

**KUMP Series Panel Plug-in Relay**

- 15 amp rating
- Contact arrangements 1-3 form A, 1-3 form B, 1-3 form C, 1 form X, 1 form Y, 1 form Z
- Open or enclosed
- Plain or bracket mount dust covers
- Optional indicator lamp and push-to-test button
- Several termination and mounting styles

Typical applications  
Hospital beds, semiconductor wafer equipment, boom/bucket lifts.



**Approvals**

UL E22575; CSA LR15734  
Technical data of approved types on request.

**Contact Data**

|                               |                                                                                                                                       |               |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Contact arrangement           | 1, 2 and 3 form A (NO); 1, 2 and 3 form B (NC);<br>1, 2 and 3 form C (CO); 1 form X (NO-DM);<br>1 form Y (NC-DB); 1 form Z (CO-DB-DM) |               |
| Rated voltage                 | 277VAC                                                                                                                                |               |
| Rated current                 | 15A                                                                                                                                   |               |
| Contact material              | AgCdO                                                                                                                                 | AgSnOInO      |
| Min. recommended contact load | 300mA, 12VDC                                                                                                                          | 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><br>AgCdO | 15A, 277VAC<br>1/2HP, 120VAC<br>10A, 240VAC<br>10A, 32VDC<br>5FLA, 15LRA, 250VAC<br>5A, 120VAC, tungsten<br>0.5A, 250VAC<br>0.5A, 125VDC<br>10FLA, 40LRA, 125VAC<br>3A, 600VAC<br>1/2HP, 480VAC<br>1/2HP, 600VAC<br>1HP, 480VAC, 3 phase |                                           |
| AgSnOInO               | 15A, 277VAC, pf = 0.8<br>10A, 277VAC, pf = 0.8                                                                                                                                                                                           | 15x10 <sup>3</sup><br>100x10 <sup>3</sup> |
| Mechanical endurance   | 10x10 <sup>6</sup> ops.                                                                                                                                                                                                                  |                                           |

**Coil Data**

|                                     |                            |
|-------------------------------------|----------------------------|
| Coil voltage range                  | 5 to 110VDC<br>6 to 240VAC |
| Coil insulation system according UL | Class B                    |

**Coil versions, DC coil**

| Coil code | Rated voltage VDC | Operate voltage VDC | Coil resistance Ω±10% | Rated coil power W |
|-----------|-------------------|---------------------|-----------------------|--------------------|
| 5         | 5                 | 3.75                | 21                    | 1.2                |
| 6         | 6                 | 4.5                 | 32.1                  | 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               |

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 Ω±15% | Rated coil power VA |
|-----------|-------------------|---------------------|-----------------------|---------------------|
| 6         | 6                 | 5.1                 | 4.2                   | 2.8                 |
| 12        | 12                | 10.2                | 18                    | 2.8                 |
| 24        | 24                | 20.4                | 72                    | 2.8                 |
| 120       | 120               | 102.0               | 1700                  | 2.9                 |
| 240       | 240               | 204.0               | 7200                  | 2.9                 |

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

**Insulation Data**

|                               |                      |
|-------------------------------|----------------------|
| Initial dielectric strength   |                      |
| between open contacts         | 1200V <sub>rms</sub> |
| between contact and coil      | 2200V <sub>rms</sub> |
| between adjacent contacts     | 2200V <sub>rms</sub> |
| Initial insulation resistance |                      |
| between insulated elements    | 100MΩ, 500VDC        |

**Other Data**

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

|                                      |                                                                                                                              |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Ambient temperature                  |                                                                                                                              |
| DC coil                              | Enclosed relays: -45°C to 70°C<br>Open relays: 15°C higher maximum                                                           |
| AC coil                              | Enclosed relays, 3 pole: -45°C to +45°C<br>Enclosed relays, 1 and 2 pole: -45°C to +55°C<br>Open relays: 15°C higher maximum |
| Category of environmental protection | IEC 61810 RT0 - open relay; RTI - dust protected                                                                             |
| Terminal type                        | Quick connects (QC), .187, .205 or .250: PCB-THT                                                                             |
| Terminal retention, push force       |                                                                                                                              |
| QC .205                              | 17 lbs for 3s                                                                                                                |
| QC .187, QC .250, PCB                | 25 lbs for 3s                                                                                                                |
| Weight                               | 85g                                                                                                                          |
| Packaging/unit                       | tray/25 pcs., box/150pcs.                                                                                                    |

**Accessories**

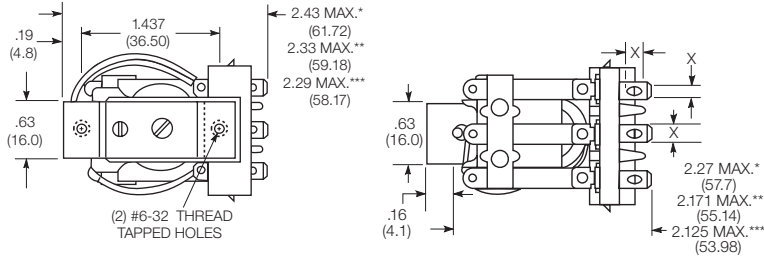
For details see datasheet      Sockets and Accessories, KUP Relays

| 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)       |

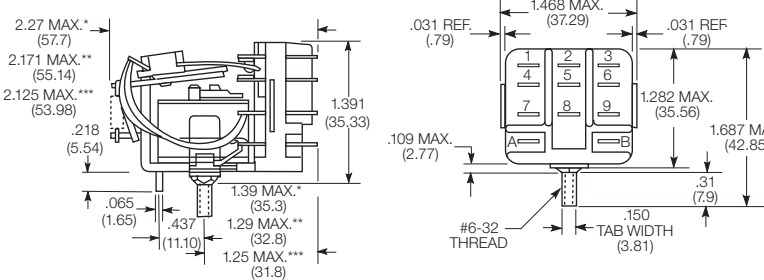
**KUMP Series Panel Plug-in Relay (Continued)**

**Dimensions**

KUM bracket type



KUM stud type



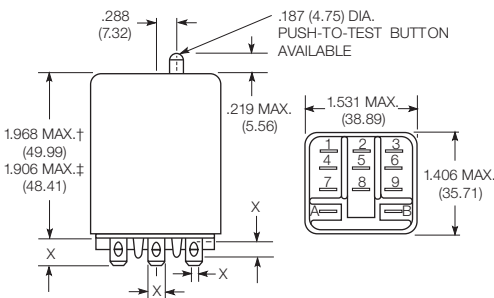
**Seated Heights For KUM (open) Relays**

- 1.391" (35.33mm) for #6-32 stud with .218" (5.54mm) locating tab.
- 1.52" (38.6mm) for bracket with 2-#6 32 tapped holes.
- 1.282" (32.56mm) for #6-32 tapped core with .125" (3.18mm) or .218" (5.54mm) locating tab.
- 2.046" (51.97mm) for relay with printed circuit terminals.

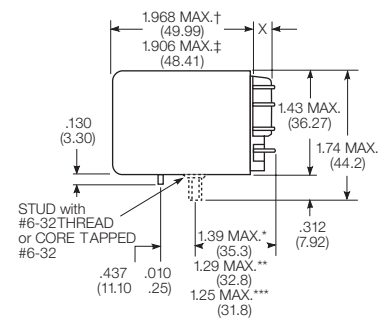
STUD TYPE also available with .125" (3.18mm) tab, as well as without stud and locating tab. Models without stud have core tapped #6-32 THREAD, .25" (6.4mm) minimum depth.

- \*Dimensions with .250" (6.35mm) terminals.
- \*\* Dimensions with .110" (2.79mm) or .205"(5.21mm) terminals.
- \*\*\* Dimensions with .187" (4.75mm) terminals.

KUMP plain case

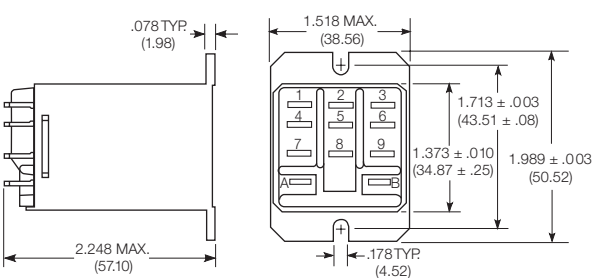


KUMP core / stud mount case



X Is For Terminal Dimensions. See Terminal Drawings.

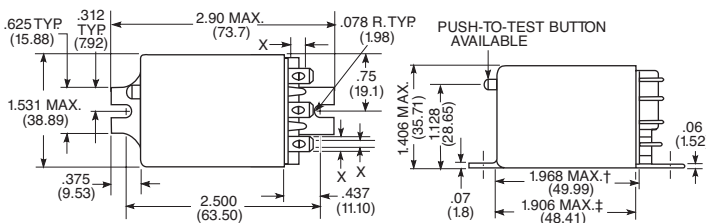
KUMP top flange case



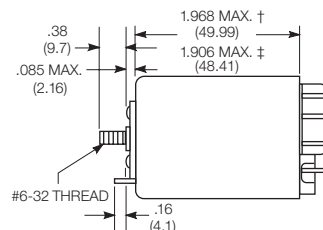
- † Dimensions with .250" (6.35mm) terminals.
- ‡ Dimensions with .187" (4.75mm and .205" 5.21mm) terminals.

- \*Dimensions with .250" (6.35mm) terminals.
- \*\* Dimensions with .110" (2.79mm) or .205"(5.21mm) terminals.
- \*\*\* Dimensions with .187" (4.75mm) terminals.

KUMP bracket mount case



KUMP stud on end case



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

**Relay front diagrams**

Models with 6.35mm (.250) QC terminals



Models with all other terminals



**Terminal dimensions**

4.75mm (.187) quick connect



5.21mm (.205) quick connect



1.19mm (.047) printed circuit



6.35mm (.250) quick connect



**Terminal assignment**



**PCB layout**

Bottom view on solder pins

1 form Z version  
(Omit unnecessary holes for form X and Y types)



3 pole version  
(Omit unnecessary holes for form A and 2 pole types)



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

|                                                                                                                                                                   |                                                                       |                                                 |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------|--|--|--|--|
| <b>Product code structure</b>                                                                                                                                     |                                                                       | Typical product code <b>KUMP -11 A 1 8 -120</b> |  |  |  |  |
| <b>Type</b>                                                                                                                                                       |                                                                       |                                                 |  |  |  |  |
| <b>KUM</b> 15A open style relay                                                                                                                                   |                                                                       |                                                 |  |  |  |  |
| <b>KUMP</b> 15A enclosed relay                                                                                                                                    |                                                                       |                                                 |  |  |  |  |
| <b>Contact arrangement</b>                                                                                                                                        |                                                                       |                                                 |  |  |  |  |
| <b>1</b> 1 form A (1 NO)                                                                                                                                          | <b>2</b> 1 form B (1 NC)                                              | <b>3</b> 1 form X (1 NO-DM)                     |  |  |  |  |
| <b>4</b> 1 form Y (1 NC-DB)                                                                                                                                       | <b>5</b> 1 form C (1 CO)                                              | <b>6</b> 1 form Z (1 CO-DB-DM)                  |  |  |  |  |
| <b>7</b> 2 form A (2 NO)                                                                                                                                          | <b>8</b> 2 form B (2 NC)                                              | <b>11</b> 2 form C (2 CO)                       |  |  |  |  |
| <b>12</b> 3 form A (3 NO)                                                                                                                                         | <b>13</b> 3 form B (3 NC)                                             | <b>14</b> 3 form C (3 CO)                       |  |  |  |  |
| <b>Coil Input</b>                                                                                                                                                 |                                                                       |                                                 |  |  |  |  |
| <b>A</b> AC, 50/60Hz                                                                                                                                              | <b>D</b> DC                                                           |                                                 |  |  |  |  |
| <b>Mounting and options</b>                                                                                                                                       |                                                                       |                                                 |  |  |  |  |
| <b>KUM</b>                                                                                                                                                        |                                                                       |                                                 |  |  |  |  |
| <b>1</b> #6-32 mounting stud, 5.54mm (.218in) locating tab                                                                                                        | <b>2</b> 2-hole bracket, #6-32 tapped                                 |                                                 |  |  |  |  |
| <b>3</b> #6-32 tapped core, 3.18mm (.125in) locating tab                                                                                                          | <b>4</b> #6-32 tapped core, 5.54mm (.218in) locating tab              |                                                 |  |  |  |  |
| <b>5</b> #6-32 tapped core, no locating tab                                                                                                                       |                                                                       |                                                 |  |  |  |  |
| <b>KUMP</b>                                                                                                                                                       |                                                                       |                                                 |  |  |  |  |
| <b>1</b> Socket mount (plain) case                                                                                                                                |                                                                       |                                                 |  |  |  |  |
| <b>2</b> Socket mount (plain) case with push-to-test button                                                                                                       |                                                                       |                                                 |  |  |  |  |
| <b>3</b> Socket mount (plain) case with indicator lamp <sup>1)</sup>                                                                                              |                                                                       |                                                 |  |  |  |  |
| <b>4</b> Socket mount (plain) case with indicator lamp and push-to-test button <sup>1)</sup>                                                                      |                                                                       |                                                 |  |  |  |  |
| <b>5</b> Bracket mount case                                                                                                                                       |                                                                       |                                                 |  |  |  |  |
| <b>6</b> Bracket mount case with push-to-test button                                                                                                              |                                                                       |                                                 |  |  |  |  |
| <b>7</b> Bracket mount case with indicator lamp <sup>1)</sup>                                                                                                     |                                                                       |                                                 |  |  |  |  |
| <b>8</b> Bracket mount case with indicator lamp and push-to-test button <sup>1)</sup>                                                                             |                                                                       |                                                 |  |  |  |  |
| <b>9</b> Plain case with #6-32 stud and locating tab on end of case                                                                                               |                                                                       |                                                 |  |  |  |  |
| <b>A</b> Plain case with #6-32 stud and locating tab                                                                                                              |                                                                       |                                                 |  |  |  |  |
| <b>B</b> Plain case with #6-32 stud and locating tab, push-to-test button                                                                                         |                                                                       |                                                 |  |  |  |  |
| <b>C</b> Plain case with #6-32 stud and locating tab, indicator lamp <sup>1)</sup>                                                                                |                                                                       |                                                 |  |  |  |  |
| <b>D</b> Plain case with #6-32 stud and locating tab, push-to-test button and indicator lamp <sup>1)</sup>                                                        |                                                                       |                                                 |  |  |  |  |
| <b>E</b> Plain case with #6-32 tapped core and locating tab                                                                                                       |                                                                       |                                                 |  |  |  |  |
| <b>F</b> Plain case with #6-32 tapped core and locating tab, push-to-test button                                                                                  |                                                                       |                                                 |  |  |  |  |
| <b>G</b> Plain case with #6-32 tapped core and locating tab, indicator lamp <sup>1)</sup>                                                                         |                                                                       |                                                 |  |  |  |  |
| <b>H</b> Plain case with #6-32 tapped core and locating tab, push-to-test button and indicator lamp <sup>1)</sup>                                                 |                                                                       |                                                 |  |  |  |  |
| <b>T</b> Top flange case                                                                                                                                          |                                                                       |                                                 |  |  |  |  |
| 1) 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. |                                                                       |                                                 |  |  |  |  |
| <b>Terminal and contact material</b>                                                                                                                              |                                                                       |                                                 |  |  |  |  |
| <b>6</b> 5.21mm (.205in) quick connect/solder; AgCdO                                                                                                              | <b>8</b> 4.75mm (.187in) quick connect/solder; AgCdO                  |                                                 |  |  |  |  |
| <b>9</b> 1.19mm (.047in) PCB, AgCdO                                                                                                                               | <b>G</b> 6.35mm (.250in) quick connect/solder; AgCdO <sup>2)</sup>    |                                                 |  |  |  |  |
| <b>R</b> 5.21mm (.205in) quick connect/solder; AgSnOInO                                                                                                           | <b>T</b> 4.75mm (.187in) quick connect/solder; AgSnOInO               |                                                 |  |  |  |  |
| <b>U</b> 1.19mm (.047in) PCB, AgSnOInO                                                                                                                            | <b>V</b> 6.35mm (.250in) quick connect/solder; AgSnOInO <sup>2)</sup> |                                                 |  |  |  |  |
| 2) 6.35mm (.250in) quick connect/solder terminals are not available on 3 pole relays                                                                              |                                                                       |                                                 |  |  |  |  |
| <b>Coil voltage</b>                                                                                                                                               |                                                                       |                                                 |  |  |  |  |
| Coil code: please refer to coil versions table                                                                                                                    |                                                                       |                                                 |  |  |  |  |

| Product Code   | Arrangement    | Material | Coil    | Terminals          | Mounting                 | Part Number |
|----------------|----------------|----------|---------|--------------------|--------------------------|-------------|
| KUMP-11A18-24  | 2 form C; 2 CO | AgCdO    | 24 VAC  | 4.75mm (.187in) QC | Socket mount, plain case | 6-1393116-3 |
| KUMP-11A18-120 |                |          | 120 VAC |                    |                          | 6-1393116-2 |
| KUMP-11A18-240 |                |          | 240 VAC |                    |                          | 6-1393116-4 |
| KUMP-11D18-12  |                |          | 12 VDC  |                    |                          | 7-1393116-1 |
| KUMP-11D18-24  |                |          | 24 VDC  |                    |                          | 7-1393116-2 |
| KUMP-11D18-110 |                |          | 110 VDC |                    |                          | 7-1393116-0 |
| KUMP-14A18-24  | 3 form C, 3 CO |          | 24 VAC  |                    |                          | 8-1393116-5 |
| KUMP-14A18-120 |                |          | 120 VAC |                    |                          | 8-1393116-4 |
| KUMP-14D18-12  |                |          | 12 VDC  |                    |                          | 9-1393116-0 |
| KUMP-14D18-24  |                |          | 24 VDC  |                    |                          | 9-1393116-1 |