

## KUEP Series Panel Plug-in Relay

- 1 form X, 2 form A and 2 form C contact arrangements
- 10 amp current rating
- Magnetic blow-out
- Various mounting options
- Indicator lamp available

Typical applications  
DC load switching in industrial controls.



### Approvals

UL E22575; CSA LR15734; OE (KUEP-11 only)

Technical data of approved types on request.

### Contact Data

|                               |                                                |               |
|-------------------------------|------------------------------------------------|---------------|
| Contact arrangement           | 1 form X (NO-DM), 2 form A (NO), 2 form C (CO) |               |
| Rated voltage                 | 150VDC                                         |               |
| Rated current                 | 10A                                            |               |
| Contact material              | AgCdO                                          | AgSnOInO      |
| Min. recommended contact load | 300mA, 12VDC                                   |               |
| Frequency of operation        | 360 ops./hour                                  | 360 ops./hour |
| Operate/releases time max.    | 15/10ms                                        |               |
| Bounce time max.              | 17ms                                           |               |

### Contact ratings

| Type                     | Load                      | Cycles                  |
|--------------------------|---------------------------|-------------------------|
| <b>UL 508</b>            |                           |                         |
| KUEP, 1 form X, AgCdO    |                           |                         |
|                          | 10A, 150VDC               | 100x10 <sup>3</sup>     |
|                          | 1A, 300VDC                | 100x10 <sup>3</sup>     |
|                          | 2.5 A, 170 VDC, resistive | 100x10 <sup>3</sup>     |
| KUEP, 2 form A, AgCdO    |                           |                         |
|                          | 5 A, 150 VDC              |                         |
|                          | 2.5 A, 170 VDC, resistive | 100x10 <sup>3</sup>     |
| KUEP, 2 form C, AgCdO    |                           |                         |
|                          | 3 A, 150 VDC              |                         |
|                          | 2.5 A, 170 VDC, resistive | 100x10 <sup>3</sup>     |
|                          | 10 A, 240 VAC             |                         |
|                          | 10 A, 32 VDC              |                         |
|                          | 5 FLA, 15 LRA, 250 VAC    |                         |
|                          | 1/3 HP, 120 VAC           |                         |
|                          | 5 A, 120 VAC, tungsten    |                         |
|                          | 1/2 HP, 250 VAC           |                         |
|                          | 0.5 A, 125 VDC            |                         |
|                          | 10 FLA, 40 LRA, 125 VAC   |                         |
|                          | 3 A, 600 VAC              |                         |
|                          | 1/2 HP, 480 VAC           |                         |
|                          | 1/2 HP, 600 VAC           |                         |
|                          | 1 HP, 480 VAC, 3 phase    |                         |
| KUEP, 1 form X, AgSnOInO |                           |                         |
|                          | 10A, 150VDC, resistive    | 30x10 <sup>3</sup>      |
| KUEP, 2 form A, AgSnOInO |                           |                         |
|                          | 5 A, 150 VDC, resistive   | 100x10 <sup>3</sup>     |
| KUEP, 2 form C, AgSnOInO |                           |                         |
|                          | 3 A, 150 VDC, resistive   | 100x10 <sup>3</sup>     |
| Mechanical endurance     |                           | 10x10 <sup>6</sup> ops. |

### Coil Data

| Coil voltage range                  |                   | 5 to 110VDC         |                                   |                    |
|-------------------------------------|-------------------|---------------------|-----------------------------------|--------------------|
|                                     |                   | 6 to 240VAC         |                                   |                    |
| Coil insulation system according UL |                   | Class B             |                                   |                    |
| <b>Coil versions, DC coil</b>       |                   |                     |                                   |                    |
| Coil code                           | Rated voltage VDC | Operate voltage VDC | Coil resistance $\Omega \pm 10\%$ | Rated coil power W |
| One pole versions                   |                   |                     |                                   |                    |
| 5                                   | 5                 | 3.75                | 21                                | 1.2                |
| 6                                   | 6                 | 4.5                 | 32                                | 1.125              |
| 12                                  | 12                | 9.0                 | 120                               | 1.2                |
| 24                                  | 24                | 18.0                | 472                               | 1.25               |
| 48                                  | 48                | 36.0                | 1800                              | 1.3                |
| 110                                 | 110               | 82.5                | 10000                             | 1.25               |
| Two pole versions                   |                   |                     |                                   |                    |
| 5                                   | 5                 | 3.75                | 14                                | 1.8                |
| 6                                   | 6                 | 4.5                 | 20                                | 1.8                |
| 12                                  | 12                | 9.0                 | 80                                | 1.8                |
| 24                                  | 24                | 18.0                | 320                               | 1.8                |
| 48                                  | 48                | 36.0                | 1250                              | 1.85               |
| 110                                 | 110               | 82.5                | 6720                              | 1.8                |

All figures are given for coil without preenergization, at ambient temperature +23°C.

### Coil versions, AC coil

| Coil code | Rated voltage VAC | Operate voltage VAC | Coil resistance $\Omega \pm 15\%$ | Rated coil power VA |
|-----------|-------------------|---------------------|-----------------------------------|---------------------|
|           |                   |                     |                                   |                     |

**KUEP Series Panel Plug-in Relay (Continued)**

**Other Data**

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at [www.te.com/customersupport/rohssupportcenter](http://www.te.com/customersupport/rohssupportcenter)

Ambient temperature  
DC coil -45°C to 70°C  
AC coil 1 pole: -45°C to 55°C  
2 pole: -45°C to 45°C

Category of environmental protection  
IEC 61810 RTI - dust protected

Terminal type Quick connects (QC), .187 or .205 PCB-THT

Terminal retention, push force  
QC .205 17 lbs for 3s  
QC .187

**Other Data (Continued)**

Weight 85g  
Packaging/unit tray/25 pcs., box/150pcs.

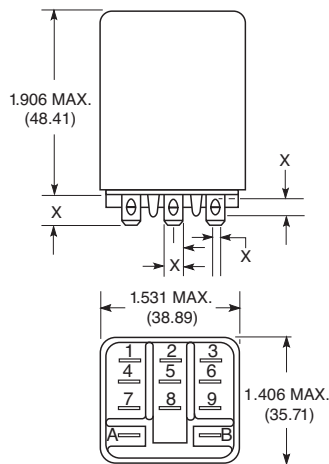
**Accessories**

For details see datasheet Sockets and Accessories, KUP Relays

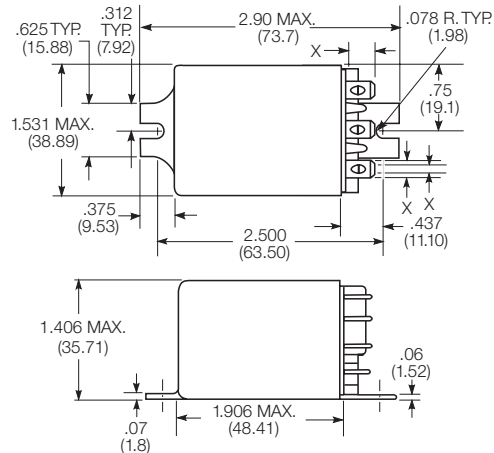
| Product Code | Description                                          |
|--------------|------------------------------------------------------|
| 27E893       | DIN socket (use 20C318 clip)                         |
| 27E121       | Track mount socket (use 20C314 clips)                |
| 27E043       | Chassis mount/solder eyelet socket (use 20C254 clip) |
| 27E046       | Chassis mount/PCB socket (use 20C254 clip)           |
| 27E067       | Chassis mount/quick connect socket (use 20C254 clip) |
| 27E396       | Snap-in/quick connect socket (use 20C254 clip)       |

**Dimensions**

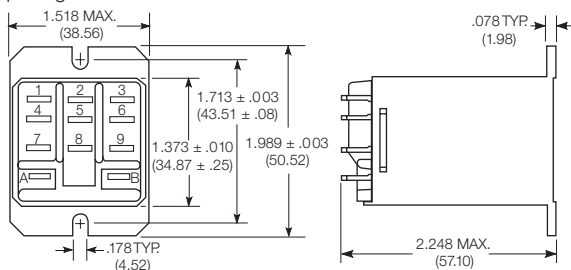
Plain case



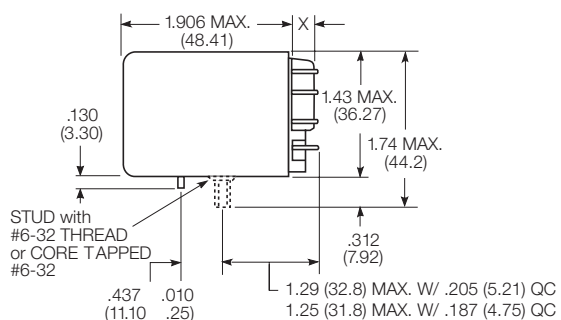
Bracket mount case



Top flange case



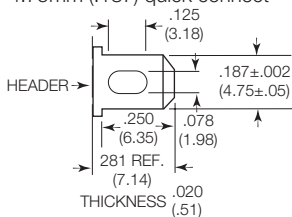
Core / stud mount case



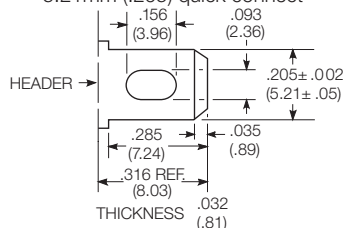
X Is For Terminal Dimensions.  
See Terminal Drawings.

**Terminal dimensions**

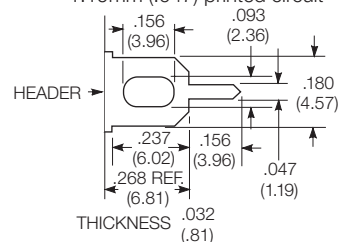
4.75mm (.187) quick connect



5.21mm (.205) quick connect



1.19mm (.047) printed circuit

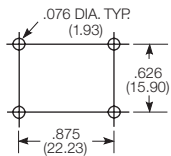


## KUEP Series Panel Plug-in Relay (Continued)

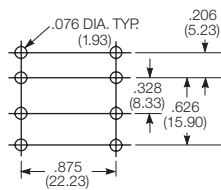
### PCB layout

Bottom view on solder pins

1 form X version



2 form C version shown  
(Omit unnecessary holes for  
form A types)

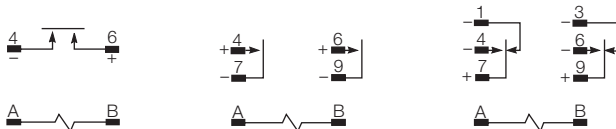


### Terminal assignment

1 form X

2 form A

2 form C



Load polarity noted above is recommended for optimum arc suppression.

### Product code structure

Typical product code **KUEP -3 A 1 5 -120**

#### Type

**KUEP** Enclosed relay with magnetic blow-outs

#### Contact arrangement and rating

**3** 1 form X (1 NO-DM) **7** 2 form A (2 NO)  
**11** 2 form C (2 CO)

#### Coil Input

**A** AC, 50/60Hz **D** DC

#### Mounting and options

**1** Socket mount (plain) case **3** Socket mount (plain) case, with indicator lamp <sup>1)</sup>  
**5** Bracket mount case **A** Plain case with #6-32 stud and locating tab  
**E** Plain case with #6-32 tapped core and locating tab **T** Top flange case  
<sup>1)</sup> Indicator lamps are available on models with the following coils: 6-24VAC and VDC, 110VDC and 120-240VAC.  
Only models with 120-240VAC coils are UL recognized.

#### Terminal and contact material

**5** 4.75mm (.187in) quick connect/solder; AgCdO **6** 5.21mm (.205in) quick connect/solder; AgCdO  
**7** 1.19mm (.047in) PCB, AgCdO **P** 4.75mm (.187in) quick connect/solder; AgSnOInO  
**R** 5.21mm (.205in) quick connect/solder; AgSnOInO **S** 1.19mm (.047in) PCB, AgSnOInO

#### Coil voltage

Coil code: please refer to coil versions table

| Product Code   | Arrangement       | Material | Coil    | Terminals          | Mounting                                     | Part Number |
|----------------|-------------------|----------|---------|--------------------|----------------------------------------------|-------------|
| KUEP-3A15-120  | 1 form X, 1 NO-DM | AgCdO    | 120 VAC | 4.75mm (.187in) QC | Socket mount, plain case                     | 9-1393113-4 |
| KUEP-3D15-12   |                   |          | 12 VDC  |                    |                                              | 9-1393113-8 |
| KUEP-3D15-24   |                   |          | 24 VDC  |                    |                                              | 1393114-1   |
| KUEP-3D15-48   |                   |          | 48 VDC  |                    |                                              | 1393114-2   |
| KUEP-3D15-110  |                   |          | 110 VDC |                    |                                              | 9-1393113-7 |
| KUEP-3D35-24   |                   |          | 24 VDC  |                    | Socket mount, plain case with indicator lamp | 1393114-5   |
| KUEP-7D15-24   | 2 form A, 2 NO    |          |         |                    | Socket mount, plain case                     | 1-1393114-1 |
| KUEP-11A15-120 | 2 form C, 2 CO    |          | 120 VAC |                    |                                              | 8-1393113-3 |
| KUEP-11D15-12  |                   |          | 12 VDC  |                    |                                              | 8-1393113-6 |
| KUEP-11D15-24  |                   |          | 24 VDC  |                    |                                              | 8-1393113-7 |
| KUEP-11D15-48  |                   |          | 48 VDC  |                    |                                              | 8-1393113-8 |
| KUEP-11D15-110 |                   |          | 110 VDC |                    |                                              | 8-1393113-5 |