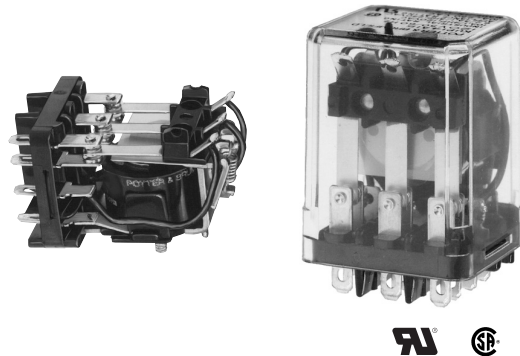


KUMP Series Panel Plug-in Relay

- 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); 1, 2 and 3 Form C (CO); 1 Form X (NO-DM); 1 Form Y (NC-DB); 1 Form Z (CO-DB-DM)	
Rated voltage	277VAC	
Rated current	15A	
Contact material	AgCdO	AgSnOInO
Frequency of operation	360 ops./hour	360 ops./hour
Operate/releases time max.	15/10ms	
Bounce time max.	17ms	

Contact ratings

Type	Load	Cycles
UL 508		
AgCdO	15A, 277VAC 1/2HP, 120VAC 10A, 240VAC 10A, 32VDC 5FLA, 15LRA, 250VAC 5A, 120VAC, tungsten 0.5A, 250VAC 0.5A, 125VDC 10FLA, 40LRA, 125VAC 3A, 600VAC 1/2HP, 480VAC 1/2HP, 600VAC 1HP, 480VAC, 3 phase	
AgSnOInO	15A, 277VAC, pf = 0.8 10A, 277VAC, pf = 0.8	15x10 ³ 100x10 ³
Mechanical endurance		10x10 ⁶ ops.

Coil Data

Coil voltage range	5 to 110VDC 6 to 240VAC
Coil insulation system according UL	Class B

Coil versions, DC coil

Coil code	Rated voltage VDC	Operate voltage VDC	Coil resistance $\Omega_{\pm 10\%}$	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 $\Omega_{\pm 15\%}$	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 _{rms}
between contact and coil	2200V _{rms}
between adjacent contacts	2200V _{rms}
Initial insulation resistance	
between insulated elements	100M Ω , 500VDC

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

Ambient temperature	
DC coil	Enclosed relays: -45°C to 70°C Open relays: 15°C higher maximum
AC coil	Enclosed relays, 3 pole: -45°C to +45°C Enclosed relays, 1 and 2 pole: -45°C to +55°C Open relays: 15°C higher maximum
Category of environmental protection	IEC 61810 RTO - 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

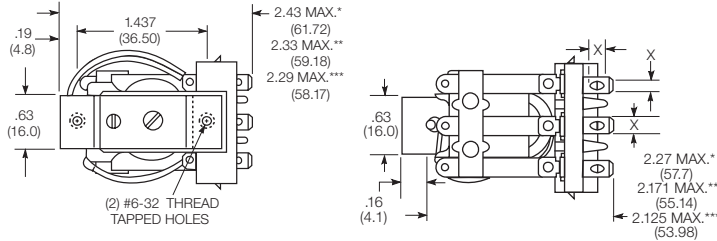
For details see datasheet Sockets and Accessories, KUP Relays

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

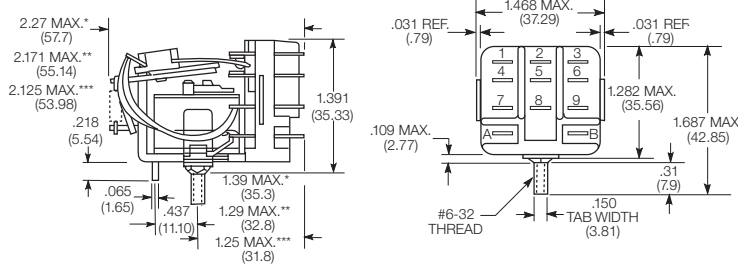
KUMP Series Panel Plug-in Relay (Continued)

Dimensions

KUM bracket type



KUM stud type



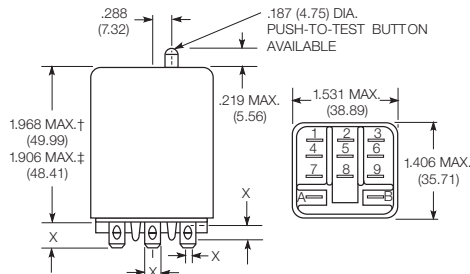
Seated Heights For KUM (open) Relays

- 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.

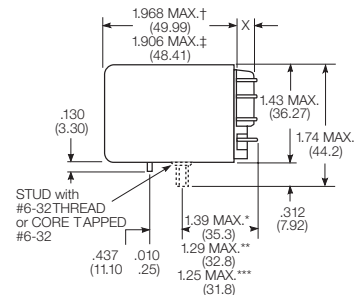
STUD TYPE also available with .125" (3.18mm) tab, as well as without stud and locating tab. Models without stud have core tapped #6-32 THREAD, .25" (6.4mm) minimum depth.

- *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

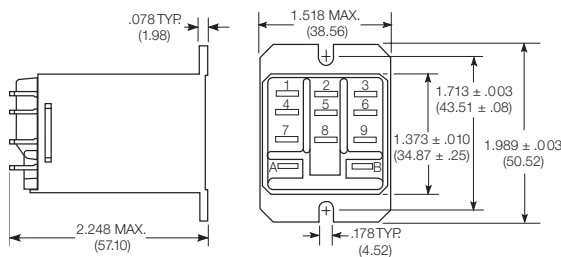


KUMP core / stud mount case



X Is For Terminal Dimensions. See Terminal Drawings.

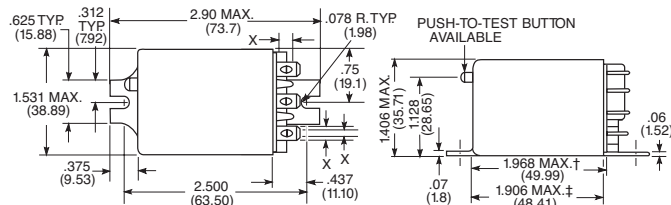
KUMP top flange case



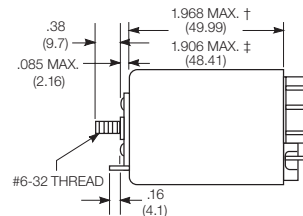
- † Dimensions with .250" (6.35mm) terminals.
- ‡ Dimensions with .187" (4.75mm) and .205" (5.21mm) terminals.

- *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



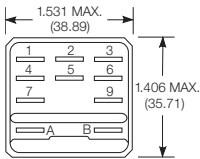
KUMP stud on end case



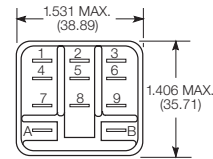
KUMP Series Panel Plug-in Relay (Continued)

Relay front diagrams

Models with 6.35mm (.250) QC terminals

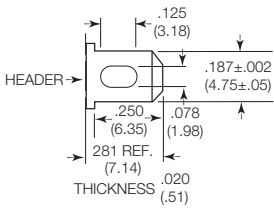


Models with all other terminals

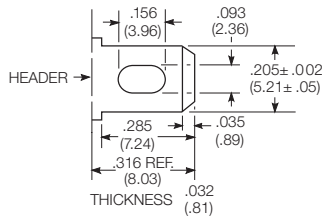


Terminal dimensions

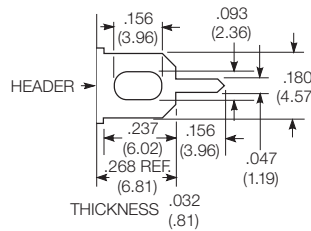
4.75mm (.187) quick connect



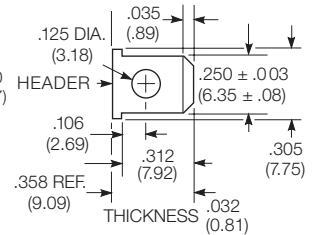
5.21mm (.205) quick connect



1.19mm (.047) printed circuit

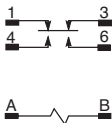


6.35mm (.250) quick connect

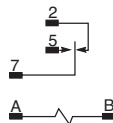


Terminal assignment

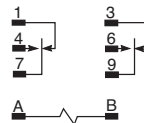
- 1 Form Z
- 1 Form X (delete 1 & 3)
- 1 Form Y (delete 4 & 6)



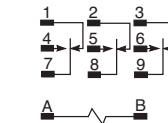
- 1 Form C
- 1 Form A (delete 2)
- 1 Form B (delete 5)



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



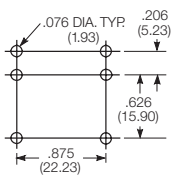
- 3 Form C
- 3 Form A (delete 1, 2 & 3)
- 3 Form B (delete 4, 5 & 6)



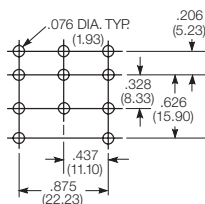
PCB layout

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)

Product code structure

Typical product code **KUMP -11 A 1 5 -120**

Type

- KUM** 15A open style relay
- KUMP** 15A enclosed relay

Contact arrangement

- | | | |
|-----------------------------|---------------------------|--------------------------------|
| 1 1 form A (1 NO) | 2 1 form B (1 NC) | 3 1 form X (1 NO-DM) |
| 4 1 form Y (1 NC-DB) | 5 1 form C (1 CO) | 6 1 form Z (1 CO-DB-DM) |
| 7 2 form A (2 NO) | 8 2 form B (2 NC) | 11 2 form C (2 CO) |
| 12 3 form A (3 NO) | 13 3 form B (3 NC) | 14 3 form C (3 CO) |

Coil Input

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

Mounting and options

KUM

- | | |
|------------------------------------------------------------|----------------------------------------------------------|
| 1 #6-32 mounting stud, 5.54mm (.218in) locating tab | 2 2-hole bracket, #6-32 tapped |
| 3 #6-32 tapped core, 3.18mm (.125in) locating tab | 4 #6-32 tapped core, 5.54mm (.218in) locating tab |
| 5 #6-32 tapped core, no locating tab | |

KUMP

- 1** Socket mount (plain) case
- 2** Socket mount (plain) case with push-to-test button
- 3** Socket mount (plain) case with indicator lamp ¹⁾
- 4** Socket mount (plain) case with indicator lamp and push-to-test button ¹⁾
- 5** Bracket mount case
- 6** Bracket mount case with push-to-test button
- 7** Bracket mount case with indicator lamp ¹⁾
- 8** Bracket mount case with indicator lamp and push-to-test button ¹⁾
- 9** Plain case with #6-32 stud and locating tab on end of case
- A** Plain case with #6-32 stud and locating tab
- B** Plain case with #6-32 stud and locating tab, push-to-test button
- C** Plain case with #6-32 stud and locating tab, indicator lamp ¹⁾
- D** Plain case with #6-32 stud and locating tab, push-to-test button and indicator lamp ¹⁾
- E** Plain case with #6-32 tapped core and locating tab
- F** Plain case with #6-32 tapped core and locating tab, push-to-test button
- G** Plain case with #6-32 tapped core and locating tab, indicator lamp ¹⁾
- H** Plain case with #6-32 tapped core and locating tab, push-to-test button and indicator lamp ¹⁾
- T** 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.

Terminal and contact material

- | | |
|--------------------------------------------------------|----------------------------------------------------------------------|
| 6 5.21mm (.205in) quick connect/solder; AgCdO | 8 4.75mm (.187in) quick connect/solder; AgCdO |
| 9 1.19mm (.047in) PCB, AgCdO | G 6.35mm (.250in) quick connect/solder; AgCdO ²⁾ |
| R 5.21mm (.205in) quick connect/solder; AgSnInO | T 4.75mm (.187in) quick connect/solder; AgSnInO |
| U 1.19mm (.047in) PCB, AgSnInO | V 6.35mm (.250in) quick connect/solder; AgSnInO ²⁾ |
- ²⁾ 6.35mm (.250in) quick connect/solder terminals are not available on 3 pole relays

Coil voltage

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