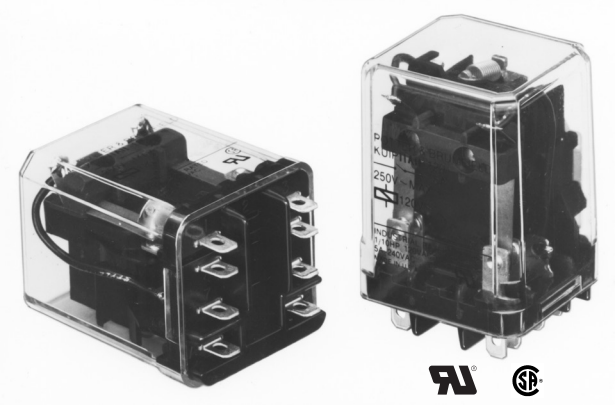
KUIP/KUGP Series Panel Plug-in Relay

- **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.

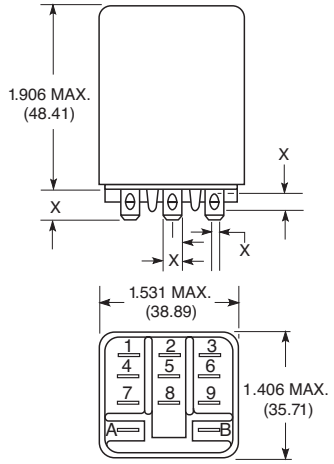
Accessories

For details see datasheet Sockets and Accessories, KUP Relays

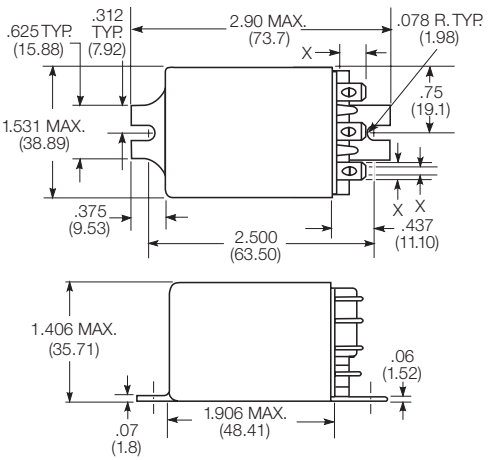
Product Code	Description
27E893	DIN socket (use 20C318 clip)
27E121	Track mount socket (use 20C314 clips)
27E043	Chassis mount/solder eyelet socket (use 20C254 clip)
27E046	Chassis mount/PCB socket (use 20C254 clip)
27E067	Chassis mount/quick connect socket (use 20C254 clip)
27E396	Snap-in/quick connect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

Dimensions

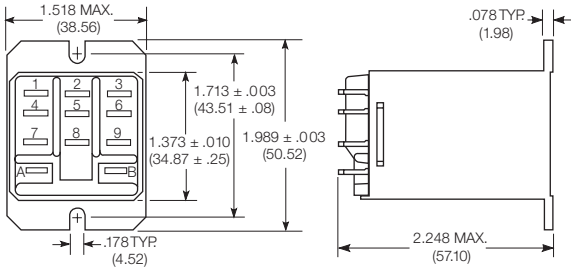
Plain case



Bracket mount case



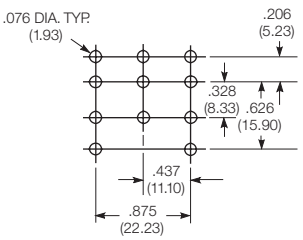
Top flange case



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



08-2011, Rev. 0811
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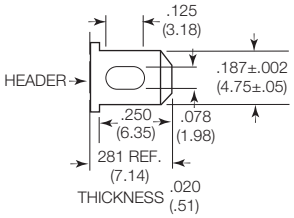
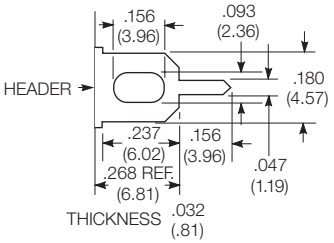
Terminal dimensions

4.75mm (.187) quick connect

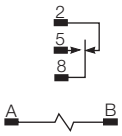


1.19mm (.047) printed circuit

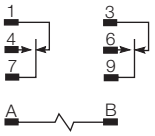


Terminal assignment

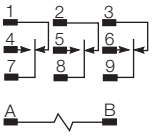
1 Form C



2 Form C
2 Form A (delete 1 & 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)
- **11** 2 form C (2 CO) 1)
- **14** 3 form C (3 CO) 1)
- **7** 2 form A (2 NO)
- **12** 3 form A (3 NO)

1) not available on KUGP type

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