus requirements without the need of an electrical ground connection.

#### A Warning! Live electrical components!

During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.





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