

# KUHP series

## 30 Amp Power Relays

File E22575

File LR15734-123

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

- AC coils 6-277VAC 50/60 Hz., DC 6-110VDC.
- Contact arrangement up to DPDT.
- .250" combination push-on/solder terminals or PC terminals.
- Side flange and top flange mounting.
- Designed to meet VDE space requirements.
- Class B coil insulation.

### Contact Data @ 25°C

**Arrangements:** 1 Form C (SPDT) and 2 Form C (DPDT).

**Material:** Silver or silver-cadmium oxide.

**Expected Mechanical Life:** 10 million operations.

### Contact Ratings

| Contact Arrangement                              | UL/CSA Ratings   | Expected Life   |
|--|--|-----------------|
| <b>1 Form C<br/>Single Pole<br/>Double Throw</b> | 30A 120/240VAC<br>1 HP @ 120VAC,<br>1 1/2 HP @ 240VAC<br>25A @ 28VDC                               | 100,000<br>ops. |
| <b>2 Form C<br/>Double Pole<br/>Double Throw</b> | 20A @ 120/240VAC<br>3/4 HP @ 120VAC<br>1 1/2 HP @ 240VAC<br>20A @ 28VDC<br>7A @ 120VAC (Tungsten)* | 100,000<br>ops. |

\*NO contacts only.

### Initial Dielectric Strength

**Between Open Contacts:** 1,200V rms.

**Between Adjacent Contacts:** 3,750V rms.

**Between Contacts and Coil:** 3,750V rms.

**Between Coil and Frame:** 2,000V rms.

### Coil Data @ 25°C

**Voltage:** 6-110VDC and 6-277VAC.

**Nominal Power:**

**DC Coils:** 1.2 Watts.

**AC Coils:** 2.7VA.

**Duty Cycle:** Continuous.

**Initial Insulation Resistance:** 100 megohms, min.

**Insulation:** Class B, 130°C.

### Coil Data

|                 | Nominal Voltage | DC Resistance in Ohms ± 10%* | Must Operate Voltage | Nominal Coil Current (mA) |
|-----------------|-----------------|------------------------------|----------------------|---------------------------|
| <b>DC Coils</b> | 6               | 32.1                         | 4.5                  | 187                       |
|                 | 12              | 120                          | 9.0                  | 100                       |
|                 | 24              | 472                          | 18.0                 | 51                        |
|                 | 48              | 1,800                        | 36.0                 | 26.7                      |
|                 | 110             | 10,000                       | 82.5                 | 11                        |
| <b>AC Coils</b> | 6               | 4.2                          | 5.1                  | 460                       |
|                 | 12              | 18                           | 10.2                 | 230                       |
|                 | 24              | 72                           | 20.4                 | 115                       |
|                 | 120             | 1,700                        | 102.0                | 24                        |
|                 | 240             | 7,200                        | 204.0                | 12                        |
|                 | 277             | 10,250                       | 235.5                | 9                         |

\*±15% for AC coils.

### Operate Data @ 25°C

**Must Operate Voltage:**

**DC Coils:** 75% of nominal.

**AC Coils:** 85% of nominal.

**Operate Time (Excluding Bounce):** 20 milliseconds, typical, at nominal voltage.

**Release Time (Excluding Bounce):** 20 milliseconds, typical, at nominal voltage.

### Environmental Data

**Temperature Range: (Operating)**

**DC Coils:** -45°C to +70°C.

**AC Coils:** -45°C to +45°C.

**Shock:** 15g's, 11 ms (non-operating).

**Vibration:** .065" double amplitude, 10-55 Hz.

### Mechanical Data

**Termination:** .250" quick connect/solder; and PC board.

**Enclosure:** Polycarbonate dust cover.

**Weight:** 3.2 oz. (92g) approximately.

### Ordering Information

| Typical Part No. ▶  | KUHP- | 11 | A | 5 | 1 | -120 |
|---|-------|----|---|---|---|------|
| <b>1. Basic Series and Type:</b><br>KUHP = Enclosed 20/30 amp relay.  |       |    |   |   |   |      |
| <b>2. Contact Arrangement and Rating:</b><br>5 = 1C (SPDT); 30 amps.      11 = 2C (DPDT); 20 amps.  |       |    |   |   |   |      |
| <b>3. Coil Input:</b><br>A = AC, 50/60 Hz.      D = DC  |       |    |   |   |   |      |
| <b>4. Mountings:</b><br>1 = PLAIN CASE      5 = BRACKET MOUNT CASE      T = TOP FLANGE CASE   |       |    |   |   |   |      |
| <b>5. Terminals and Contact Materials:</b><br>1 = .250" (6.35mm) quick connect/solder; silver-cadmium oxide.      7 = .047" (1.19mm) printed circuit; silver-cadmium oxide. |       |    |   |   |   |      |
| <b>6. Coil Voltage:</b><br>AC coils to 277VAC, 50/60 Hz.      DC coils to 110VDC.   |       |    |   |   |   |      |

**NOTE:** No sockets are available for this relay.

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

|               |               |              |               |                |               |               |
|---------------|---------------|--------------|---------------|----------------|---------------|---------------|
| KUHP-5A51-24  | KUHP-5AT1-120 | KUHP-5D51-24 | KUHP-5DT1-24  | KUHP-11A51-120 | KUHP-11D51-12 | KUHP-11DT1-12 |
| KUHP-5A51-120 | KUHP-5D51-12  | KUHP-5DT1-12 | KUHP-11A51-24 | KUHP-11AT1-120 | KUHP-11D51-24 | KUHP-11DT1-24 |

Dimensions are shown for reference purposes only.

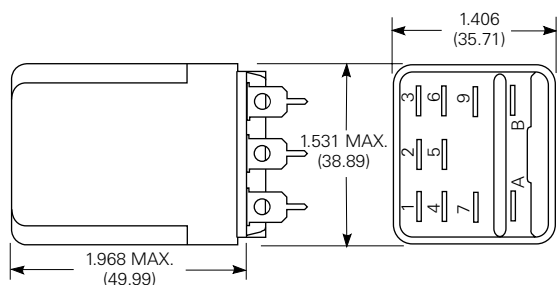
Dimensions are in inches over (millimeters) unless otherwise specified.

Specifications and availability subject to change.

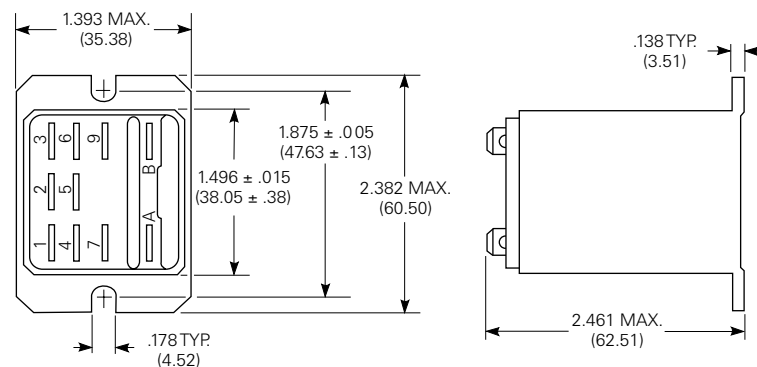
www.tycoelectronics.com  
Technical support:  
Refer to inside back cover.

**Outline Dimensions**

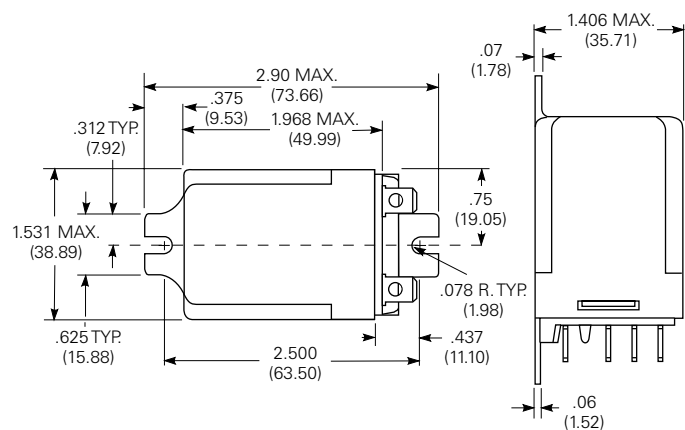
**Plain Case**



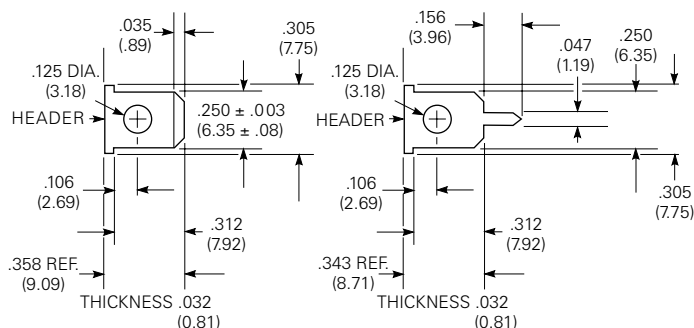
**Top Flange Enclosure**



**Bracket Mount Case**



**Terminal Dimensions  
.250" (6.35mm) Quick  
Connect/Solder**

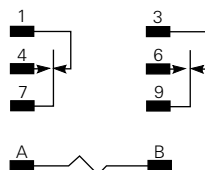
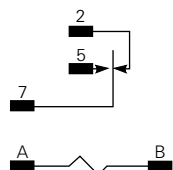


**Printed Circuit**

**Wiring Diagrams**

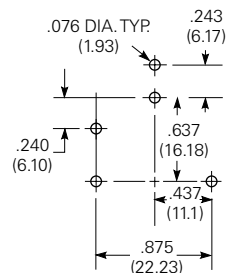
- 1 Form C
- 1 Form A (Delete 2)
- 1 Form B (Delete 5)

- 2 Form C
- 2 Form A (Delete 1 & 3)
- 2 Form B (Delete 4 & 6)

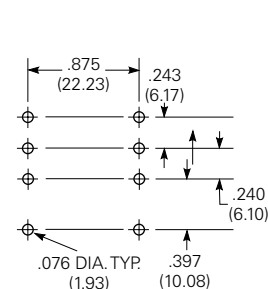


**PC Board Layouts (Bottom Views)**

**1 Pole Model**



**2 Pole Model**



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<http://moschip.ru/get-element>

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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

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