

SP.

## **KUEP Series Panel Plug-in Relay**

- 1 Form X, 2 Form A and 2 Form C contact arrangements
- 10 amp current rating
- Magnetic blow-out
- Various mounting options
- Indicator lamp available



Typical applications DC load switching in industrial controls

### Approvals

UL E22575; CSA LR15734; CE (KUEP-11 only) Technical data of approved types on request

#### **Contact Data**

Contact arrangement 1 form		A (NO), 2 form C (CO)
Rated voltage	150	VDC
Rated current	1(	AC
Contact material	AgCdO	AgSnOlnO
Min. recommended contact load	300mA	, 12VDC
Frequency of operation	360 ops./hour	360 ops./hour
Operate/releases time max.	15/10ms	
Bounce time max.	17ms	
Contact ratings		
Type Load		Cycles
UL 508		
KUEP, 1 form X, AgCdO		
10A, 150VDC		100x10 <sup>3</sup>
1A, 300VDC		100x10 <sup>3</sup>
2.5 A, 170 VDC, r	esistive	100x10 <sup>3</sup>
KUEP, 2 form A, AgCdO		
5 A, 150 VDC		
2.5 A, 170 VDC, r	esistive	100x10 <sup>3</sup>
KUEP, 2 form C, AgCdO		
3 A, 150 VDC		
2.5 A, 170 VDC, r	esistive	100x10 <sup>3</sup>
10 A. 240 VAC		
10 A, 32 VDC		
5 FLA, 15 LRA, 25	50 VAC	
1/3 HP, 120 VAC		
5 A, 120 VAC, tun	asten	
1/2 HP, 250 VAC	goton	
10 FLA, 40 LRA, 1	25 VAC	
3 A, 600 VAC	20 11 10	
1/2 HP, 480 VAC		
1/2 HP, 600 VAC		
1 HP, 480 VAC, 3	nhasa	
KUEP, 1 form X, AgSnOlnO	priase	
10A, 150VDC, res	ietivo	30x10 <sup>3</sup>
KUEP, 2 form A, AgSnOlnO	ISUVE	00/10
5 A, 150 VDC, res	intivo	100x10 <sup>3</sup>
KUEP, 2 form C, AgSnOlnO	ISUNG	100X10*
3 A, 150 VDC, res	ietivo	100x10 <sup>3</sup>
Mechanical endurance		<sup>6</sup> ops.
	IUXIC	r ops.

Coil voltage range			5 to 125VDC		
			6 to 240VAC		
Coil insul	lation system ac	cording UL	Class B		
Coil vers	sions, DC coil				
Coil	Rated	Operate	Coil	Rated coil	
code	voltage	voltage	resistance	power	
	VDC	VDČ	Ω±10%		
One pol	e versions				
5	5	3.75	21	1.2	
6	6	4.5	32	1.125	
12	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	
125	125 125 93.75		13000	1.2	
Two pol	e versions				
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	
125	125	93.75	8680	1.8	
All figures	are divers for coll wit	bout propagation	at ambient temperatur		

All figures are given for coil without preenergization, at ambient temperature +23°C.

#### Coil versions, AC coil

**Coil Data** 

	310113, AO COI			
Coil	Rated	Operate	Coil	Rated coil
code	voltage	voltage	resistance	power
	VAC	VAC	Ω±15%	VA
One pol	e versions			
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
Two pol	e versions			
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**

Initial dielectric strength	
between open contacts	1200V <sub>rms</sub>
between contact and coil	2200V <sub>rms</sub>
between adjacent contacts	2200V <sub>rms</sub>
Initial insulation resistance	
between insulated elements	100ΜΩ

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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-tion, application notes and all specifications are subject to change.

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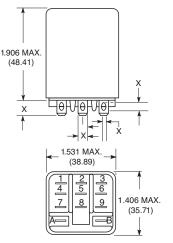
## KUEP Series Panel Plug-in Relay (Continued)

#### **Other Data**

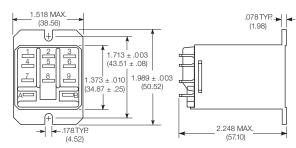
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content						
refer to the Product Compliance Support Center at						
www.te.com/c	ustomersupport/rohssupportcenter					
Ambient temperature						
DC coil	-45°C to 70°C					
AC coil	1 pole: -45°C to 55°C					
	2 pole: -45°C to 45°C					
Category of environmental protection						
IEC 61810	RTI - dust protected					
Vibration resistance (functional)	.065" double amplitude, 10-55Hz					
Shock resistance (functional)	15g, 11ms (non-operating)					
Terminal type	Quick connects (QC), .187 or .205					
	PCB-THT					
Terminal retention, push force						
QC .205	17 lbs for 3s					
QC .187	25 lbs for 3s					

#### Dimensions

Plain case



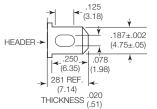
Top flange case



X Is For Terminal Dimensions. See Teminal Drawings.

#### **Terminal dimensions**

4.75mm (.187) quick connect



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5.21mm (.205) quick connect

.156

(3.96)

.285 -

(7.24)

316 REE

(8.03)

THICKNESS

-

HEADER →

.093 (2.36)

(.89)

.032

(.81)

.205±.002

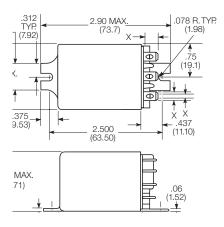
(5.21±.05)

Other Data (Continued)

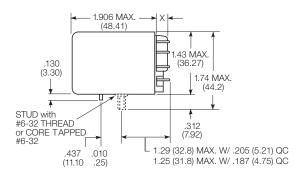
vveigni	80y
Packaging/unit	tray/25 pcs., box/150pcs.

#### Accessories Sockets and Accessories, KUP Relays For details see datasheet Product Code Description DIN socket (use 20C318 clip) 27E893 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)

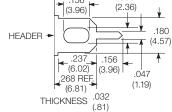
Bracket mount case



Core / stud mount case



1.19mm (.047) printed circuit



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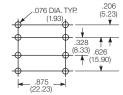
#### PCB layout

Bottom view on solder pins

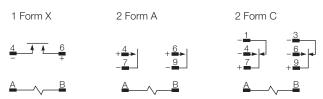
1 form X version

2 form C version shown (Omit unnecessary holes for form A types)





#### Terminal assignment



Load polarity noted above is recommended for optimum arc suppression.

Produ	uct code structure			Typical product code	KUEP	-3	Α	1	5	-120
Туре										
	<b>KUEP</b> Enclosed relay with magnetic blow-ou	ts								
Contac	ct arrangement and rating									
	3 1 form X (1 NO-DM)	7	2 form A (2 NO)							
	11 2 form C (2 CO)									
Coil In	iput						-			
	A AC, 50/60Hz	D	DC							
Mount	ting and options									
	1 Socket mount (plain) case		3	Socket mount (plain) cas	se, with ind	licator	lamp 1)			
	5 Bracket mount case		A	Plain case with #6-32 st	ud and loc	ating ta	ab			
	E Plain case with #6-32 tapped core and lo	cating	g tab 🛛 🕇	Top flange case						
	1) Indicator lamps are available on models wit	h the	following coils: 6-2	4VAC and VDC, 110VDC a	nd 120-24	OVAC.				
	Only models with 120-240VAC coils are UL	reco	gnized.							
Termin	nal and contact material								_	
	5 4.75mm (.187in) quick connect/solder; A	gCdC	) 6	5.21mm (.205in) quick c	connect/sol	lder; Ag	gCdO			
	7 1.19mm (.047in) PCB, AgCdO		F	4.75mm (.187in) quick c	connect/sol	lder; Ag	gSnOlnO			
	R 5.21mm (.205in) quick connect/solder; A	gSnC	NnO S	1.19mm (.047in) PCB, A	AgSnOlnO					
Coil vo	oltage									
	Coil code: please refer to coil versions table									

Product Code	Arrangement	Material	Coil	Terminals	Mounting	Part Number
KUEP-3A15-120	1 Form X, 1 NO-DM	AgCdO	120 VAC	4.75mm (.187in) QC	Socket mount, plain case	9-1393113-4
KUEP-3D15-12			12 VDC			9-1393113-8
KUEP-3D15-24			24 VDC			1393114-1
KUEP-3D15-48			48 VDC			1393114-2
KUEP-3D15-110			110 VDC			9-1393113-7
KUEP-3D35-24			24 VDC		Socket mount, plain case w/ indicator lamp	1393114-5
KUEP-7D15-24	2 Form A, 2 NO				Socket mount, plain case	1-1393114-1
KUEP-11A15-120	2 Form C, 2 CO		120 VAC			8-1393113-3
KUEP-11D15-12			12 VDC			8-1393113-6
KUEP-11D15-24			24 VDC			8-1393113-7
KUEP-11D15-48			48 VDC			8-1393113-8
KUEP-11D15-110			110 VDC			8-1393113-5

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