

KHA Series Panel Plug-in Relay

- Compact package
- Two and four pole form C contact arrangements
- Polycarbonate or nylon dust cover
- Various mounting configurations
- Indicator lamp and push-to-reset options available
- Various contact materials available for specific load requirements



Typical applications

Industrial sewing/stitching machines, fitness, elevators, pumps, robotics, solar panels



Approvals

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

Contact Data

Contact arrangement	2 form C (2CO), 4 form C (4CO)
Rated voltage	240VAC
Rated current	1-5A
Contact material	Ag, AgCdO, Au-AgNi, Au overlay Ag, Au diffused Ag
Contact style	Single contact or bifurcated crossbar
Min. recommended contact load	
Ag (single contact)	100mA, 12VDC
AgCdO (single contact)	300mA, 12VDC
Au-AgNi (single contact)	10mA, 12VDC
Au overlay Ag (bifurcated crossbar)	Dry circuit
Au diffused Ag (single contact)	50mA, 12VDC
Initial contact resistance	
Ag, AdCdO	100mΩ
Au-AgNi, Au overlay Ag, Au diffused Ag	200mΩ
Frequency of operation	360 ops./hour
Operate/release time max.	13/6ms

Contact ratings

Type	Load	Cycles
UL 508		
Ag	5A, 120VAC, general purpose 2.5A, 240VAC, general purpose 1/10HP, 120/240VAC 180VA, 250VAC, pilot duty 42VA, 28VDC, pilot duty	
AgCdO	5A, 240VAC, general purpose 5A, 28VDC, resistive 1/10HP, 120/240VAC 180VA, 250VAC, pilot duty 42VA, 28VDC, pilot duty	
Au-AgNi	2A, 120VAC, resistive	
Au overlay Ag	1A, 120VAC 1A, 30VDC	
Au diffused Ag	5A, 120VAC, general purpose 2.5A, 240VAC, general purpose 1/10HP, 120/240VAC 180VA, 250VAC, pilot duty 42VA, 28VDC, pilot duty	

Note: The relay should only carry ≤15A continuously (all poles combined).
Mechanical endurance 10x10⁶ ops.

Coil Data

Coil voltage range	5 to 240VDC 6 to 240VAC
Coil insulation system according UL	Class B

Coil versions, DC coil

Coil code	Rated voltage VDC	Operate voltage VDC	ReleaseCoil resistance Ω±10%	Rated coil power mW
5	5	3.75	32	800
6	6	4.5	40	900
12	12	9.0	160	900
24	24	18.0	690	850
48	48	36.0	2600	900
110	110	82.5	11000	1100
	220/240		Use 110V relay with series dropping 5W resistor of 11KΩ	

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
6	6	5.1	10.5	1.2
12	12	10.2	43	1.2
24	24	20.4	160	1.25
48	48	40.8	668	1.2
120	120	102.0	3900	1.35
240	240	204.0	12000	1.5

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

Insulation Data

Initial dielectric strength	
between open contacts	1000V _{rms}
between contact and coil	1500V _{rms}
between adjacent contacts	1500V _{rms}
between coil and frame	1500V _{rms}
Initial insulation resistance	
between insulated elements	100MΩ at 500VDC

Other Data

Material compliance:	EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customer-support/rohssupportcenter
Ambient temperature	-45°C to 70°C
Category of environmental protection	IEC 61810 RTI - dust protected

KHA Series Panel Plug-in Relay (Continued)

Other Data (continued)

Terminal type	solder/plug-in .105" (2.67mm), pcb-tht .112" (2.84mm)
Weight	45g
Packaging/unit	tray/50 pcs., box/250pcs.

Accessories

For details see datasheet Sockets and Accessories, KHA Relays

Product Code	Description
27E894	DIN socket (use 20C426 clip)
27E166	Panel/track mount socket (use 20C297 clip)
27E006	Solder/grounding socket (use 20C217 clip)
27E007	PCB/grounding socket (use 20C217 clip)

NOTE: Relays with contact current <50mA are not recommended for use in sockets.

Dimensions

KHAU and KHAX types



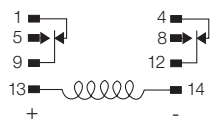
PCB terminals
KHAE and KHAF types



Printed circuit terminal thickness .022 (.558)

Terminal assignment

2 form C



4 form C



Polarity shown for LED indicator

PCB layout

Bottom view on solder pins

4 pole version

