

KUL Series Latching Panel Plug-in Relay

- Magnetic latching (bistable) relay
- Single or dual wound DC coils or single wound AC coils
- 1, 2, and 3 pole Form C contact arrangement
- Reset occurs by reversing polarity in a single coil relay or by energizing the reset winding in dual coil relays
- Various mounting and socket styles

Typical applications

Alarm systems, machine tools, battery chargers, process and power controls, pressure washers, paving equipment

Approvals
UL E22575; CSA LR15734
Technical data of approved types on request

Contact Data		
Contact arrangement	1 form C (CO), 2 form (C (CO), 3 form C (CO)
Rated voltage	240	VAC
Rated current	1(DA
Contact material	Ag	AgCdO
Min. recommended contact load	d 100mA, 12VDC	300mA, 12VDC
Frequency of operation	360 ops./hour	
Operate/release time max.	25/25ms	

Operate/rei	ease time max. 25/25ms	
Contact ra	itings	
Туре	Load	Cycles
UL 508		
Ag		
	5A, 240VAC	100x10 ³
	1/6HP, 120VAC	
	1/3HP, 240VAC	
	0.5A, 120VDC	
	2.5A, 120VAC, tungsten	
AgCdO		
· ·	10A, 250VAC	100x10 ³
	1/3HP, 120VAC	
	1/2HP, 250VAC	

AgCaO			
	10A, 250VAC		100x10 ³
	1/3HP, 120VAC		
	1/2HP, 250VAC		
	5A, 120VAC, tungsten		
	SA, 120VAC, lungsten		
	0.5A, 125VDC		
	10A, 28VDC		100x10 ³
	10FLA, 30LRA, 125VAC		
	5FLA, 15LRA, 250VAC		
	125VA, pilot duty, 125/250VAC		
Mechanical end	durance	10x10 ⁶ ops.	

Coil Data	
Coil voltage range	12 to 110VDC (single and dual coil)
	24 to 240VAC (single coil)
	24 to 120VAC (dual coil)
Coil insulation system according UL	Class B





1400

7400

1.65

1.65



Coil versions, DC coil 1)						
Coil	Rated	Operate	Coil	Rated coil		
code	voltage	voltage	resistance	power		
	VDC	VDC	Ω±10%	W		
Single c	oil					
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		
Dual coi	l 2)					
12	12	9.0	90	1.6		
24	24	18.0	350	1.65		

82.5 1) Latch and reset coil voltages and resistances are the same (unlike coils on request). 2) Dual coil available only with 1 or 2 form C contacts. All figures are given for coil without preenergization, at ambient temperature +23°C.

36.0

48

110

48

110

Coil versions, AC coil 3)						
Coil	Rated	Operate	Latch coil	Reset coil	Reset coil	
code	voltage	voltage	resistance	resistance	resistor	
	VAC	VAC	$\Omega \pm 15\%$	$\Omega \pm 15\%$	Ω	
Single co	lic					
24	24	20.4	176	_	680	
120	120	102.0	3700	_	15000	
240	240	204.0	179000	_	68000	
Dual coi						
24	24	20.4	100	250	_	
120	120	102.0	2525	2200	5600	
2) AC poils use diades. Diades and resistors included inside relay with 1 and 2 Form C						

3) AC coils use diodes. Diodes and resistors included inside relay with 1 and 2 Form C contacts. For 3 Form C relay, the customer must furnish and wire diodes and resistors externally (1N4007 is recommended diode).

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

Insulation Data	
Initial dielectric strength	
between open contacts	500V _{rms}
between contact and coil	1500V _{rms}
between adjacent contacts	1500V _{rms}
Initial insulation resistance	
between insulated elements	100ΜΩ

96g tray/25 pcs., box/150pcs.



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Otner Data			
Material compliance: EU RoHS/	ELV, China RoHS, REACH, Halogen content		
refer to the	e Product Compliance Support Center at		
www.te.co	om/customersupport/rohssupportcenter		
Ambient temperature			
DC coil	Single coil: -45°C to 70°C		
	Dual coil: -45°C to 50°C		
AC coil Single coil: -45°C to 70°C			
Category of environmental prote	ection		
IEC 61810	RTI - dust protected		
Terminal type	Quick connects (QC) .187		

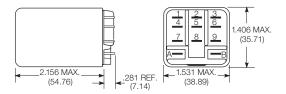
For details see	datasheet	Sockets and Accessories, KUP Relays	
		,	
Product Code	Description		
27E893	DIN socket and	d 20C318 clip	
27E121	Track mount socket and 20C314 clip		
27E043	Chassis mount	t/solder eyelet socket and 20C254 clip	
27E046	Chassis mount	t/PCB socket and 20C254 clip	
27E067	Chassis mount	t/quick connect socket and 20C254 clip	
27E396	Snap-in/quick	connect socket and 20C254 clip	

Dimensions

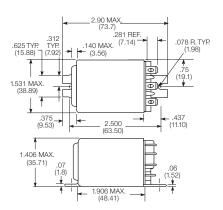
Weight

Packaging/unit

Plain case

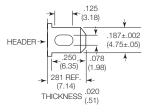


Bracket mount case



Terminal dimensions

4.75mm (.187) quick connect

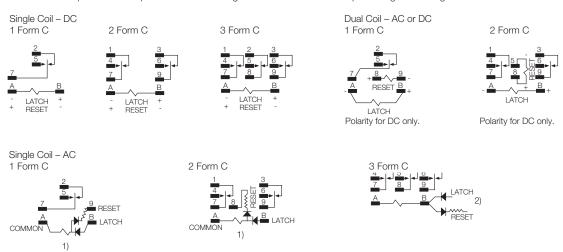




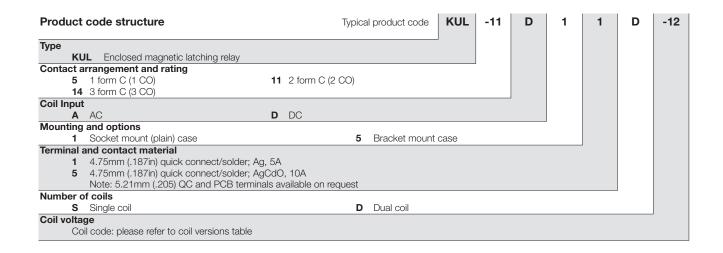
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Terminal assignment

Bottom view on pins - Contact positions shown in diagrams is with the "RESET" input having been energized last.



- 1) Do not connect any low impedance loads from terminal B to A.
- 2) Resistor and diodes connected by customer. See Coil Data Chart for resistor value. Recommended using 1N4007 diode.



Product Code	Arrangement	Material	Coil	Case Style	Terminals	Part Number
KUL-5A15S-120	1 Form C, 1 CO	AgCdO	120 VAC	Plain case	Plug-in	1393116-4
KUL-11A15S-24	2 Form C, 2 CO		24 VAC			2-1393115-7
KUL-11A15S-120			120 VAC			2-1393115-6
KUL-11D15D-12			12 VDC			3-1393115-1
KUL-11D15D-24			24 VDC			3-1393115-2
KUL-11D15D-48			48 VDC			3-1393115-3
KUL-11D15S-12			12 VDC			3-1393115-4
KUL-11D15S-24			24 VDC			3-1393115-5

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