

KUL Series Latching Panel Plug-in Relay

- Magnetic latching 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

Approval	S		
UL E22575;	CSA LR15734		
Technical data	of approved types on reque	est	
Contact I	Data		
Contact arra	angement 1 f	orm C (CO), 2 form (C (CO), 3 form C (CO)
Rated voltag	ge	240	VAC
Rated curre	nt	10)A
Contact ma	terial	Ag	AgCdO
Min. recommended contact load		100mA, 12VDC	300mA, 12VDC
Frequency of operation		360 ops./hour	
Operate/release time max.		25/25ms	
Contact ra	tings		
Туре	Load		Cycles
UL 508			
Ag			
	5A, 240VAC		100x10 ³
	1/6HP, 120VAC		
	1/3HP, 240VAC		
	0.54 400 /50		

	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		
	5A, 120VAC, tungsten		
	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 LII	Class B







Coil vers	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	I 2)						
12	12	9.0	90	1.6			
24	24	18.0	350	1.65			
48	48	36.0	1400	1.65			
110	110	82.5	7400	1.65			

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.

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the 'Definitions' section, available at

http://relays.te.com/definitions

Coll vers	ions, AC co	II 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	oil				
24	24	20.4	176	_	680
120	120	102.0	3700	_	15000
240	240	204.0	179000	_	68000
Dual coil					
24	24	20.4	100	250	_
120	120	102.0	2525	2200	5600

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

www.te.com



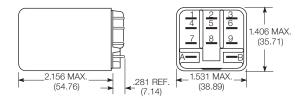
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Other Data	
Material compliance: EU RoHS/ELV, Ch	nina RoHS, REACH, Halogen content
refer to the Produ	uct Compliance Support Center at
www.te.com/cus	tomersupport/rohssupportcenter
Ambient temperature	
DC coil	Single coil: -45°C to 70°C
	Dual coil: -45°C to 50°C
AC coil	Single coil: -45°C to 70°C
Category of environmental protection	
IEC 61810	RTI - dust protected
Terminal type	Quick connects (QC) .187
Weight	96g
Packaging/unit	tray/25 pcs., box/150pcs.

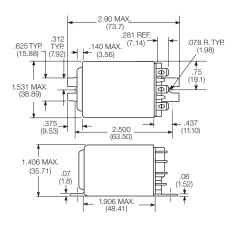
Accessories				
For details see datasheet		Sockets and Accessories, KUP Relays		
Product Code	Description			
27E893	DIN socket (use 2	20C318 clip)		
27E121	Track mount socket (use 20C314 clips)			
27E043	Chassis mount/so	older eyelet socket (use 20C254 clip)		
27E046	Chassis mount/P	CB socket (use 20C254 clip)		
27E067	Chassis mount/q	uick connect socket (use 20C254 clip)		
27E396	Snap-in/quick co	nnect socket (use 20C254 clip)		

Dimensions

Plain case

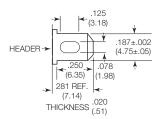


Bracket mount case



Terminal dimensions

4.75mm (.187) quick connect

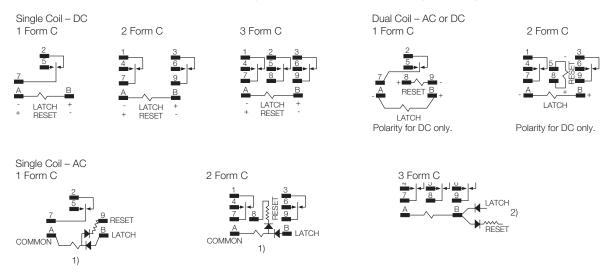




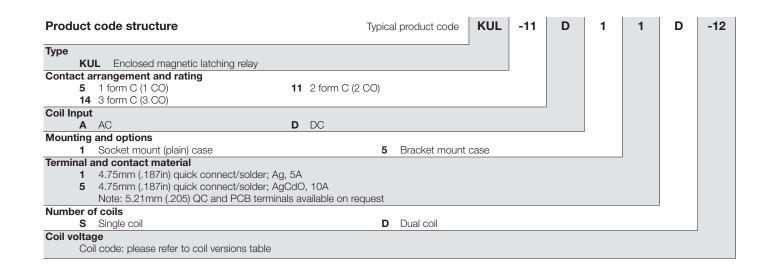
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Terminal assignment

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