

# KUP93 series

## General Purpose 3 to 10 Amp, Multicontact AC or DC Relay

File 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

- AC coils 24, 120 & 240V 50/60 Hz.; DC 12 & 24VDC.
- Contact arrangement to 3PDT.
- Sockets available for all models.
- Accepted pin pattern for HVAC industry.
- Primarily designed for the HVAC industry.

### Contact Data @ 25°C

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

### Contact rating

Material	UL/CSA Ratings	Life Expected
Fine silver	5A @ 28VDC or 240VAC, 80% PF, 1/10 HP @ 120VAC, 1/4 HP @ 240VAC	100,000
Silver cadmium oxide	10A @ 28VDC or 240VAC, 80% PF, 1/4 HP @ 120VAC, 1/3 HP @ 240 VAC, 10 FLA, 30 LRA @ 120 VAC, 5 FLA, 15 LRA @ 240 VAC	100,000
		30,000

### Initial Dielectric Strength

**Between Open Contacts:** 500V rms.  
**Between Adjacent Contacts:** 1,500V rms.  
**Between Contacts and Coil:** 1,500V rms.

### Coil Data @ 25°C

**Nominal Power:**  
**DC Coils:** 1.2 Watts.  
**AC Coils:** 2.7VA.  
**Initial Insulation Resistance:** 100 megohms, min., at 25°C.r

### Coil Data

	Nominal Voltage	DC Resistance in Ohms ± 10%*	Must Operate Voltage	Nominal Coil Current (mA)
DC Coils	12	120	9.0	100
	24	472	18.0	51
AC Coils	24	72	20.4	115
	120	1,700	102.0	24
	240	7,200	204.0	12

\*AC coils, ± 15%

### Operate Data @ 25°C

#### Must Operate Voltage:

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

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

**Operate Time (Excluding Bounce):** 15 milliseconds, typical, at nominal voltage.

#### Release Time (Excluding Bounce):

**DC Coils:** 10 milliseconds, typical, at nominal voltage.

**AC Coils:** 10 milliseconds, typical, at nominal voltage.

### Environmental Data

#### Temperature Range:

#### Storage:

**All Coils:** -45°C to +105°C.

#### Operating:

**DC Coils:** -45°C to +70°C.

**AC Coils:** -45°C to +45°C.

### Mechanical Data

**Termination:** .187" x .020" quick connect.

**Enclosures:** Clear polycarbonate dust cover.

**Weight:** 3.0 oz. (86g) approximately.N

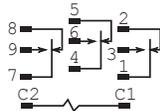
**Ordering Information**

Typical Part No. >	<b>KUP93</b>	<b>14</b>	<b>A</b>	<b>2</b>	<b>1</b>	<b>-24</b>
<p><b>1. Type:</b> KUP93 = Enclosed general purpose relay.</p>						
<p><b>2. Contact Arrangement:</b> 14 = 3 Form C (3PDT)</p>						
<p><b>3. Coil Input:</b> A = AC                    D = DC</p>						
<p><b>4. Mounting:</b> 1 = PLAIN CASE;</p>						
<p><b>5. Terminals, Contact Material &amp; Rating:</b> 1 = .187" (4.75mm) quick connect, silver, 5 amps. 3 = .187" (4.75mm) quick connect, silver-cadmium oxide, 10 amps.</p>						
<p><b>6. Coil Voltage:</b> To 240VAC, 50/60 Hz. or 110VDC.</p>						

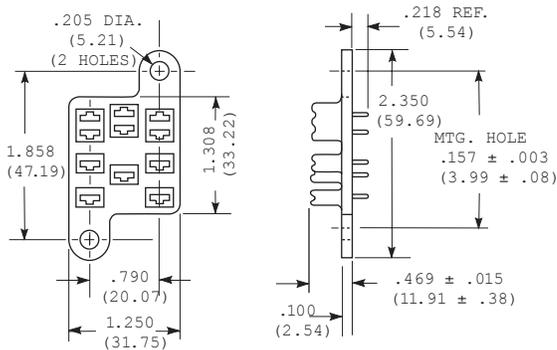
**Our authorized distributors are more likely to stock the following items for immediate delivery.**  
No items in this series typically are stocked.

**Outline Dimensions**

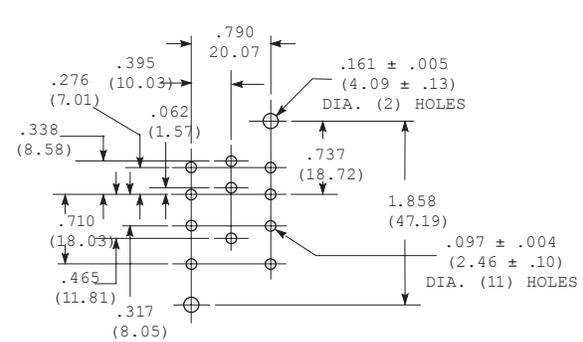
**Wiring Diagrams**  
**3 Form C**



**KUP93 Sockets**



**Socket PC Board Layout (Component Side of Board)**



**KUP93 Socket Number**

Socket Color	P C Socket With Terminals
Natural Nylon	27E168**

\*\*UL Recognized, file E22575

**Socket:** Rated 10 amperes. Will accept .187" (4.75mm) quick-connect terminals of all KUP93 relays. »