



KRPA, KRP, KA, KR series

5 to 10 Amp General Purpose Relay

File E29244, E22575

File LR15734

Users should thoroughly review the technical data before selecting a product part number. It is recommended that users also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

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.

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 | |
|-------------------------------|-------------------------------|---|
| 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 |

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 ¹ | 5A @ 120VAC, 3A @ 240VAC, 1/10 HP @ 120VAC, 1/6 HP @ 240VAC |
| G | KA ² | 10A @ 120VAC, 6A @ 240VAC 1/6 HP @ 120VAC, 1/3 HP @ 240VAC |

¹Listed by C.S.A. for 5A @ 120VAC 80% PF

²Listed by C.S.A. for 10A @ 120VAC 80% PF

Note: See KRPA, KRP, KA Ordering Information table.

Initial Dielectric Strength

Between Open Contacts: 500V rms.

Between All Elements: 1,500V rms.

Coil Data @ 25°C

| | | Nominal Power | Maximum Power |
|-------------|----|-----------------------|-----------------------|
| KRP KRPA | AC | 2VA | Enclosed Models - 4VA |
| | 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

Termination: Open Models: Solder terminals.

Enclosed Models: Octal-type plug.

Enclosure: Transparent polycarbonate.

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 | | | | | | | | |
|---|---------------------------|-------------|-----------|----------|----------|-------------|------|------|-----|----|-----------------|----------|----------|-------|
| <p>1. Series: KRPA (Newer version, enclosed) KRP (Older version, enclosed) KA (Open style)</p> | | | | | | | | | | | | | | |
| <p>2. Contact Arrangement: 5 = 1 Form C (SPDT) 11 = 2 Form C (DPDT) 14 = 3 Form C (3PDT)</p> | | | | | | | | | | | | | | |
| <p>3. Coil Input: A = AC, 50/60 Hz. D = DC</p> | | | | | | | | | | | | | | |
| <p>4. Contact Rating and Indicator Lamp Option:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">TYPE</th> <th style="width: 25%;">KRPA</th> <th style="width: 25%;">KRP</th> <th style="width: 25%;">KA</th> </tr> </thead> <tbody> <tr> <td>Codes Available</td> <td>Y, G, N,</td> <td>Y, G, N,</td> <td>Y, G,</td> </tr> </tbody> </table> <p>Y = Silver, no indicator lamp G = Silver-cadmium oxide, no indicator lamp N = Silver-cadmium oxide, with indicator lamp*</p> | | | | | | | TYPE | KRPA | KRP | KA | Codes Available | Y, G, N, | Y, G, N, | Y, G, |
| TYPE | KRPA | KRP | KA | | | | | | | | | | | |
| Codes Available | Y, G, N, | Y, G, N, | Y, G, | | | | | | | | | | | |
| <p>5. Coil Voltage: Up to 240VAC Up to 125VDC</p> | | | | | | | | | | | | | | |

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

Our authorized distributors are more likely to stock the following items for immediate delivery.

| | | | | |
|--------------|--------------|---------------|---------------|---------------|
| KA-5AG-120 | KRP-11AN-24 | KRPA-5AG-120 | KRPA-11AY-240 | KRPA-14AY-240 |
| KA-5AY-120 | KRP-11AN-120 | KRPA-5AY-120 | KRPA-11DG-6 | KRPA-14DG-12 |
| KA-5DG-6 | KRP-11AY-120 | KRPA-5DG-6 | KRPA-11DG-12 | KRPA-14DG-24 |
| KA-5DG-12 | KRP-11DG-12 | KRPA-5DG-12 | KRPA-11DG-24 | KRPA-14DG-48 |
| KA-5DG-110 | KRP-11DG-24 | KRPA-5DG-24 | KRPA-11DG-48 | KRPA-14DG-110 |
| KA-11AG-120 | KRP-11DG-48 | KRPA-5DY-12 | KRPA-11DG-110 | KRPA-14DN-24 |
| KA-11AY-6 | KRP-11DG-110 | KRPA-5DY-24 | KRPA-11DN-12 | KRPA-14DY-24 |
| KA-11AY-24 | KRP-11DG-125 | KRPA-11AG-6 | KRPA-11DN-24 | |
| KA-11AY-120 | KRP-11DN-12 | KRPA-11AG-12 | KRPA-11DN-110 | |
| KA-11DG-12 | KRP-11DN-24 | KRPA-11AG-24 | KRPA-11DY-12 | |
| KA-11DG-24 | KRP-11DY-24 | KRPA-11AG-120 | KRPA-11DY-24 | |
| KA-11DG-110 | KRP-14AG-120 | KRPA-11AG-240 | KRPA-14AG-12 | |
| KA-14AG-120 | KRP-14AG-240 | KRPA-11AN-12 | KRPA-14AG-24 | |
| KA-14AY-120 | KRP-14AN-120 | KRPA-11AN-24 | KRPA-14AG-120 | |
| KA-14DG-24 | KRP-14AY-120 | KRPA-11AN-120 | KRPA-14AG-240 | |
| KA-14DG-110 | KRP-14DG-12 | KRPA-11AN-240 | KRPA-14AN-24 | |
| KRP-5AG-120 | KRP-14DG-24 | KRPA-11AY-6 | KRPA-14AN-120 | |
| KRP-11AG-24 | KRP-14DG-110 | KRPA-11AY-12 | KRPA-14AN-240 | |
| KRP-11AG-120 | KRP-14DN-24 | KRPA-11AY-24 | KRPA-14AY-24 | |
| KRP-11AG-240 | KRPA-5AG-24 | KRPA-11AY-120 | KRPA-14AY-120 | |



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

1. Basic Series: KR

2. Type:

P = Enclosed

(20 amp models available only with Contact Arrangement 3 and Material H.)

3. Contact Arrangement:

3 = 1 Form X (SPST - NO - DM)

4. Coil Input:

A = AC

D = DC

5. Contact Material & Rating:

H = Silver-cadmium oxide, 1/4" (6.35mm) dia., 20 amps.

6. Coil Voltage:

To 240VAC, 50/60 Hz. or 110VDC.

Our authorized distributors are more likely to stock the following items for immediate delivery.

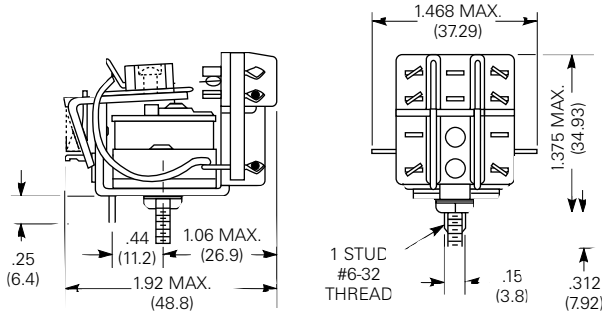
KRP-3AH-120

KRP-3DH-24

KRP-5AG-120

Outline Dimensions

KA Series

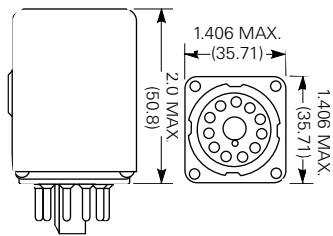


Tolerances on .XX Decimals ± .02 (± .5) Unless Otherwise Specified
Tolerances on .XXX Decimals ± .005 (± .13) Unless Otherwise Specified

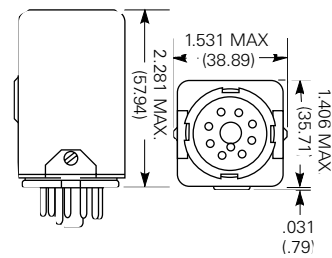
KR Series Enclosures

Type "P" Clear Dust Cover

For KRPA and KRP



For KRP3-H



Hold-Down Spring

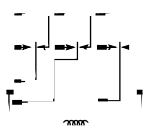
20C176 KRPA & KRP
20C206 KAP and KRP3



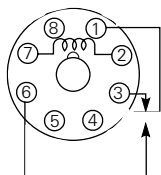
Durable stainless steel spring can be moved aside for relay removal or installation. Mounts with same machine screws or rivets that secure socket to chassis. Two .156" (3.96mm) dia. holes required.

Wiring Diagrams (Bottom Views)

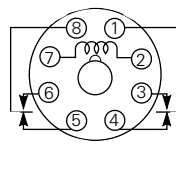
KA



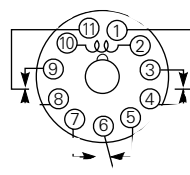
KR5
KAP5
KRP5
KRPA5



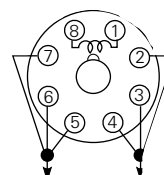
KAP11
KRP11
KRPA11



KAP14
KRP14
KRPA14



KRP3AH

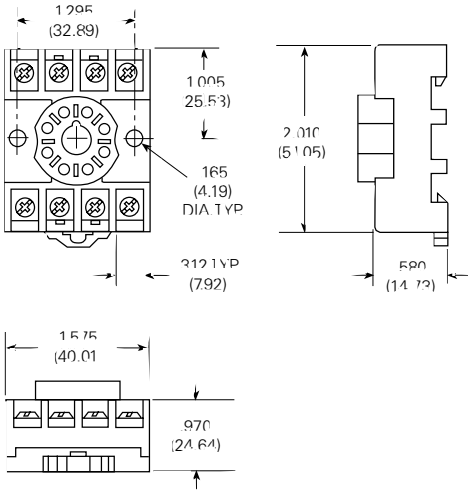


Sockets For KRP, KRPA Series Relays

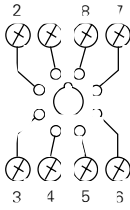
The following sockets are normally maintained in stock for immediate delivery.

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

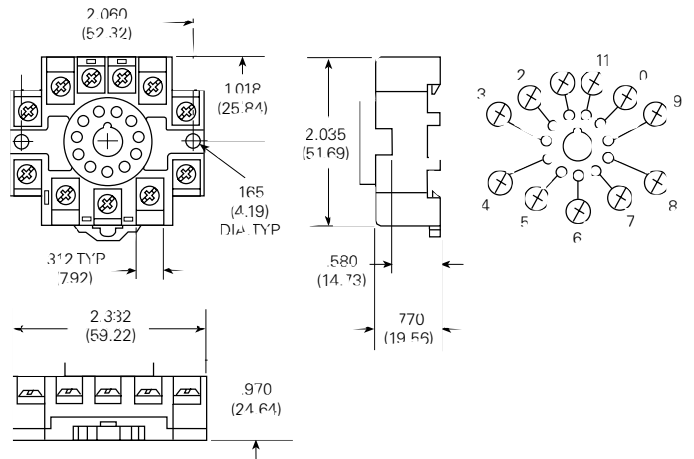
**27E891
10A, 300VAC**



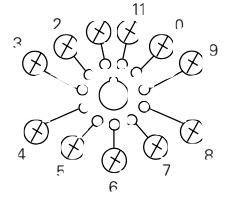
**Terminal Location
Top View**



**27E892
10A, 300VAC**



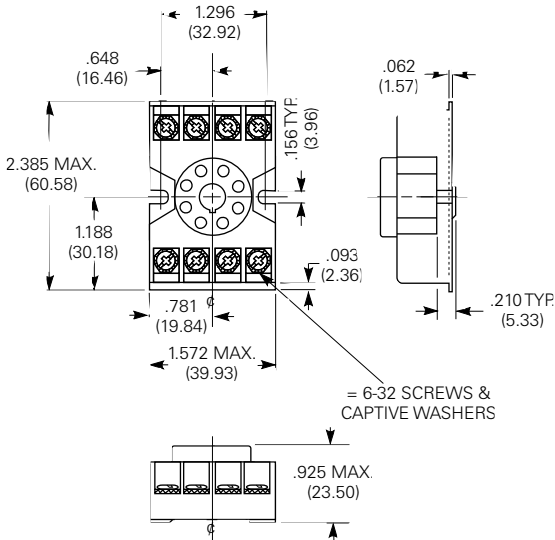
**Terminal Location
Top View**



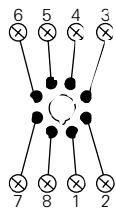
Sockets have M3.5 screw terminals which accept up to two #12 AWG wires. Rated 10 amps @ 300VAC and meets UL 94V-0.

Screw Terminal Sockets

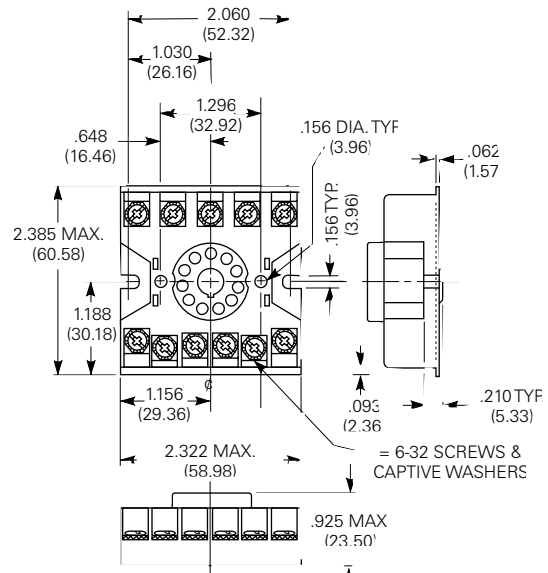
**27E122
10A, 300VAC
8-pin**



Terminal Location



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



Terminal Location

