

**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; CE (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	
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	
	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	
KUEP, 2 form A, AgSnOInO	5 A, 150 VDC, resistive	100x10 <sup>3</sup>
	KUEP, 2 form C, AgSnOInO	
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 125VDC 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
<b>One pole versions</b>				
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
125	125	93.75	13000	1.2
<b>Two pole versions</b>				
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
125	125	93.75	8680	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 Ω±15%	Rated coil power VA
<b>One pole versions</b>				
6	6	5.1	6	2.0
12	12	10.2	24	2.0
24	24	20.4	85	2.0
120	120	102.0	2250	2.1
240	240	204.0	9110	2.1
<b>Two pole versions</b>				
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

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

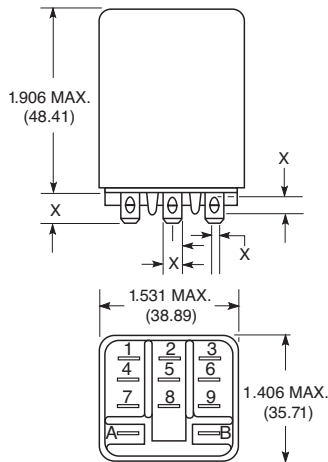
**Other Data**

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)

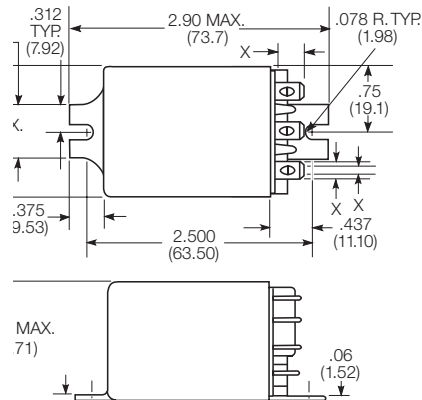
Ambient temperature	
DC coil	-45°C to 70°C
AC coil	1 pole: -45°C to 55°C 2 pole: -45°C to 45°C
Category of environmental protection	
IEC 61810	RT1 - dust protected
Vibration resistance (functional)	.065" double amplitude, 10-55Hz
Shock resistance (functional)	15g, 11ms (non-operating)
Terminal type	
	Quick connects (QC), .187 or .205 PCB-THT
Terminal retention, push force	
QC .205	17 lbs for 3s
QC .187	25 lbs for 3s

**Dimensions**

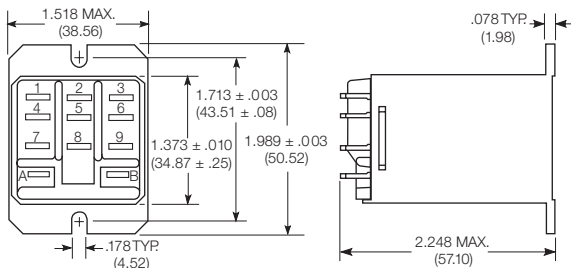
Plain case



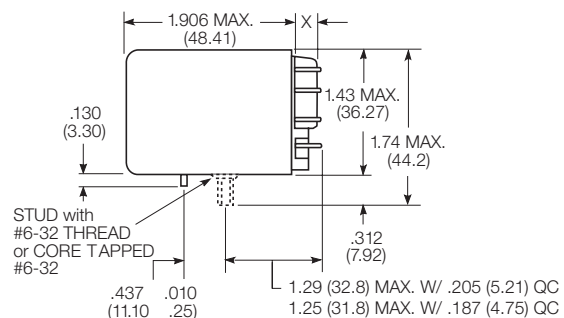
Bracket mount case



Top flange case



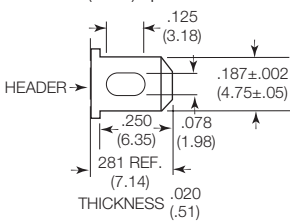
Core / stud mount case



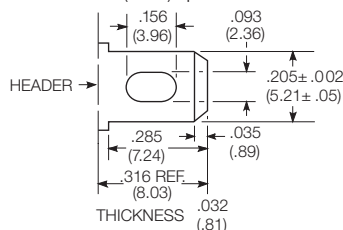
X Is For Terminal Dimensions. See Terminal Drawings.

**Terminal dimensions**

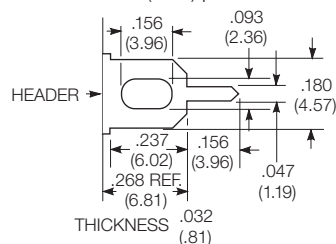
4.75mm (.187) quick connect



5.21mm (.205) quick connect



1.19mm (.047) printed circuit

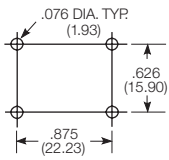


**KUEP Series Panel Plug-in Relay** (Continued)

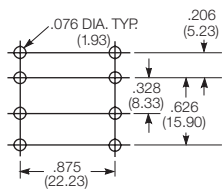
**PCB layout**

Bottom view on solder pins

1 form X version



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

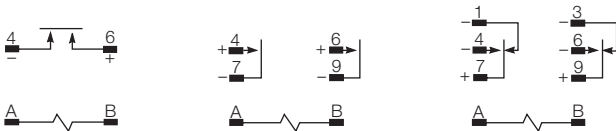


**Terminal assignment**

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**

<b>Type</b> KUEP Enclosed relay with magnetic blow-outs					
<b>Contact arrangement and rating</b>	<b>3</b> 1 form X (1 NO-DM)	<b>7</b> 2 form A (2 NO)			
	<b>11</b> 2 form C (2 CO)				
<b>Coil Input</b>	<b>A</b> AC, 50/60Hz	<b>D</b> DC			
<b>Mounting and options</b>	<b>1</b> Socket mount (plain) case	<b>3</b> Socket mount (plain) case, with indicator lamp <sup>1)</sup>			
	<b>5</b> Bracket mount case	<b>A</b> Plain case with #6-32 stud and locating tab			
	<b>E</b> Plain case with #6-32 tapped core and locating tab	<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>5</b> 4.75mm (.187in) quick connect/solder; AgCdO	<b>6</b> 5.21mm (.205in) quick connect/solder; AgCdO			
	<b>7</b> 1.19mm (.047in) PCB, AgCdO	<b>P</b> 4.75mm (.187in) quick connect/solder; AgSnInO			
	<b>R</b> 5.21mm (.205in) quick connect/solder; AgSnInO	<b>S</b> 1.19mm (.047in) PCB, AgSnInO			
<b>Coil voltage</b>	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 w/ 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			8-1393113-8
KUEP-11D15-24			24 VDC			8-1393113-7
KUEP-11D15-48			48 VDC			8-1393113-6
KUEP-11D15-110			110 VDC			8-1393113-5