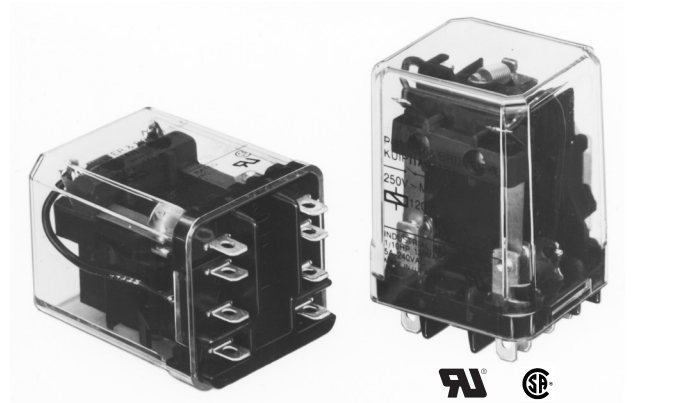


**KUIP/KUGP Series Panel Plug-in Relay**

- 10 amp rated relays
- 2 Form A (NO) and 1-3 Form C (CO) contact arrangement
- KUIP 8mm coil-to-contact spacing and KUGP 3mm contact gap
- Various mounting and socket styles

Typical applications  
Voltage control units



**Approvals**

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

**Contact Data**

Contact arrangement		
KUGP:	2 form A (NO); 3 form A (NO)	
KUIP:	1 form C (CO), 2 form A (NO), 2 form C (CO), 3 form C (CO)	
Rated voltage	240VAC	
Rated current	10A	
Contact material	Ag	AgCdO
Min recommended contact load	100mA, 12VDC	300mA, 12VDC
Frequency of operation	360 ops./hour	
Operate/releases time max.	20/15ms	
Bounce time max.	20ms	

**Contact ratings**

Type	Load	Cycles
------	------	--------

**UL 508**

Ag	5A, 240VAC	
	5A, 28VDC	
	1/6HP, 120VAC	
	2.5A, 120VAC, tungsten	
	1/3HP, 240VAC	
	0.5A, 120VDC	
AgCdO	5FLA, 15LRA, 250VAC	
	10A, 240VAC	
	10A, 32VDC	
	5FLA, 15LRA, 250VAC	
	1/3HP, 120VAC	
	5A, 120VAC, tungsten	
	1/2HP, 250VAC	
	0.5A, 125VDC	
	10FLA, 40LRA, 125VAC	
	3A, 600VAC	
	1/2HP, 480VAC	
1/2HP, 600VAC		
1HP, 480VAC, 3 phase		
Mechanical endurance	10x10 <sup>6</sup> ops.	

**Coil Data**

Coil voltage range	6 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
KUIP				
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
KUGP				
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
KUIP 1 and 2 pole				
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
KUIP 3 pole, KUGP				
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**

	KUIP	KUGP
Initial dielectric strength		
between open contacts	1200V <sub>rms</sub>	3500V <sub>rms</sub>
between contact and coil	2200V <sub>rms</sub>	3750V <sub>rms</sub>
between adjacent contacts	2200V <sub>rms</sub>	3750V <sub>rms</sub>
Initial insulation resistance		
between insulated elements	100M $\Omega$ , 500VDC	

**KUIP/KUGP 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	KUIP: -45°C to 95°C KUGP: -45°C to 75°C (1 & 2 pole)
AC coil	KUIP: -45°C to 70°C KUGP: -45°C to 70°C (1 & 2 pole)
Category of environmental protection	RTI - dust protected
IEC 61810	
Terminal type	Quick connects (QC) .187 PCB-THT
Terminal retention, push force	25 lbs for 3s
Weight	85g
Packaging/unit	tray/25 pcs., box/150pcs.

**Accessories**

For details see datasheet Sockets and Accessories, KUP Relays

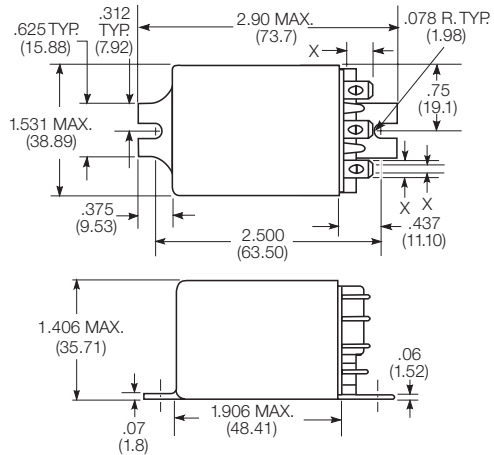
Product Code	Description
27E893	DIN socket (use 20C318 clip)
27E121	Track mount socket (use 20C314 clips)
27E043	Chassis mount/solder eyelet socket (use 20C254 clip)
27E046	Chassis mount/PCB socket (use 20C254 clip)
27E067	Chassis mount/quick connect socket (use 20C254 clip)
27E396	Snap-in/quick connect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

**Dimensions**

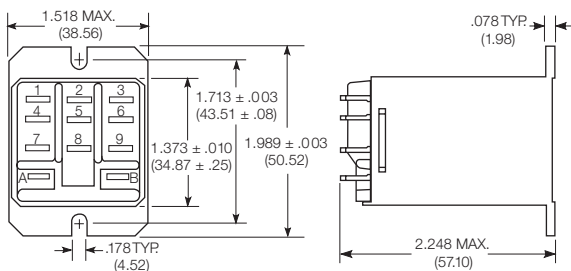
Plain case



Bracket mount case



Top flange case



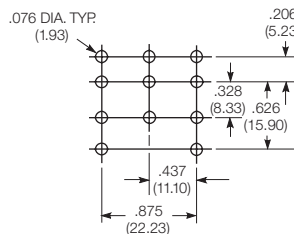
X Is For Terminal Dimensions.  
See Terminal Drawings.

**PCB layout**

Bottom view on solder pins

3 Form C shown

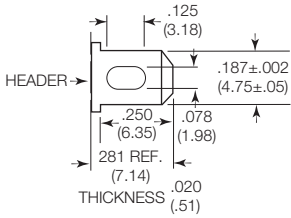
Omit unnecessary holes for other contact forms



**KUIP/KUGP Series Panel Plug-in Relay (Continued)**

**Terminal dimensions**

4.75mm (.187) quick connect

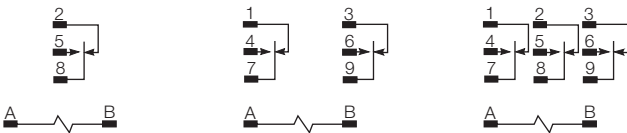


1.19mm (.047) printed circuit



**Terminal assignment**

1 Form C                      2 Form C                      3 Form C  
2 Form A (delete 1 & 3)    3 Form A (delete 1, 2 & 3)



**Product code structure**

Typical product code **KUIP -5 A 5 5 -120**

<b>Type</b>	<b>KUIP</b> Enclosed relay with 8mm contact to coil spacing <b>KUGP</b> Enclosed relay with 3mm open contact spacing and 8mm contact to coil spacing (form A only)								
<b>Contact arrangement and rating</b>	<table border="0"> <tr> <td><b>5</b> 1 form C (1 CO) 1)</td> <td><b>7</b> 2 form A (2 NO)</td> </tr> <tr> <td><b>11</b> 2 form C (2 CO) 1)</td> <td><b>12</b> 3 form A (3 NO)</td> </tr> <tr> <td><b>14</b> 3 form C (3 CO) 1)</td> <td></td> </tr> <tr> <td colspan="2">1) not available on KUGP type</td> </tr> </table>	<b>5</b> 1 form C (1 CO) 1)	<b>7</b> 2 form A (2 NO)	<b>11</b> 2 form C (2 CO) 1)	<b>12</b> 3 form A (3 NO)	<b>14</b> 3 form C (3 CO) 1)		1) not available on KUGP type	
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1) not available on KUGP type									
<b>Coil Input</b>	<table border="0"> <tr> <td><b>A</b> AC, 50/60Hz</td> <td><b>D</b> DC</td> </tr> </table>	<b>A</b> AC, 50/60Hz	<b>D</b> DC						
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<b>Mounting and options</b>	<table border="0"> <tr> <td><b>1</b> Socket mount (plain) case</td> <td><b>5</b> Bracket mount case</td> </tr> <tr> <td><b>T</b> Top flange case</td> <td></td> </tr> </table>	<b>1</b> Socket mount (plain) case	<b>5</b> Bracket mount case	<b>T</b> Top flange case					
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<b>Terminal and contact material</b>	<table border="0"> <tr> <td><b>3</b> 1.19mm (.047in) PCB, Ag</td> <td><b>5</b> 4.75mm (.187in) quick connect/solder; AgCdO</td> </tr> <tr> <td><b>7</b> 1.19mm (.047in) PCB, AgCdO</td> <td></td> </tr> </table>	<b>3</b> 1.19mm (.047in) PCB, Ag	<b>5</b> 4.75mm (.187in) quick connect/solder; AgCdO	<b>7</b> 1.19mm (.047in) PCB, AgCdO					
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<b>7</b> 1.19mm (.047in) PCB, AgCdO									
<b>Coil voltage</b>	Coil code: please refer to coil versions table								

Product Code	Arrangement	Material	Coil	Terminals	Mounting	Part Number
KUGP-7D55-24	2 Form A, 2 NO	AgCdO	24 VDC	4.75mm (.187in) QC	Bracket mount case	2-1393114-4
KUIP-5A55-120	1 Form C; 1 CO		120 VAC			2-1393115-0
KUIP-11D55-12	2 Form C; 2 CO		12 VDC			1-1393115-0
KUIP-11D55-24			24 VDC			1-1393115-1
KUIP-14A15-120	3 Form C; 3 CO		120 VAC		Socket mount, plain case	1-1393115-4
KUIP-14D15-12			12 VDC			1-1393115-6
KUIP-14D15-24			24 VDC			1-1393115-7