

## 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	360 ops./hour		
Operate/releases time max.	20/15ms			
Bounce time max.	20ms			

**Contact ratings**

Type	Load	Cycles
<b>UL 508</b>		
Ag		
5A, 240VAC		
5A, 28VDC		
1/6HP, 120VAC		
2.5A, 120VAC, tungsten		
1/3HP, 240VAC		
0.5A, 120VDC		
5FLA, 15LRA, 250VAC		
AgCdO		
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

Coil code	Rated voltage VDC	Operate voltage VDC	Coil resistance $\Omega \pm 10\%$	Rated coil power W
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
AC coil	KUGP: -45°C to 75°C (1 & 2 pole)
	KUIP: -45°C to 70°C
	KUGP: -45°C to 70°C (1 & 2 pole)

**Category of environmental protection**

IEC 61810	RTI - dust protected
-----------	----------------------

**Terminal type**

Quick connects (QC) .187
PCB-THT

**Terminal retention, push force**

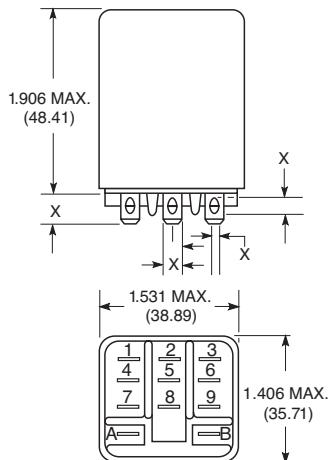
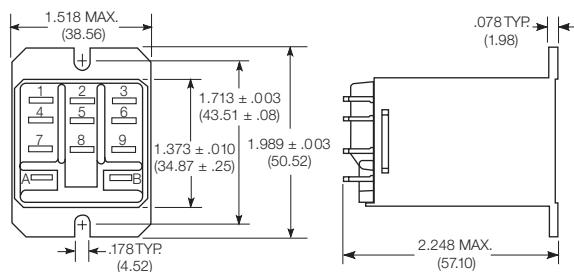
25 lbs for 3s

**Weight**

85g

**Packaging/unit**

tray/25 pcs., box/150pcs.

**Dimensions**
**Plain case**

**Top flange case**


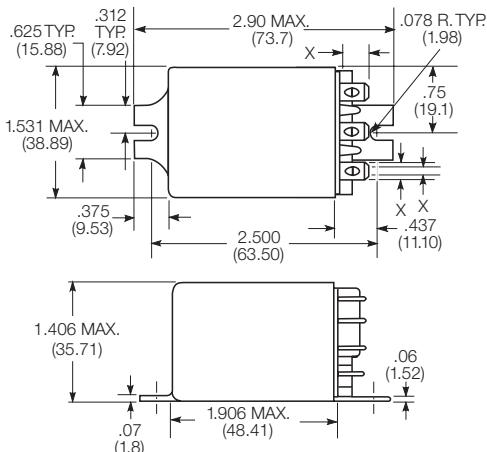
X Is For Terminal Dimensions.  
See Terminal Drawings.

**Accessories**

For details see datasheet

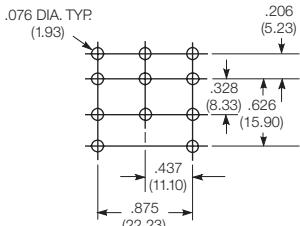
Sockets and Accessories, KUP Relays

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)

**Bracket mount case**

**PCB layout**

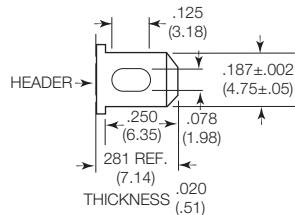
Bottom view on solder pins

3 Form C shown  
Omit unnecessary holes for other contact forms

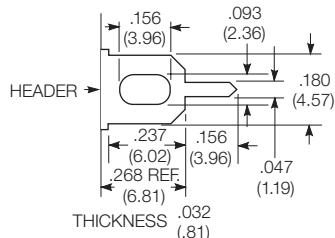


**KUIP/KUGP Series Panel Plug-in Relay (Continued)**
**Terminal dimensions**

4.75mm (.187) quick connect



1.19mm (.047) printed circuit


**Terminal assignment**

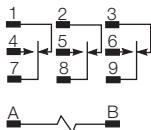
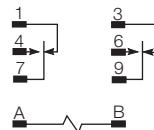
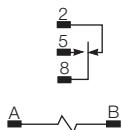
1 Form C

2 Form C

2 Form A (delete 1 &amp; 3)

3 Form C

3 Form A (delete 1, 2 &amp; 3)


**Product code structure**

Typical product code

**KUIP**
**-5**
**A**
**5**
**5**
**-120**
**Type**
**KUIP** Enclosed relay with 8mm contact to coil spacing

**KUGP** Enclosed relay with 3mm open contact spacing and 8mm contact to coil spacing (form A only)

**Contact arrangement and rating**
**5** 1 form C (1 CO) 1)

**7** 2 form A (2 NO)

**11** 2 form C (2 CO) 1)

**12** 3 form A (3 NO)

**14** 3 form C (3 CO) 1)

1) not available on KUGP type

**Coil Input**
**A** AC, 50/60Hz

**D** DC

**Mounting and options**
**1** Socket mount (plain) case

**5** Bracket mount case

**T** Top flange case

**Terminal and contact material**
**3** 1.19mm (.047in) PCB, Ag

**5** 4.75mm (.187in) quick connect/solder; AgCdO

**7** 1.19mm (.047in) PCB, AgCdO

**Coil voltage**

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

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[KUIP-11D55-24](#)