



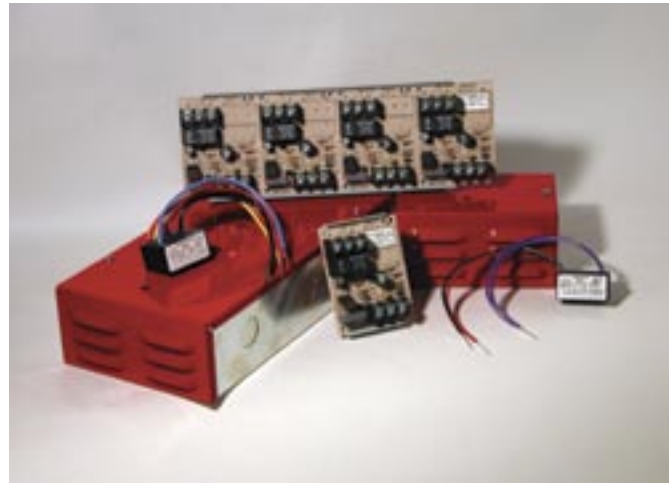
## Multi-Voltage Conventional Relays

*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 multi-voltage 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-14T/R-20T/R-24T	
<b>Operating Voltage</b>	18 – 35 VDC, 18 – 35 VAC, 115 VAC, 230 VAC
<b>Operating Current</b>	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)
<b>Operating Temperature</b>	-40°F to 158°F (-40°C to 70°C)
<b>Humidity Range</b>	10% – 93% non-condensing
<b>Dimensions</b>	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
<b>Contact Ratings</b>	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	
<b>Operating Voltage</b>	18 – 35 VDC, 18 – 35 VAC, 115 VAC, 230 VAC
<b>Operating Current</b>	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)
<b>Operating Temperature</b>	-40°F to 158°F (-40°C to 70°C)
<b>Humidity Range</b>	10% – 93% non-condensing
<b>Dimensions</b>	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
<b>Contact Ratings</b>	24 VDC: 7 A with L/R = 5 mS 120 VAC: 10 A 120 VAC: 1/6 HP 230 VAC: 7 A

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



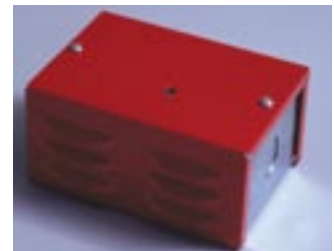
PR-1



EOLR-1



PR-3



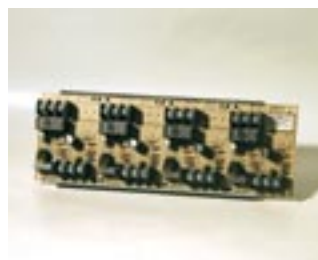
R-10E & R-20E Enclosure



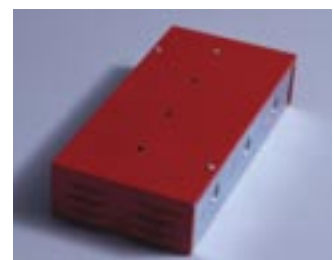
PR-2



R-10T



R-14T



R-14E & R-24E Enclosure



3825 Ohio Avenue • St. Charles, IL 60174  
Phone: 800-SENSOR2 • Fax: 630-377-6495

©2007 System Sensor.  
Product specifications subject to change without notice. Visit [systemsensor.com](http://systemsensor.com) for current product information, including the latest version of this data sheet.  
A05-0372-005 • 3/07 • #1782