## INSTALLATION INSTRUCTIONS

## **PRU1 Series Pilot Relay**



# FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN DEATH OR OTHER SERIOUS INJURY

- Follow ALL requirements in NFPA 70E for safe work practices and for Personal Protective Equipment (USA) and other applicable local codes when installing this product.
- · Only qualified electrical personnel should install this product.
- Read, understand, and follow all instructions thoroughly.
- Install only on insulated conductors.
- Lock out and tag out all power sources prior to installation or working on equipment.
- Use properly rated voltage sensing instrument to determine no voltage is present.



Hazard of electrical shoack, explosion, and arc flash.



## WARNING

#### **IMPORTANT WARNINGS**

- Equipment monitored/operated by this device may start without warning. Keep clear of apparatus at all times
- Only qualified trade installers should install this product
- This product is not intended for life-safety applications
- Do not install in hazardous or classified locations
- · The installer is responsible for all applicable codes
- This product must be installed in a suitable electrical enclosure



Automated equipment may start without warning.

#### PRODUCT APPLICATION LIMITATION:

Senva products are not designed for life or safety applications. Senva products are not intended for use in critical applications such as nuclear facilities, human implantable device or life support. Senva is not liable, in whole or in part, for any claims or damages arising from such uses.

### **INSTALLATION**



# Disconnect, lock out, and tag out all power supplies during installation

- 1. This device shall be installed on an enclosure via a 1/2" NPT nipple.
- 2. Secure relay to enclosure by screwing the provided conduit nut to the 1/2" NPT nipple threads.
- 3. Connect relay coil to control system by connecting the common (white and yellow conductor) to the control systems common or negative (-) terminal. Then choose either the High (white and black conductor, 120VAC) or Low (white and blue conductor, 24-30VDC/24VAC) depending on control system voltage being sent to the relay coil and connect to positive (+) terminal of the control system.
- 4. Connect relay contact wires to the application load being controlled by this relay. This will differ between SPDT and SPST contact arrangements. See wiring diagrams at the end of this guide.
- 5. For relays with status output (PRU1CM and PRU1SM), connect (gray conductors) to control system terminals that will be monitoring status of application load.
- 6. For relays with the Hand/Off/Auto (HOA)(PRU1S and PRU1SM) switch, leave switch in AUTO to control application load from control system driving relay coil. Put HOA in HAND to bypass control system and turn on application load. Putting the switch in OFF will not allow application load to turn on.

#### **SPECIFICATIONS Environmental Operating** -30 to 60°C (-22 to 140°F), 10-95% RH non-condensing **Expected Relay Life** 100,000 cycles electrical; 10,000,000 mechanical LED ON when energized General 16" minimum lead length; coil: 18AWG; contacts: 12AWG; **Device Wiring** HOA monitor wires: 12 AWG; status: 18AWG Field Wiring Coil: 16AWG to 18AWG, Contacts: 12AWG to 14AWG Certifications UL1015, Plenum Rated (UL2043) **Small Enclosure** 1.75" x 3.0" x 1.75" with 0.5" NPT nipple **Dimensions** 2.5" x 4.0" x 1.78" with 0.5" NPT nipple Medium Enclosure Environmental Ambient temp 60°C

CONTACT RATINGS - PRU1C/PRU1CM MODELS	CONTACT RATINGS - PRU1S/PRU1SM MODELS	COIL CURF	COIL CURRENT/PERFORMANCE		
10 Amp Resistive @ 277 VAC	10 Amp Resistive @ 277 VAC	Voltage	AC	DC	
10 Amp Resistive @ 28 VDC	10 Amp Resistive @ 14 VDC	10 V	30mA	16mA	
480 VA Pilot Duty @ 240-277 VAC	480 VA Pilot Duty @ 240-277 VAC	15 V	34mA	20mA	
480 VA Ballast @ 277 VAC	480 VA Ballast @ 277 VAC	20 V	38mA	21mA	
Not rated for electronic ballast	Not rated for electronic ballast	25 V	42mA	22mA	
600 Watt Tungsten @ 120 VAC (N.O.)	600 Watt Tungsten @ 120 VAC (N.O.)	30 V	45mA	23mA	
240 Watt Tungsten @ 120 VAC (N.C.)	1/3 HP @ 120/240 VAC (N.O.)	120V	23mA		
1/3 HP @ 120 VAC (N.O.)	1/4 HP @ 277 VAC (N.O.)	Pu	Pull-In Voltage		
1/6 HP @ 120 VAC (N.C.)		10 to 30V	8VAC	9VDC	
1/4 HP @ 277 VAC (N.O.)		120V	85VAC		
1/8 HP @ 277 VAC (N.C.)		Dro	<b>Dropout Voltage</b>		
		10 to 30V	3VAC	3VDC	

MODEL	CONTACT	COIL INPUT	CONTACT	HOA	CURRENT RUN STATUS	ENCLOSURE	LED
PRU1C	SPDT	10-30VDC/24VAC, 120VAC	10A			Small	•
PRU1CM	SPDT	10-30VDC/24VAC, 120VAC	10A		N.O. 1A @ 30VAC/DC, 0.3A TRIP	Small	•
PRU1S	SPST N.O.	10-30VDC/24VAC, 120VAC	10A	•		Medium	•
PRU1SM	SPST N.O.	10-30VDC/24VAC, 120VAC	10A	•	N.O. 1A @ 30VAC/DC, 0.3A TRIP	Medium	•

