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 X (NO-DM), 2 form A (NO), 2 form C (CO)	
Rated voltage	150VDC	
Rated current	10A	
Contact material	AgCdO	AgSnOInO
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	$100x10^3$
	1A, 300VDC	$100x10^3$
	2.5 A, 170 VDC, resistive	$100x10^3$
KUEP, 2 form A, AgCdO		
	5 A, 150 VDC	
	2.5 A, 170 VDC, resistive	$100x10^3$
KUEP, 2 form C, AgCdO		
	3 A, 150 VDC	
	2.5 A, 170 VDC, resistive	$100x10^3$
	10 A, 240 VAC	
	10 A, 32 VDC	
	5 FLA, 15 LRA, 250 VAC	
	1/3 HP, 120 VAC	
	5 A, 120 VAC, tungsten	
	1/2 HP, 250 VAC	
	0.5 A, 125 VDC	
	10 FLA, 40 LRA, 125 VAC	
	3 A, 600 VAC	
	1/2 HP, 480 VAC	
	1/2 HP, 600 VAC	
	1 HP, 480 VAC, 3 phase	
KUEP, 1 form X, AgSnOInO		
	10A, 150VDC, resistive	$30x10^3$
KUEP, 2 form A, AgSnOInO		
	5 A, 150 VDC, resistive	$100x10^3$
KUEP, 2 form C, AgSnOInO		
	3 A, 150 VDC, resistive	$100x10^3$
Mechanical endurance	$10x10^6$ ops.	

Coil Data

Coil voltage range	5 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
One pole versions				
5	5	3.75	21	1.2
6	6	4.5	32	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
Two pole 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

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
One pole 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 pole 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	$1200V_{rms}$
between contact and coil	$2200V_{rms}$
between adjacent contacts	$2200V_{rms}$
Initial insulation resistance	
between insulated elements	100MΩ

Datasheet.Live

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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/customersupport/rohssupportcenter	
Ambient temperature	
DC coil	-45ºC to 70ºC
AC coil	1 pole: -45ºC to 55ºC 2 pole: -45ºC to 45ºC
Category of environmental protection	
IEC 61810	RTI - dust protected
Terminal type	Quick connects (QC), .187 or .205 PCB-THT
Terminal retention, push force	
QC .205	17 lbs for 3s
QC .187	

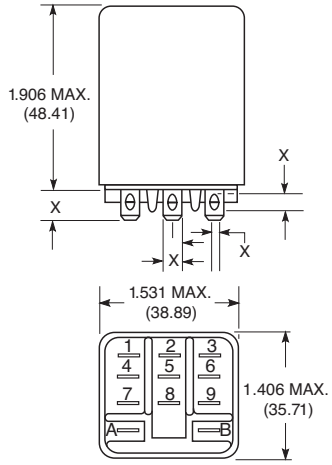
Other Data (Continued)	
Weight	85g
Packaging/unit	tray/25 pcs., box/150pcs.

Accessories	
For details see datasheet	Sockets and Accessories, KUP Relays

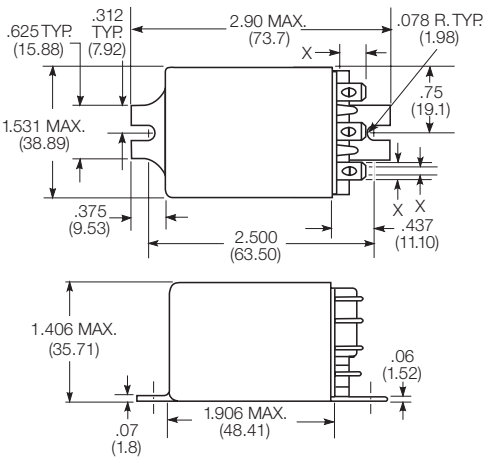
Product Code	Description
27E893	DIN socket (use 20C318 clip)
27E121	Track mount socket (use 20C314 clips)
27E043	Chassis mount/solder eyelet socket (use 20C254 clip)
27E046	Chassis mount/PCB socket (use 20C254 clip)
27E067	Chassis mount/quick connect socket (use 20C254 clip)
27E396	Snap-in/quick connect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

Dimensions

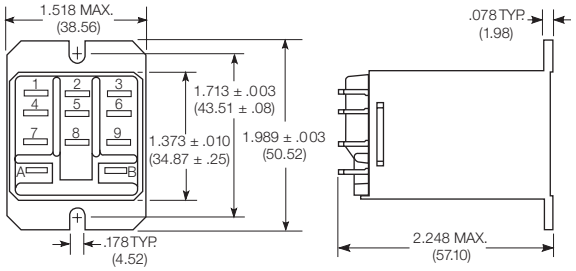
Plain case



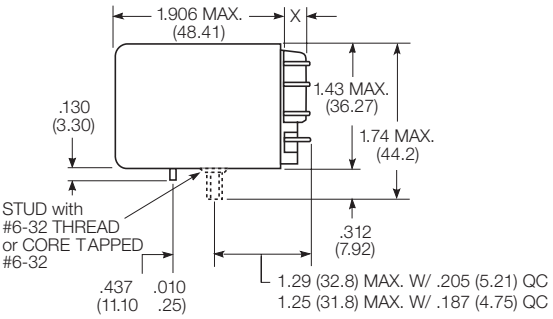
Bracket mount case



Top flange case



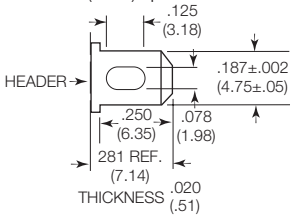
Core / stud mount case



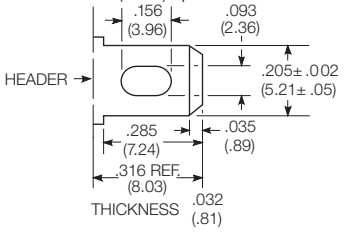
X Is For Terminal Dimensions.
See Teminal Drawings.

Terminal dimensions

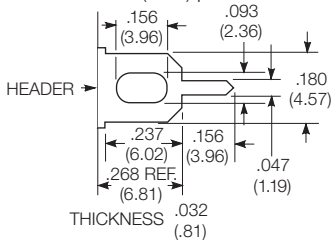
4.75mm (.187) quick connect



5.21mm (.205) quick connect



1.19mm (.047) printed circuit



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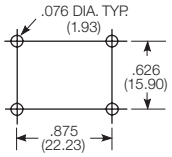
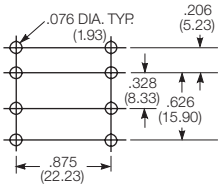
PCB layout
Bottom view on solder pins

1 form X version

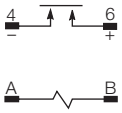


2 form C version shown
(Omit unnecessary holes for form A types)

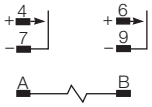


Terminal assignment

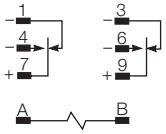
1 form X



2 form A



2 form C



Load polarity noted above is recommended for optimum arc suppression.

Product code structure — Typical product code: **KUEP -3 A 1 5 -120**

Type
KUEP Enclosed relay with magnetic blow-outs

Contact arrangement and rating
3 1 form X (1 NO-DM)
7 2 form A (2 NO)
11 2 form C (2 CO)

Coil Input
A AC, 50/60Hz
D DC

Mounting and options
1 Socket mount (plain) case
3 Socket mount (plain) case, with indicator lamp [1)]
5 Bracket mount case
A Plain case with #6-32 stud and locating tab
E Plain case with #6-32 tapped core and locating tab
T Top flange case
1) Indicator lamps are available on models with the following coils: 6-24VAC and VDC, 110VDC and 120-240VAC. Only models with 120-240VAC coils are UL recognized.

Terminal and contact material
5 4.75mm (.187in) quick connect/solder; AgCdO
6 5.21mm (.205in) quick connect/solder; AgCdO
7 1.19mm (.047in) PCB, AgCdO
P 4.75mm (.187in) quick connect/solder; AgSnOInO
R 5.21mm (.205in) quick connect/solder; AgSnOInO
S 1.19mm (.047in) PCB, AgSnOInO

Coil voltage
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 with 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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