

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
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UL 508

Ag	5A, 240VAC 5A, 28VDC 1/6HP, 120VAC 2.5A, 120VAC, tungsten 1/3HP, 240VAC 0.5A, 120VDC 5FLA, 15LRA, 250VAC
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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
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Mechanical endurance	10x10 ⁶ ops.
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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 _{rms}	3500V _{rms}
between contact and coil	2200V _{rms}	3750V _{rms}
between adjacent contacts	2200V _{rms}	3750V _{rms}
Initial insulation resistance		
between insulated elements	100M Ω , 500VDC	

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

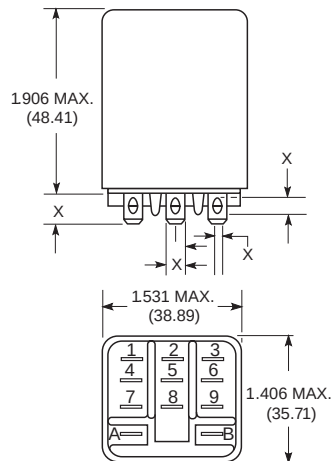
Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter

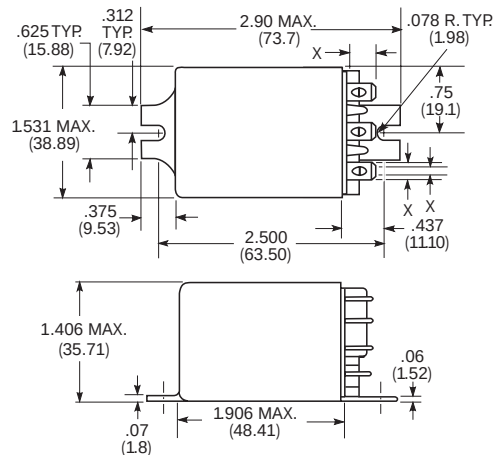
Ambient temperature	
DC coil	KUIP: -45°C to 95°C KUGP: -45°C to 75°C (1 & 2 pole)
AC coil	KUIP: -45°C to 70°C KUGP: -45°C to 70°C (1 & 2 pole)
Category of environmental protection	IEC 61810 RTI - dust protected
Terminal type	Quick connects (QC) .187 PCB-THT
Terminal retention, push force	25 lbs for 3s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

Dimensions

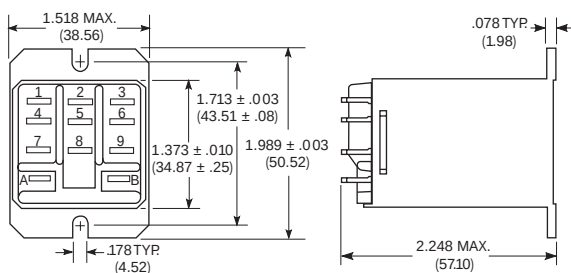
Plain case



Bracket mount case



Top flange case

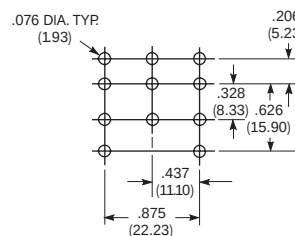


X Is For Terminal Dimensions.
See Terminal Drawings.

PCB layout

Bottom view on solder pins

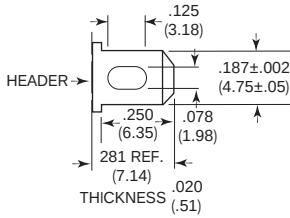
3 Form C shown
Omit unnecessary holes for other contact forms



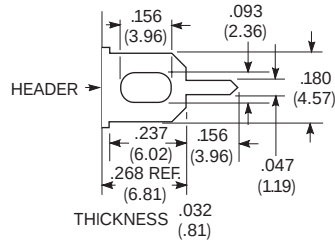
KUIP/KUGP Series Panel Plug-in Relay (Continued)

Terminal dimensions

4.75mm (.187) quick connect



1.19mm (.047) printed circuit



Terminal assignment

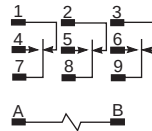
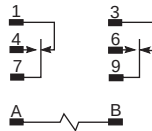
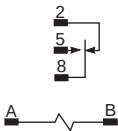
1 Form C

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

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)

11 2 form C (2 CO) 1)

14 3 form C (3 CO) 1)

1) not available on KUGP type

7 2 form A (2 NO)

12 3 form A (3 NO)

Coil Input

A AC, 50/60Hz

D DC

Mounting and options

1 Socket mount (plain) case

T Top flange case

5 Bracket mount case

Terminal and contact material

3 1.19mm (.047in) PCB, Ag

7 1.19mm (.047in) PCB, AgCdO

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