

INSTALLATION INSTRUCTIONS

PR24 Series Power Relay



DANGER

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 volt-



Hazard of electrical shock, 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. For the PR24BM relay, there is only a Low connection available (24-30VDC/24VAC)
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 (PR24BM and PR2401SBM), connect (gray conductors) to control system terminals that will be monitoring status of application load.
6. For relays with the Hand/Off/Auto (HOA)(PR2401SB and PR2401SBM) 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. You can use a M3-0.5 size screw to secure the HOA door closed.

SPECIFICATIONS

General	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
	Device Wiring	16" minimum lead length; coil: 18AWG; contacts: 12AWG; HOA monitor wires: 12 AWG; status: 18AWG
	Field Wiring	Coil: 16AWG to 18AWG, Contacts: 12AWG to 14AWG
Dimensions	Certifications	UL1015, Plenum Rated (UL2043)
	Small Enclosure	1.75" x 3.0" x 1.75" with 0.5" NPT nipple
	Medium Enclosure	2.5" x 4.0" x 1.78" with 0.5" NPT nipple
Environmental	Ambient Temp	60°C

CONTACT RATINGS - PR2401B/PR24BM MODELS

CONTACT RATINGS - PR2401SB/PR2401SBM MODELS

COIL CURRENT/PERFORMANCE

		Voltage	AC	DC
20 Amp Resistive @ 277 VAC	20 Amp Resistive @ 277 VAC	24 V	59mA	32mA
1HP @ 120VAC	1HP @ 120VAC	26 V		35mA
2HP @ 277VAC	2HP @ 277VAC	28 V		37mA
20A @ 277VAC STANDARD BALLAST	20A @ 277VAC STANDARD BALLAST	30 V		40mA
1100VA Pilot Duty @ 277VAC	1100VA Pilot Duty @ 277VAC	120 V	43mA	
<i>Not rated for electronic ballast</i>	<i>Not rated for electronic ballast</i>			
10A @ 120VAC TUNGSTEN	10A @ 120VAC TUNGSTEN			
		Pull-In Voltage		
		24 to 30V	20VAC	20VDC
		120V	85VAC	
		Dropout Voltage		
		24 to 30V	6VAC	6VDC

MODEL	CONTACT	COIL INPUT	HOA	CURRENT RUN STATUS	ENCLOSURE	LED
PR2401B	SPDT	24-30VDC, 24VAC, 120VAC	20A		Small	●
PR24BM	SPDT	24-30VDC, 24VAC	20A	N.O. 1A @ 30VAC/DC, 0.3A TRIP	Small	●
PR2401SB	SPST N.O.	24-30VDC, 24VAC, 120VAC	20A	●	Medium	●
PR2401SBM	SPST N.O.	24-30VDC, 24VAC, 120VAC	20A	● N.O. 1A @ 30VAC/DC, 0.3A TRIP	Medium	●

