

## 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 Ratings

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 @ 240VAC 10 FLA, 30 LRA @ 120VAC, 5 FLA, 15 LRA @ 240VAC	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.

#### Coil Data

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

\*AC coils,  $\pm 15\%$

#### 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.

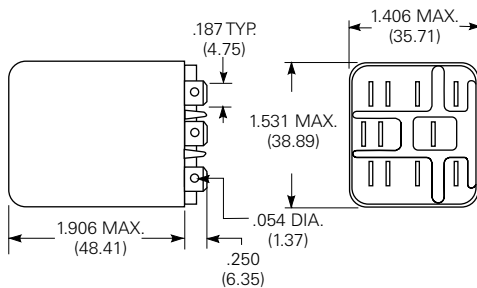
## Ordering Information

Typical Part No. ▶		KUP93	11	A	2	1	-24
<b>1. Type:</b> KUP93 = Enclosed general purpose relay.							
<b>2. Contact Arrangement:</b> 14 = 3 Form C (3PDT)							
<b>3. Coil Input:</b> A = AC D = DC							
<b>4. Mounting:</b> 1 = PLAIN CASE;							
<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.							
<b>6. Coil Voltage:</b> To 240VAC, 50/60 Hz. or 110VDC.							

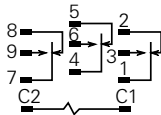
**Our authorized distributors are more likely to stock the following items for immediate delivery.**

No items in this series typically are stocked.

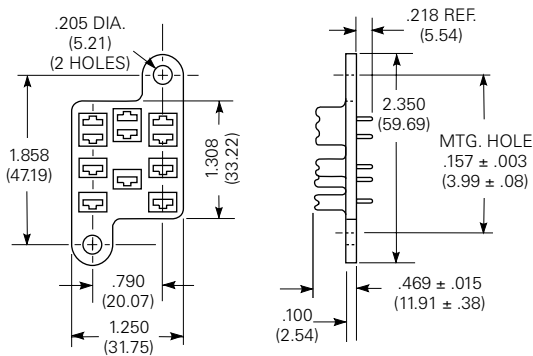
## Outline Dimensions



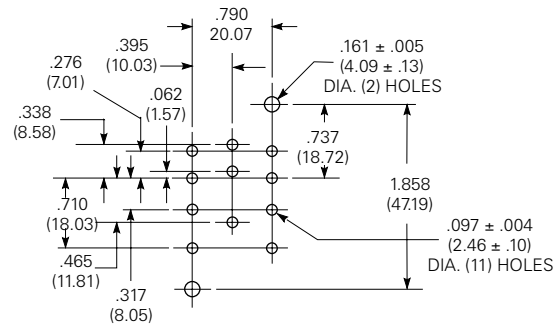
## Wiring Diagrams 3 Form C



## 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.