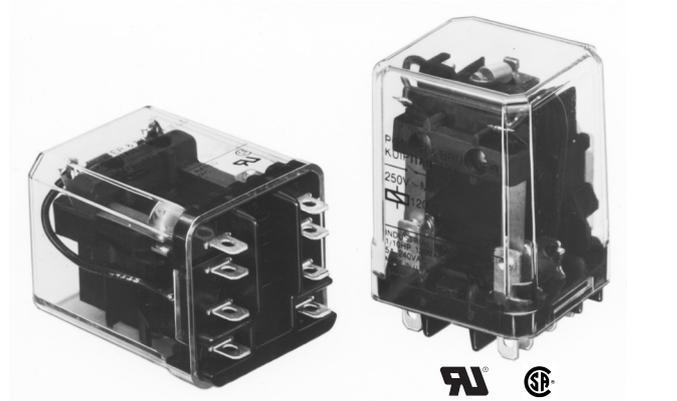## KUIP/KUGP Series Panel Plug-in Relay

- 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
UL 508		
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	10x10^6 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 Ω±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 Ω±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	100MΩ, 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: -45ºC to 95ºC
	KUGP: -45ºC to 75ºC (1 & 2 pole)
AC coil	KUIP: -45ºC to 70ºC
	KUGP: -45ºC to 70ºC (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.

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
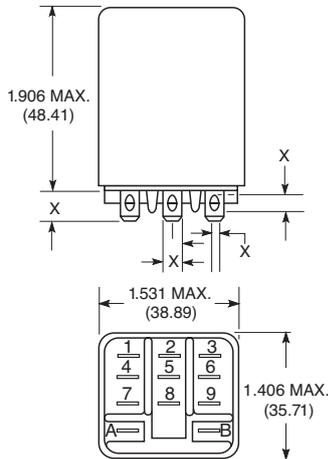
Bracket mount case
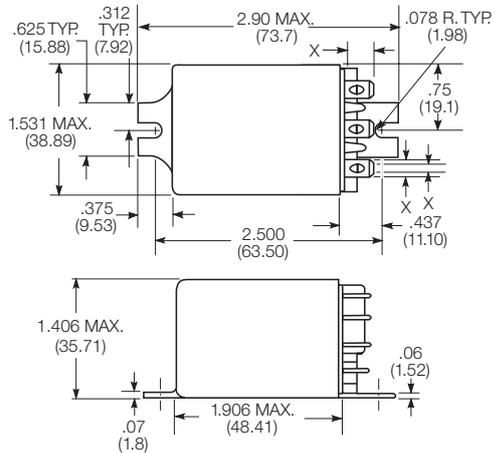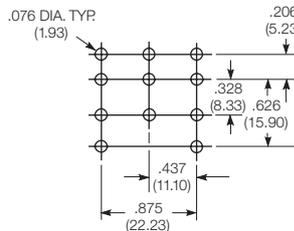

Top flange case
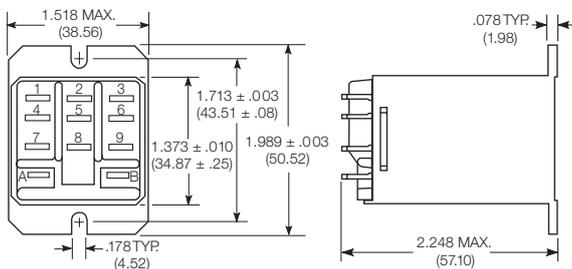
X Is For Terminal Dimensions.
See Teminal Drawings.

PCB layout
Bottom view on solder pins

3 Form C shown
Omit unncessary holes for other contact forms

Datasheets and product specification
according to IEC 61810-1 and to be used
only together with the 'Definitions' section.

Datasheets and product data is subject to the
terms of the disclaimer and all chapters of
the 'Definitions' section, available at
http://relays.te.com/definitions

Datasheets, product data, 'Definitions' sec-
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KUIP/KUGP Series Panel Plug-in Relay (Continued)

Terminal dimensions

4.75mm (.187) quick connect

HEADER

.125 (3.18)
.187±.002 (4.75±.05)
.250 (6.35)
.078 (1.98)
281 REF. (7.14)
THICKNESS .020 (.51)
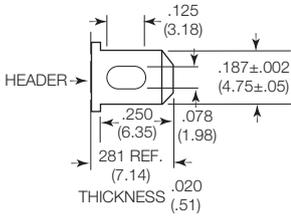
1.19mm (.047) printed circuit

HEADER

.156 (3.96)
.093 (2.36)
.180 (4.57)
.237 (6.02)
.156 (3.96)
.268 REF. (6.81)
.047 (1.19)
THICKNESS .032 (.81)
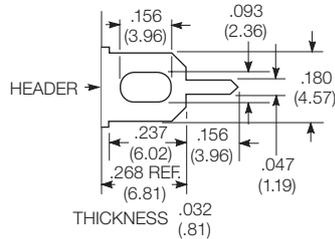
Terminal assignment

1 Form C

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

3 Form C
3 Form A (delete 1, 2 & 3)
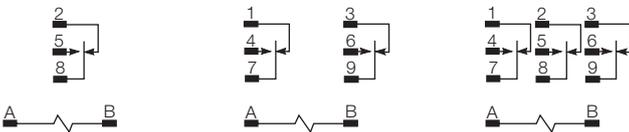
Product code structure

| 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)	**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

Datasheets and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

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