

**FEATURES**

- Analog 0-10VDC signal input/ output
- Minimum position override potentiometer
- Freeze stat override input
- 2 3/16" Snap Track mounting

**APPLICATIONS**

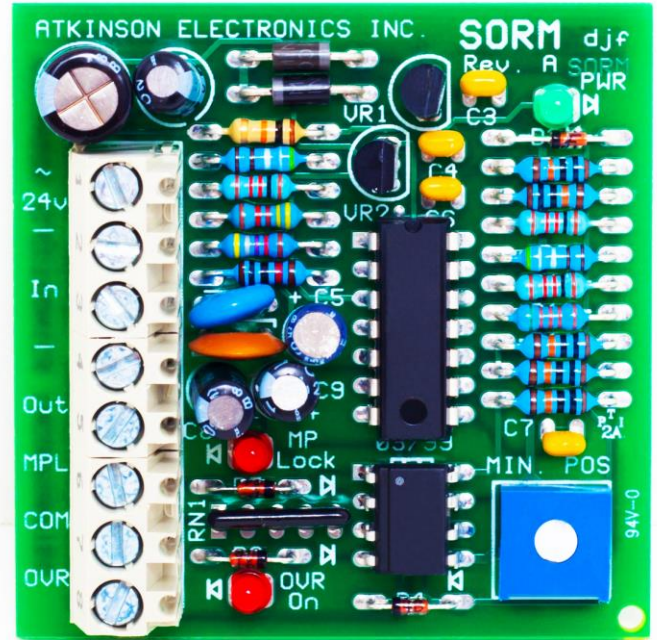
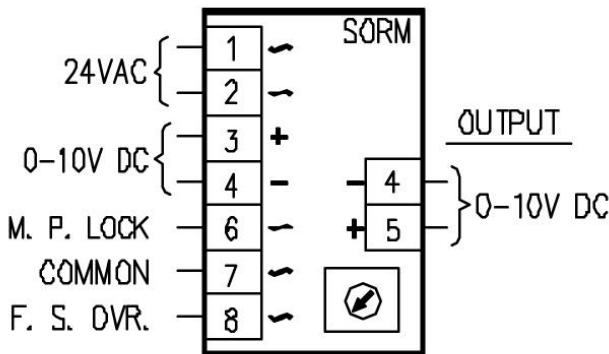
- 0, 2-10V plus outside damper control with minimum position and lockout control
- 0, 2-10V reheat valve control with freeze stat override

**DESCRIPTION & OPERATION**

The SORM is dual function signal override module that was designed for controllers with 0-10VDC output. The SORM provides a minimum position override with lockout ability and a freeze stat override input for driving the output to 100%.

The SORM uses an industry standard half wave rectifier power supply in which terminal #2 of AC supply and the input/output signal commons (-) are connected. The SORM 0-10VDC input has a 10K Ohm input impedance while the minimum position lockout and freeze stat override inputs are optically isolated for Do control or 24VAC switched through a freeze stat or control relay. The 0-10VDC signal is compared to the minimum position signal and freeze stat override input and selects the highest signal and outputs that value. The output is buffered and has EMI noise filtering.

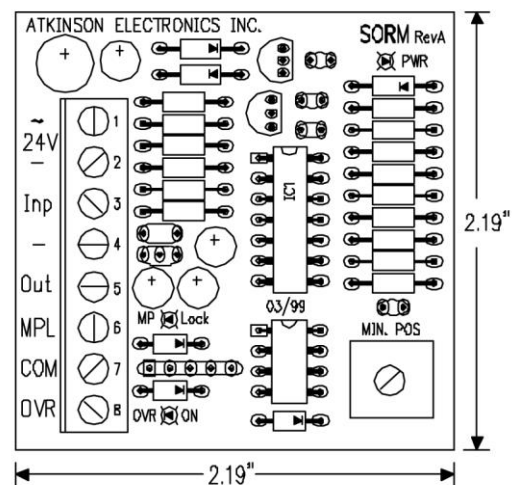
**WIRING CONFIGURATION**



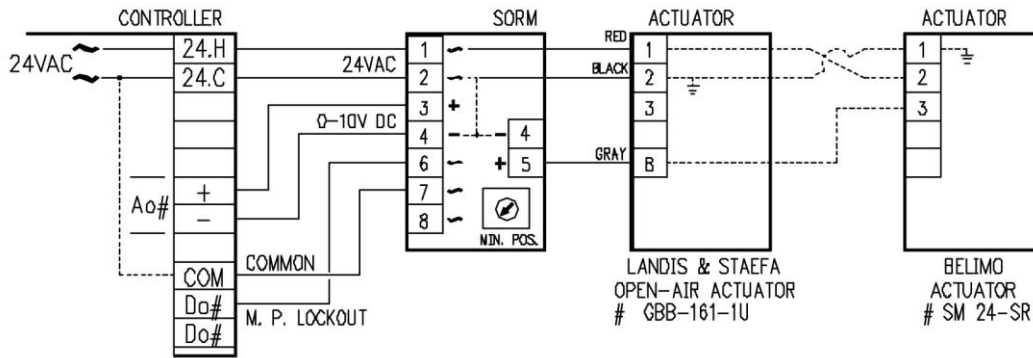
**SPECIFICATIONS**

|                   |  |
|-------------------|--|
| SIZE:             | 2.190"W x 2.190"L x 1"H                  |
| MOUNTING:         | 2.187" RDI snap track (supplied)         |
| POWER:            | 24VAC ± 15% 50/60Hz .5VA<br>24VDC @ 20mA |
| INPUT SIGNALS:    | 0-10VDC, 10KΩ imp.                       |
| OVERRIDE SIGNALS: | 24VAC/ VDC                               |
| OUTPUT SIGNALS:   | 0-10VDC, 2KΩ minimum load                |
| AMBIENT TEMP:     | 0-50°C                                   |

**PHYSICAL CONFIGURATION**

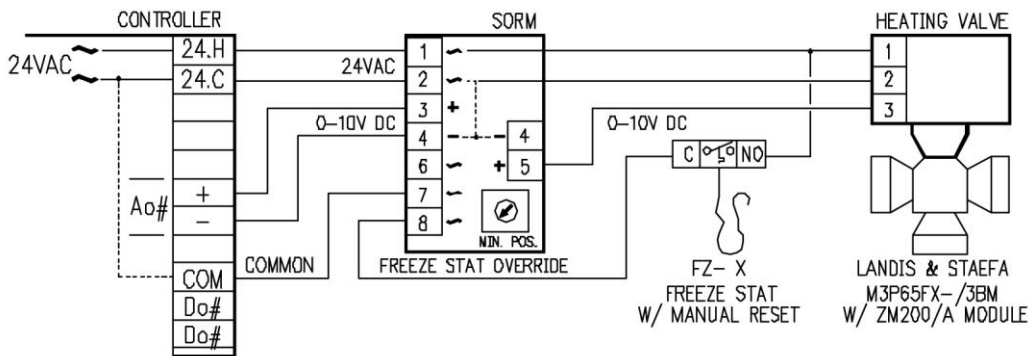


**APPLICATION 1**  
**MINIMUM POSITION SET-POINT WITH SM2 SO OVERRIDE CONTROL**



The SORM is wired for minimum position operation with a DO override. The controllers 0 to 10VDC signal is wired to the SORM terminals 3 & 4, the controllers DO override signal is wired to terminals 6 (DO) & 7 (DO com). The output is between terminals 4 (common to terminal 2) & 5.

**APPLICATION 2**  
**FREEZE STAT OVERRIDE OF A 0 TO 10VDC CONTROL SIGNAL**



The SORM is wired for freeze stat override operation of a heating valve control signal. The controllers 0 to 10VDC signal is wired to the SORM terminals 3 & 4, the freeze stat 24VAC signal is wired to terminals 8 (DO) & 7 (DO Com). The output is between terminals 4 (common to terminal 2) & 5. When the freeze stat trips, 24VAC is applied to the override input and drives the output to 100% (10VDC).