### INSTALLATION

#### !CAUTION!

#### • This product is not intended for life or safety applications

Severe injury or death can result from electrical shock during contact with high voltage conductors or related equipment. Disconnect and lock-out all power sources during installation. Applications shown are suggested means of installing relays, but it is the responsibility of the installer to ensure that the installation is in compliance with all national and local codes. Installation should be attempted only by individuals familiar with codes, standards, and proper safety procedures for high-voltage installations. Do not rely on status indications of device exclusively to determine of power is present in conductor.

#### Ensure load and coil source are shut off and locked out before any installation

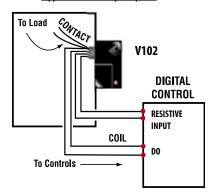
- Using the threaded nipple connect the V102 to the desired enclosure through a knock out.
- 2. Secure with the conduit nut provided.
- 3. Connect Coil:
  - Choose the coil common lead (White with Yellow Stripe) and connect it to the (-) source termination point.
  - Choose either the low (10-30VAC/DC White w/blue stripe) or high (120VAC White w/black stripe) voltage lead whichever fits your application, and connect it to the (+) source termination point.\*

NOTE: When connecting the control side of this device (#18 wires) to power line circuits, current limiting is to be provided of 7 amps max.

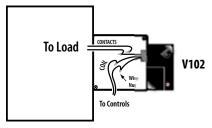
- 4. Connect Relay Contacts:
  - Choose the two solid orange wires (N.O. Contact) and connect them to your switched load.
- 5. Connect Resistive HOA Monitor:
  - Choose the two solid grey wires and take them to a resistive (0-10K $\!\Omega\!$ ) input of the control system.
- 6. Secure your enclosure and reconnect power.
- 7. Program resistive input to the ranges listed (reverse).

### WIRING EXAMPLES

Nipple mount directly to a panel



Nipple mount to any 2x or 4x electrical box



<sup>\*</sup>Any unused wires must be isolated, e.g. wire nut.

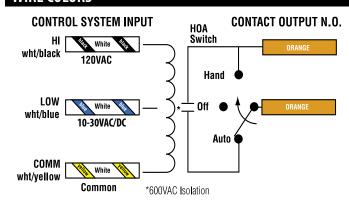
# **Installation Instructions**

# Victory 102

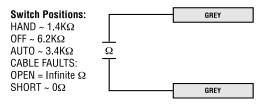
# 10A SPST Enclosed Relay with HOA Switch



## **WIRE COLORS**

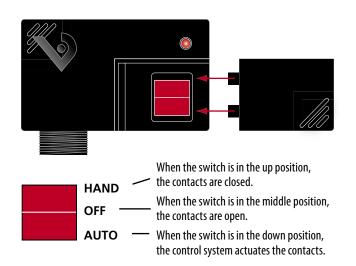


#### **V102 RESISTIVE HOA POSITION MONITOR**



NOTE: See reverse for programming ranges.

#### HOA POSITIONS



<sup>\*</sup>Wires which are not terminated must be isolated or insulated, i.e. wire nut.

# **SPECIFICATIONS**

#### <u>General</u>

Operating Temp	-40° to 55°C
Operating Humidity	0-95% non condensing
Expected Relay Life	10 million cycles min. mechanical
Relay Status	LED ON=relay coil energized
Dimensions	4.0"(L) x 2.04"(W) x 2.50"(H)
	3/4" NPT nipple
Resistive Monitor Maximums	
Voltage Max	13.4VAC/DC
Current Max	4mA AC/DC

TYPICAL COIL PERFORMANCE				
Coil Voltage 10-30' Pull In Voltage	VAC/DC, 12	OVAC AC	DC	
10-30V		8	9	
120V		78		
Drop Out Voltage		AC	DC	
10-30V		2	3	
120V		18		
Voltage	Coil Current			
	AC	DC		
10V 25n	nA	14mA		
24V 31n	nA	16mA		
30V 39n	nA	18mA		
120V22i	mΔ	_		

# **CONTACT RATINGS**

Resistive.... 10A(r)@277VAC
Motor...... 1/3 HP@240VAC N.O.
1/6 HP@240VAC N.C.

Gold Flash... Yes

# PROGRAMMING for the RESISTIVE MONITOR

The resistive monitor is a 0-10K $\Omega$  analog output for monitoring the HOA switch position. Please use the following ranges for your DDC scaling.

		Nominal Values
Condition	Range*	w/o Wire Resistance*
Line Open	Greater than 8,630	N/A
HOA OFF	5,290 to 8,630	6,190
HOA AUTO	2,880 to 5,289	3,391
HOA ON	1,200 to 2,879	1,406
Line Shorted	Less than 1,200	N/A

<sup>\*</sup>Ranges based on the presence of 0-1000 $\Omega$  of resistance due to wire. Average # of feet for 1000 $\Omega$  by wire AWG listed below.

Wire Type†	Distance Allowed (ft.)
AWG 26	12,189
AWG 22	30,864
AWG 18	78,296

†All 2-wire runs