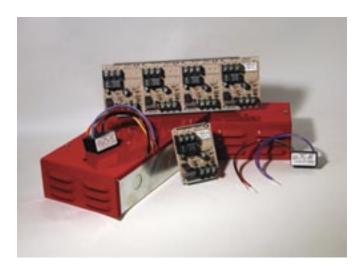


## Multi-Voltage Conventional Relays

System Sensor's multi-voltage conventional relays are used for high-current switching applications such as fan and damper assembly control, door control, air handling unit controls, and other types of system interfacing.



## Features

- Multi-voltage operation
- Activation LEDs
- Easy and flexible installation
- Reliable and robust design
- Multipurpose field installations
- Multi-voltage relays with terminal strip field wiring connections, mounting track, and hardware for R-10T/20T and R-14T/24T
- Removable front cover on steel enclosure for R-10E/R-20E and R-14/R-24E, which mount inside the enclosure
- · LED viewing hole on top of the steel enclosure's cover
- Extra pair of wires for redundant power input on PR-3
- Terminal strip field wiring connections, mounting track, and hardware

**The R-10T, R-20T, R-14T, and the R-24T models** are multivoltage relays with terminal strip field wiring connections, mounting track, and hardware. The R-10T is a single FORM–C (SPDT) relay with a red activation LED, and the R-14T is a four-gang 1 FORM–C (SPDT) relay with four red activation LEDs. The R-20T is a single 2 FORM–C (DPDT) relay with a red activation LED, and the R-24T is a four-gang 2 FORM–C (DPDT) relay with four red activation LEDs.

The R-10E/R-20E and R-14E/R-24E are similar to the T-series track mount relays, but they are mounted into a steel enclosure. The enclosure has a removable front cover that provides easy access and an LED viewing hole on the top of the cover.

**PR-1/PR-2/PR-3** are epoxy encapsulated multi-voltage relays. They are single-pole double-throw relays that use a red LED as a visible indication of relay coil energization. PR-3 is identical to PR-2, except it has an extra pair of wires for redundant power input.

**Model EOLR-1** is an epoxy encapsulated, single-pole single-throw, normally open relay that can be used as an end of line device in fire alarm systems, e.g. to supervise power supplies.

## **Agency Listings**







## **Multi-Voltage Conventional Relay Specifications**

Specifications: R-10T/R-1	4T/R-20T/R-24T
Operating Voltage	18 – 35 VDC, 18 – 35 VAC, 115 VAC, 230 VAC
Operating Current	20 mA DC max. @ 24 VDC, 24 VAC, 115 VAC,
	230 VAC (R-10T/R-14T)
	40 mA DC max. @ 24 VDC, 24 VAC, 115 VAC,
	230 VAC (R-20T/R-24T)
Operating Temperature	–40°F to 158°F (–40°C to 70°C)
Humidity Range	10% – 93% non-condensing
Dimensions	R-10T/R-20T: 2.5″L × 3.35″W × 1.2″H
	R-14T/R-24T: 10"L × 3.35"W × 1.2"H
Contact Ratings	24 VDC: 7 A with L/R = 5 mS
	120 VAC: 10 A
	120 VAC: 1/6 HP
	230 VAC: 7 A
Specifications: R-10E/R-14E/ R-20E/R-24E	
Specifications: R-10E/R-1	4E/ R-20E/R-24E
Specifications: R-10E/R-1 Operating Voltage	<b>4E/ R-20E/R-24E</b> 18 – 35 VDC, 18 – 35 VAC, 115 VAC, 230 VAC
Operating Voltage	18 – 35 VDC, 18 – 35 VAC, 115 VAC, 230 VAC
Operating Voltage	18 – 35 VDC, 18 – 35 VAC, 115 VAC, 230 VAC 20 mA DC max. @ 24 VDC, 24 VAC, 115 VAC, 230 VAC (R-10E/R-14E) 40 mA DC max. @ 24 VDC, 24 VAC, 115 VAC,
Operating Voltage	18 – 35 VDC, 18 – 35 VAC, 115 VAC, 230 VAC 20 mA DC max. @ 24 VDC, 24 VAC, 115 VAC, 230 VAC (R-10E/R-14E)
Operating Voltage	18 – 35 VDC, 18 – 35 VAC, 115 VAC, 230 VAC 20 mA DC max. @ 24 VDC, 24 VAC, 115 VAC, 230 VAC (R-10E/R-14E) 40 mA DC max. @ 24 VDC, 24 VAC, 115 VAC,
Operating Voltage Operating Current	18 – 35 VDC, 18 – 35 VAC, 115 VAC, 230 VAC 20 mA DC max. @ 24 VDC, 24 VAC, 115 VAC, 230 VAC (R-10E/R-14E) 40 mA DC max. @ 24 VDC, 24 VAC, 115 VAC, 230 VAC (R-20E/R-24E)
Operating Voltage Operating Current Operating Temperature	18 – 35 VDC, 18 – 35 VAC, 115 VAC, 230 VAC 20 mA DC max.@ 24 VDC, 24 VAC, 115 VAC, 230 VAC (R-10E/R-14E) 40 mA DC max.@ 24 VDC, 24 VAC, 115 VAC, 230 VAC (R-20E/R-24E) –40°F to 158°F (–40°C to 70°C)
Operating Voltage Operating Current Operating Temperature Humidity Range	18 – 35 VDC, 18 – 35 VAC, 115 VAC, 230 VAC 20 mA DC max. @ 24 VDC, 24 VAC, 115 VAC, 230 VAC (R-10E/R-14E) 40 mA DC max. @ 24 VDC, 24 VAC, 115 VAC, 230 VAC (R-20E/R-24E) -40°F to 158°F (-40°C to 70°C) 10% – 93% non-condensing
Operating Voltage Operating Current Operating Temperature Humidity Range	18 – 35 VDC, 18 – 35 VAC, 115 VAC, 230 VAC 20 mA DC max. @ 24 VDC, 24 VAC, 115 VAC, 230 VAC (R-10E/R-14E) 40 mA DC max. @ 24 VDC, 24 VAC, 115 VAC, 230 VAC (R-20E/R-24E) -40°F to 158°F (-40°C to 70°C) 10% – 93% non-condensing R-10E/R-20E: 5.1°L × 3.75°W × 2.5″H
Operating Voltage Operating Current Operating Temperature Humidity Range Dimensions	18 – 35 VDC, 18 – 35 VAC, 115 VAC, 230 VAC 20 mA DC max. @ 24 VDC, 24 VAC, 115 VAC, 230 VAC (R-10E/R-14E) 40 mA DC max. @ 24 VDC, 24 VAC, 115 VAC, 230 VAC (R-20E/R-24E) -40°F to 158°F (-40°C to 70°C) 10% – 93% non-condensing R-10E/R-20E: 5.1 °L × 3.75 °W × 2.5 °H R-14E/R-24E: 11 °L × 5.3 °W × 2.5 °H
Operating Voltage Operating Current Operating Temperature Humidity Range Dimensions	18 – 35 VDC, 18 – 35 VAC, 115 VAC, 230 VAC 20 mA DC max. @ 24 VDC, 24 VAC, 115 VAC, 230 VAC (R-10E/R-14E) 40 mA DC max. @ 24 VDC, 24 VAC, 115 VAC, 230 VAC (R-20E/R-24E) -40°F to 158°F (-40°C to 70°C) 10% – 93% non-condensing R-10E/R-20E: 5.1 °L × 3.75 °W × 2.5 °H R-14E/R-24E: 11 °L × 5.3 °W × 2.5 °H 24 VDC: 7 A with L/R = 5 mS
Operating Voltage Operating Current Operating Temperature Humidity Range Dimensions	18 – 35 VDC, 18 – 35 VAC, 115 VAC, 230 VAC 20 mA DC max. @ 24 VDC, 24 VAC, 115 VAC, 230 VAC (R-10E/R-14E) 40 mA DC max. @ 24 VDC, 24 VAC, 115 VAC, 230 VAC (R-20E/R-24E) -40°F to 158°F (-40°C to 70°C) 10% – 93% non-condensing R-10E/R-20E: 5.1°L × 3.75°W × 2.5°H R-14E/R-24E: 11°L × 5.3°W × 2.5°H 24 VDC: 7 A with L/R = 5 mS 120 VAC: 10 A

Specifications: PR-1	
Operating Voltage	18 – 35 VDC, 18 – 35 VAC, 120 VAC
Operating Current	15 mA DC max. @ 24 VDC, 24 VAC, 120 VAC
<b>Operating Temperature</b>	–40°F to 158°F (–40°C to 70°C)
Humidity Range	10 – 93% RH
Wire Length	8″ minimum
Dimensions	0.87″H × 2.01″W × 1.42″D
Contact Ratings	24 VDC: 7 A with L/R = 5 mS 120 VAC: 7 A max. (0.35 PF) 250 VAC: 10 A resistive 30 VDC: 10 A resistive
Specifications: PR-2/PR-3	
Operating Voltage	10 to 40 VDC
Operating Current	30 mA DC max.
<b>Operating Temperature</b>	–40°F to 158°F (–40°C to 70°C)
Humidity Range	10 – 93% RH
Wire Length	8″ minimum
Dimensions	0.91 "H × 1.65" W × 1.22" D
Contact Ratings	120 VAC: 10 A max. (resistive load) 120 VAC: 7 A max. (0.35 PF) 250 VAC: 10 A max. (resistive load) 30 VDC: 10 A max. (resistive load)
Specifications: EOLR-1	
Operating Voltage	9 to 40 VDC
Operating Current	20 mA DC max.
<b>Operating Temperature</b>	–22°F to 140°F (–30°C to 60°C)
Humidity Range	10 – 93% RH
Wire Length	8″ minimum
Contact Ratings	120 VAC: 0.5 A max. (resistive load) 30 VDC: 3 A max. (resistive load)



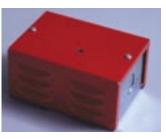
PR-1



EOLR-1



PR-3



R-10E & R-20E Enclosure

PR-2





R-14T

R-14E & R-24E Enclosure



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