

## V421





# **⚠ DANGER**

#### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

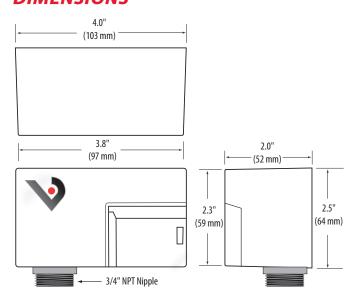
- Follow safe electrical work practices. See NFPA 70E in the USA, or applicable local codes.
- This equipment must only be installed and serviced by qualified electrical personnel.
- Read, understand and follow the instructions before installing this product.
- Turn off all power supplying equipment before working on or inside the equipment.
- Use a properly rated voltage sensing device to confirm power is off.
  DO NOT DEPEND ON THIS PRODUCT FOR VOLTAGE INDICATION

Failure to follow these instructions will result in death or serious injury.

## **NOTICE**

- · This product is not intended for life or safety applications.
- Do not install this product in hazardous or classified locations.
- The installer is responsible for conformance to all applicable codes.
- Mount this product inside a suitable fire and electrical enclosure.

## **DIMENSIONS**



## V421

## 20A DPST Enclosed Relay With Dual HOA Switches

#### Installer's Specifications

| Operating Temperature | -40°C to 40°C (-40° to 104°F)                     |
|-----------------------|---|
| Operating Humidity    | 10-90% non condensing                             |
| Expected Relay Life   | Electrical (at rated current): 100,000 cycles     |
|                       | Mechanical (unpowered): 10,000,000 cycles         |
| Relay Status          | LED ON=energized                                  |
| Wire Specifications:  |   |
| Lead Length           | 14" (356mm) min.                                  |
| Gauge                 | UL1015; Coil: 18AWG; Contacts: 12AWG              |
| Insulation Class      | 277VAC RMS  |
| Agency Approvals      | UL508 enclosed device listing, pollution degree 2 |

### INSTALLATION

# Disconnect and lock out all power sources before beginning the installation.

- Using the threaded nipple, connect the relay to the desired enclosure through a knock out hole.
- 2. Secure with the conduit nut provided.
- 3. Connect coil:
  - Choose the coil common lead (white with yellow stripe) and connect it to the common (-) source termination point.
  - Choose either the low voltage (24VAC/DC, white with blue stripe) or high voltage (208-277VAC, white with brown stripe) lead, depending on the application requirements, and connect it to the (+) source termination point.\*

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

#### 4. Connect relay contacts:

#### Output #1

 Choose the two relay N.O. (solid orange) leads and connect to the switched load.

#### Output #2

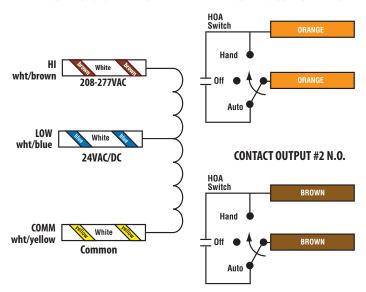
- Choose the two relay N.O. (solid brown) leads and connect to the switched load.
- 5. Secure the enclosure and reconnect power.
- \* Isolate or insulate all non-terminated wires according to local electrical code requirements, i.e. wire nut.



#### WIRING COLOR CODES

#### **CONTROL SYSTEM INPUT**

#### **CONTACT OUTPUT #1 N.O.**



**CONTACT AND COIL SPECIFICATIONS** 

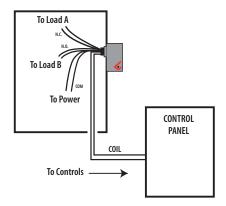
| TYPICAL COIL PERFORMANCE |              |      |  |
|--------------------------|--------------|------|--|
| Voltage                  | Coil Current |      |  |
|                          | AC           | DC   |  |
| 24V                      | . 120mA      | 64mA |  |
| 277V                     | . 102mA      | -    |  |

| CON | ATA | CT | RA | TII | NGS |
|-----|-----|----|----|-----|-----|
|     |     |    |    |     |     |

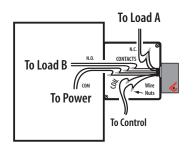
| Resistive | 20A@240VAC  |
|-----------|-------------|
|           | 8A@28VDC    |
|           | 14A@14VDC   |
| Motor     | 120VAC, 1HP |

#### **WIRING EXAMPLE**

Nipple mount directly to a panel

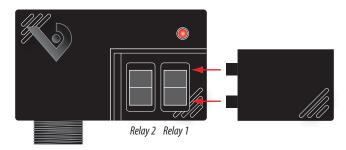


### Nipple mount to a 2x or 4x electrical box



<sup>\*</sup> Isolate any unused wires, e.g. wire nut.

#### **HOA POSITIONS**





HAND OFF

**AUTO** 

**D** Up position: contacts are closed.

Middle position: contacts are open.

Down position: control system actuates the contacts.