



# KRPA, KRP, KA, KR series

## 5 to 10 Amp General Purpose Relay

File E29244, E22575, E81558 (KR Hermetic)  
File LR15734

### Features

- Industry standard octal-type termination for quick installation.
- Contact arrangements from 1 Form C (SPDT) to 3 Form C (3PDT).
- Indicator lamp and push-to-test options available on certain models.
- The KRPA is the automated manufactured version of the KRP.
- Hermetically sealed option available with KR UL recognized for Class I Div. 2 Hazardous locations, Groups A, B, C, D.

### Contact Data @ 25°C

**Arrangements:** See Ordering Information Table.

**Materials:** Silver or silver-cadmium oxide, with or without gold flashing.

**Expected Life:** 10 million operations min., mechanical; 100,000 operations min. @ rated loads.

### KA, KRP, KRPA UL/CSA Contact Ratings @ 25°C (Except KR)

Contact Code	Arrangement	Contact Rating
Y (Silver)	1, 2, 3 Poles	5A @ 120VAC 3A @ 240VAC 1/10HP @ 120VAC 1/6HP @ 240VAC
G&N (Silver-Cad. Oxide)	1, 2, 3 Poles	10A @ 240VAC 1/2 HP @ 240VAC 1/3HP @ 120VAC

### KR-E (Herm. Sealed) UL Contact Ratings @ 25°C Class I, Div. 2, Hazardous Loc.

Contact Code	Arrangement	Contact Rating
Y (Silver)	1, 2, 3 Poles	5A @ 120VAC 3A @ 240VAC 1/10HP @ 120VAC 1/6HP @ 240VAC
G&N (Silver-Cad. Oxide)	1, 2, 3 Poles	10A @ 240VAC 1/6 HP @ 120VAC

### KR-E (Herm. Sealed) UL Contact Ratings @ 25°C UL 508 Industrial Control

Contact Code	Arrangement	Contact Rating
Y, G (Silver)	1, 2, 3 Poles	3A @ 120VAC 3A @ 28VDC 1/10HP @ 120VAC

### KRP, KRPA Factory Ratings

Contact Code	Arrangement	Contact Rating
Y	1, 2, 3 Poles	5A @ 28VDC, 120VAC, 80% PF
G&N	1, 2, 3 Poles	10A @ 28VDC, 120VAC, 80% PF 6A @ 250VAC

### KA UL Contact Ratings

Contact Code	Series	Contact Ratings
Y	KA <sup>1</sup>	5A @ 120VAC, 3A @ 240VAC, 1/10 HP @ 120VAC, 1/6 HP @ 240VAC
G	KA <sup>2</sup>	10A @ 120VAC, 6A @ 240VAC 1/6 HP @ 120VAC, 1/3 HP @ 240VAC

<sup>1</sup>Listed by C.S.A. for 5A @ 120VAC 80% PF

<sup>2</sup>Listed by C.S.A. for 10A @ 120VAC 80% PF

Note: See KRPA, KRP, KA, KR-E Ordering Information table on page 106.

### Initial Dielectric Strength

**Between Open Contacts:** 500V rms.

**Between All Elements:** 1,500V rms.

### Coil Data @ 25°C

		Nominal Power	Maximum Power
KRP	AC	2VA	Enclosed Models - 4VA
KRPA	DC	1.2W	Enclosed Models - 3W
KA	AC	2VA	Open Models - 4VA
	DC	125mW per movable arm	Open Models - 4W

**Duty Cycle:** Continuous.

**Initial Insulation Resistance:** KRP, KRPA - 1000 Megohms, min.  
KA - 100 Megohms, min.

### Coil Data @ 25°C

	Nominal Voltage	DC Resistance (Ω) ±10%	Nominal Coil Current (mA)
DC Coils	6	32	188
	12	120	100
	24	472	51
	48	1,800	26.6
	110	10,000	11.5
	220	Use 110V relay with 10,000 Ω 5W Resistor in series	
AC Coils	6	6	335
	12	24	168
	24	85	84
	120	2,250	17.5
	240	9,110	8.75

### Operate Data @ 25°C

**Must-Operate Voltage:**

**DC:** 75% or less of nominal voltage.

**AC:** 85% or less of nominal voltage.

**Operate Time (Excluding Bounce):**

15 milliseconds typical @ nominal voltage.

**Release Time (Excluding Bounce):**

10 milliseconds typical @ nominal voltage.

### Environmental Data

**Temperature Range:**

**Open Models: AC:** -45°C to +70°C.

**DC:** -45°C to +85°C.

**Enclosed Models: AC:** -45°C to +55°C.

**DC:** -45°C to +70°C.

### Mechanical Data

**Open Models:** Solder terminals.

**Enclosed Models:** Octal-type plug.

**Enclosures:** Transparent polycarbonate (except KR).

Hermetically sealed metal case available with KR only.

**Weight: KA:** 1.7 oz. (48.2g) approximately.

**KRPA, KRP:** 3.0 oz. (85g) approximately.

## Ordering Information

Typical Part No. ▶

**KRPA**

**-5**

**A**

**Y**

**-120**

### 1. Series:

KRPA (Newer version, enclosed)  
 KRP (Older version, enclosed)  
 KR (Hermetically sealed option 'E' only)  
 KA (Open style)

### 2. Contact Arrangement:

5 = 1 Form C (SPDT)  
 11 = 2 Form C (DPDT)  
 14 = 3 Form C (3PDT)

### 3. Coil Input:

A = AC, 50/60 Hz.  
 D = DC

### 4. Contact Rating and Indicator Lamp Option:

TYPE	KRPA	KRP	KR	KA
Codes Available	Y, G, N,	Y, G, N,	Y, G,	Y, G,

Leave Blank = Silver, no indicator lamp for hermetically sealed KR (option E below).  
 Y = Silver, no indicator lamp  
 G = Silver-cadmium oxide, no indicator lamp  
 N = Silver-cadmium oxide, with indicator lamp\*

### 5. Options:

Leave Blank = No options (except KR).  
 E = Hermetically Sealed Option (KR only).

### 6. Coil Voltage:

Up to 240VAC  
 Up to 125VDC

\*Indicator Lamp not available on 25-90V coils. Only 120-240VAC and 110VDC models are UL recognized and CSA certified.

## Stock Items – The following items are normally maintained in stock for immediate delivery.

KA-5AG-120	KR-11DGE-24	KRP-14AN-120	KRPA-11AN-24	KRPA-14AG-120
KA-5AY-120	KR-14AGE-120	KRP-14AY-120	KRPA-11AN-120	KRPA-14AG-240
KA-5DG-6	KR-14DGE-24	KRP-14DG-12	KRPA-11AN-240	KRPA-14AN-24
KA-5DG-12	KRP-5AG-120	KRP-14DG-24	KRPA-11AY-6	KRPA-14AN-120
KA-5DG-110	KRP-11AG-24	KRP-14DG-110	KRPA-11AY-12	KRPA-14AN-240
KA-11AG-120	KRP-11AG-120	KRP-14DN-24	KRPA-11AY-24	KRPA-14AY-24
KA-11AY-6	KRP-11AG-240	KRPA-5AG-24	KRPA-11AY-120	KRPA-14AY-120
KA-11AY-24	KRP-11AN-24	KRPA-5AG-120	KRPA-11AY-240	KRPA-14AY-240
KA-11AY-120	KRP-11AN-120	KRPA-5AY-120	KRPA-11DG-6	KRPA-14DG-12
KA-11DG-12	KRP-11AY-120	KRPA-5DG-6	KRPA-11DG-12	KRPA-14DG-24
KA-11DG-24	KRP-11DG-12	KRPA-5DG-12	KRPA-11DG-24	KRPA-14DG-48
KA-11DG-110	KRP-11DG-24	KRPA-5DG-24	KRPA-11DG-48	KRPA-14DG-110
KA-14AG-120	KRP-11DG-48	KRPA-5DY-12	KRPA-11DG-110	KRPA-14DN-24
KA-14AY-120	KRP-11DG-110	KRPA-5DY-24	KRPA-11DN-12	KRPA-14DY-24
KA-14DG-24	KRP-11DG-125	KRPA-11AG-6	KRPA-11DN-24	
KA-14DG-110	KRP-11DN-12	KRPA-11AG-12	KRPA-11DN-110	
KR-11AE-120	KRP-11DN-24	KRPA-11AG-24	KRPA-11DY-12	
KR-11AGE-120	KRP-11DY-24	KRPA-11AG-120	KRPA-11DY-24	
KR-11DE-24	KRP-14AG-120	KRPA-11AG-240	KRPA-14AG-12	
KR-11DGE-12	KRP-14AG-240	KRPA-11AN-12	KRPA-14AG-24	



KRP-3-H

# KRP-3-H series

20 Amp  
Small AC or DC Relays

File E22575

## Features

- 1 Form X (SPST - NO - DM) contact rating of 20A.
- Heavy copper alloy movable contact arms.
- Twin silver-cadmium oxide contacts.
- Many uses in automation controls and other applications requiring high current switching.

## Contact Data @ 25°C

**Arrangement:** 1 Form X (SPST - NO - DM).  
**Ratings:** UL Rating: 20A @ 120VAC, 3/4 HP @ 120VAC.  
**Factory Rating:** 20A @ 120VAC, 80% PF; 1 HP @ 120/240VAC.  
**Material:** Twin, silver-cadmium oxide.  
**Expected Life:** 2.5 million operations min., mechanical. 100,000 operations at rated contact load.

## Initial Dielectric Strength

**Between Open Contacts:** 500V rms, 60 Hz. between all elements.

## Coil Data @ 25°C

See chart on page 105.  
**Nominal Power:** DC Coils: 1.2W  
 AC Coils: 2.0VA  
**Initial Insulation Resistance:** 1,000 megohms.

## Operate Data @ 25°C

**Must-Operate Voltage:** DC: 75% of nominal voltage.  
 AC: 85% of nominal voltage.  
**Operate Time:** 15 milliseconds approximate (Excluding Bounce).  
**Release Time:** 10 milliseconds approximate (Excluding Bounce).

## Environmental Data

**Temperature Range: Enclosed Models:** AC: -45°C to +55°C.  
 DC: -45°C to +70°C.

## Mechanical Data

**Mounting:** Socket mounting.  
**Termination:** Octal-type plug.  
**Enclosure:** Polycarbonate enclosure with octal-type mounting.  
**Weight:** 2 oz. (57g) approximately.

## Ordering Information

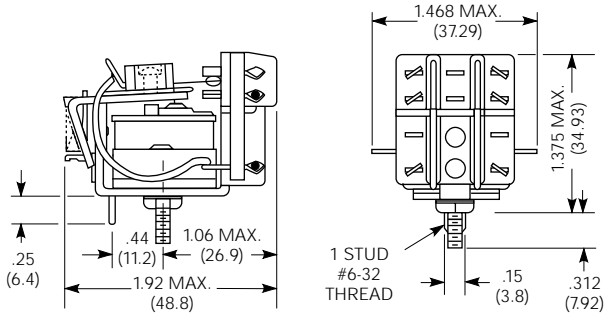
Typical Part No. ▶	KR	P	-3	D	H	-12
<b>1. Basic Series:</b> KR						
<b>2. Type:</b> P = Enclosed (20 amp models available only with Contact Arrangement 3 and Material H.)						
<b>3. Contact Arrangement:</b> 3 = 1 Form X (SPST - NO - DM)						
<b>4. Coil Input:</b> A = AC D = DC						
<b>5. Contact Material &amp; Rating:</b> H = Silver-cadmium oxide, 1/4" (6.35mm) dia., 20 amps.						
<b>6. Coil Voltage:</b> To 240VAC, 50/60 Hz. or 110VDC.						

## Stock Items

KRP-3AH-120  
 KRP-3DH-24  
 KRP-5AG-120

**Outline Dimensions**

**KA Series**

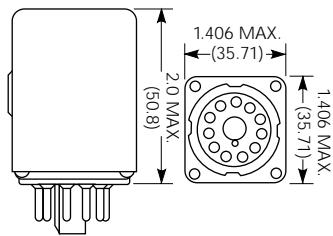


Tolerances on .XX Decimals ± .02 (± .5) Unless Otherwise Specified  
 Tolerances on .XXX Decimals ± .005 (± .13) Unless Otherwise Specified

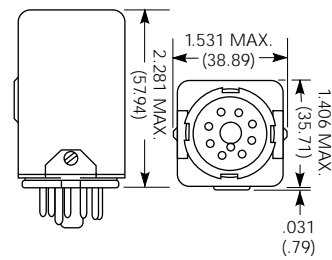
**KR Series Enclosures**

**Type "P" Clear Dust Cover**

For KRPA and KRP



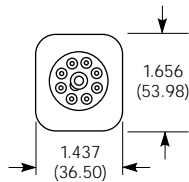
For KRP3-H



**Hermetically Sealed Enclosure (KR only)**



**Octal Plug**



Height: 2.125" (53.98mm) max.

**Hold-Down Spring**

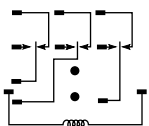
20C176 KRPA & KRP  
 20C206 KAP and KRP3



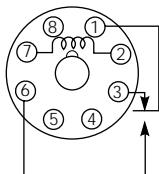
Durable stainless steel spring can be moved aside for relay removal or installation. Mounts with same machine screws or rivets that secure socket to chassis. Two .156" (3.96mm) dia. holes required.

**Wiring Diagrams (Bottom Views)**

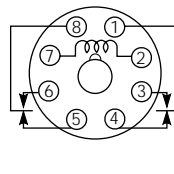
**KA**



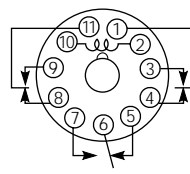
**KR5  
 KAP5  
 KRP5  
 KRPA5**



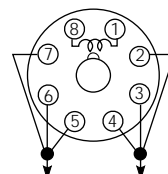
**KR11  
 KAP11  
 KRP11  
 KRPA11**



**KR14\*  
 KAP14  
 KRP14  
 KRPA14**



**KRP3AH**



\* The hermetically sealed KR14 has pins 5 and 6 reversed.

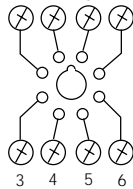
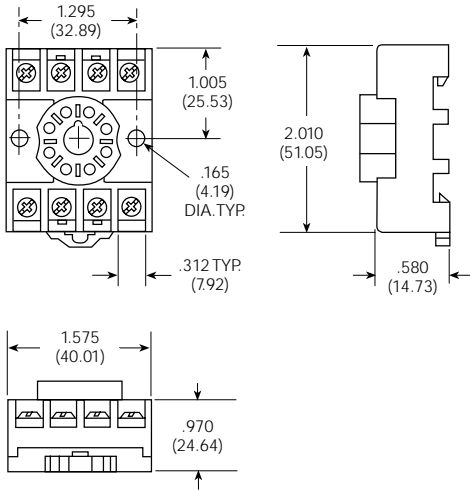
**Sockets For KRP, KRPA Series Relays**

The following sockets are normally maintained in stock for immediate delivery.

**Screw Terminal, DIN Rail Snap-Mount Sockets  
(Use with mounting track 24A110)**

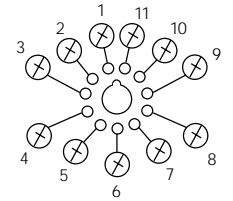
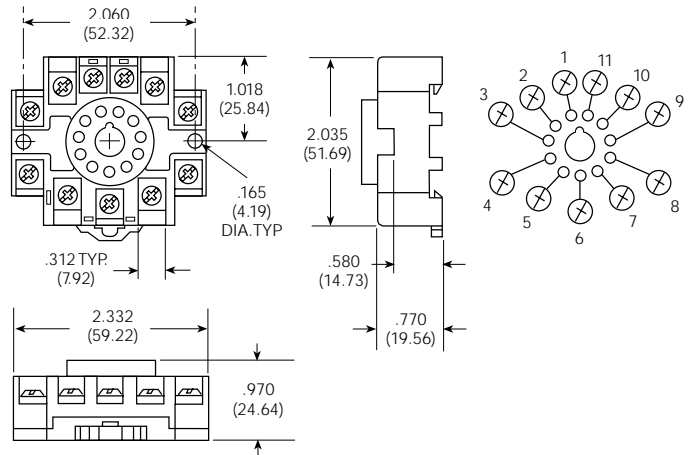
**27E891  
10A, 300VAC**

**Terminal Location  
Top View**



**27E892  
10A, 300VAC**

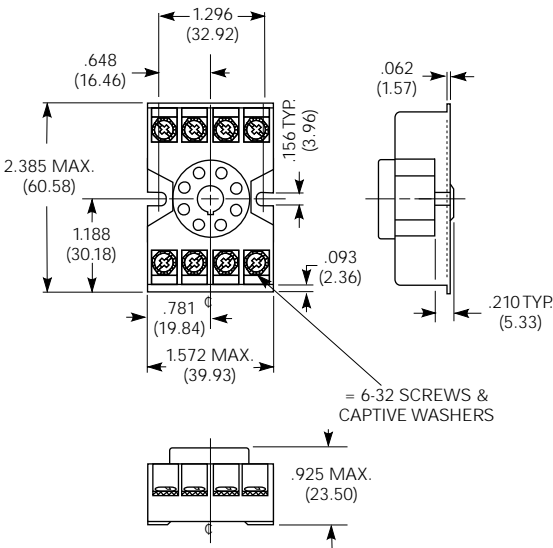
**Terminal Location  
Top View**



Sockets have M3.5 screw terminals which accept up to two #12 AWG wires. Rated 10 amps @ 300VAC and meets UL 94V-0.

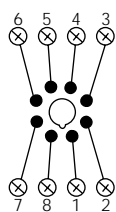
**Screw Terminal Sockets**

**27E122  
10A, 300VAC  
8-pin**

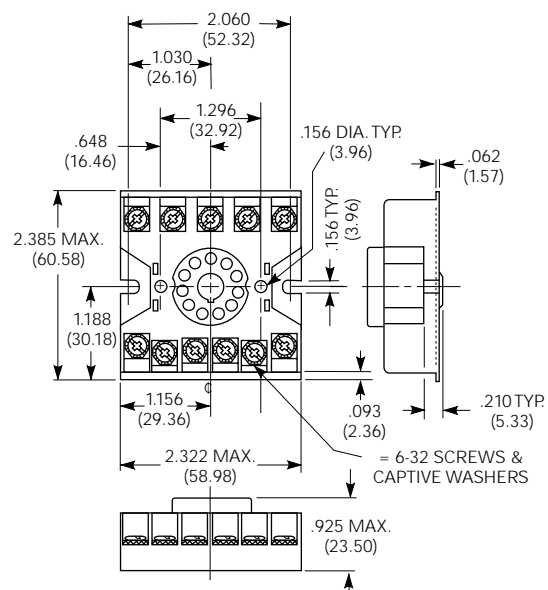


= 6-32 SCREWS & CAPTIVE WASHERS

**Terminal Location**



**27E123  
10A, 300VAC  
11-pin**



= 6-32 SCREWS & CAPTIVE WASHERS

**Terminal Location**

