

Miniature Relay PCLH

- Small size, 10A, 15A switching capacity
- Meets UL and CSA requirements
- 1 pole and 2 pole contact arrangements
- AC and DC coils with UL Class F (155°C) coil insulation system standard
- Optional flange mount case
- Plug-in terminals or PCB terminals



Typical applications

Factory automation, process controls, electrical panels, etc.

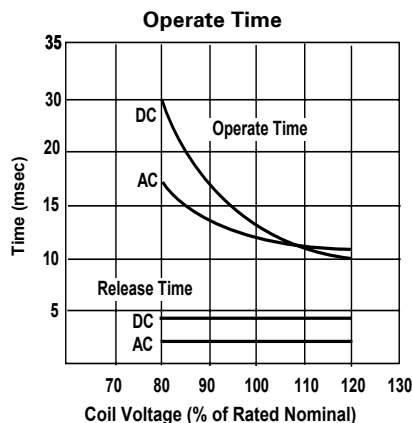


Approvals

UL E58304, TUV R50138495, CSA 1017162(LR48471-207),
CQC CQC08001025963

Technical data of approved types on request

Contact Data	2x15A	2x10A	1x15A
Contact arrangement	2 form A 2 NO or 2 form C 2 CO	2 form A 2 NO or 2 form C 2 CO	1 form A 1 NO or 1 form C 1 CO
Rated voltage	120VAC	250VAC 24VDC	250VAC 24VDC
Rated current	15A	10A	15A
Switching power	3168VA 240W	3168VA 240W	3300VA 360W
Contact material	Ag, AgSnO, AgCdO		
Min. recommended contact load	100mA at 5VDC		
Initial contact resistance	50mΩ at 6VDC, 1A		
Frequency of operation with/without load	30min ⁻¹ /300min ⁻¹		
Operate/release time max.			
AC coil	20/20ms		
DC coil	15/8ms		
Electrical endurance	100x10 ³ ops. at rated load		
Contact ratings			
2 pole type	15A at 120VAC resistive 10A at 250VAC/24VDC resistive		
1 pole type	15A at 250VAC/24VDC resistive		
Mechanical endurance	100x10 ⁶ ops.		



Coil Data

Coil voltage range	6 to 110VDC 6 to 240VAC (50/60Hz)
Max. coil power	110% of rated power
Max. coil temperature	
AC coil	115°C
DC coil	105°C
Coil insulation system according UL	class F

Coil versions, DC coil

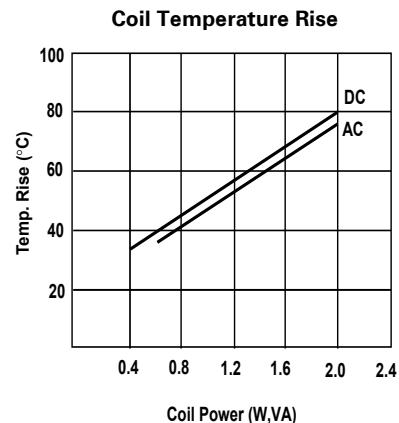
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10 %	Rated coil power mW
01D	6	4.8	0.6	40	900
02D	12	9.6	1.2	160	900
03D	24	19.2	2.4	650	900
04D	48	38.4	4.8	2600	900
05D	100/110	88.0	10.0	11000	1100

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	Release voltage VAC	Coil resistance Ω±10%	Rated coil power VA
01A	6	4.8	1.8	10	1.4
02A	12	9.6	3.6	40	1.4
03A	24	19.2	7.2	160	1.4
04A	48	38.4	14.4	600	1.4
05A	100	80.0	30.0	2800	1.4
06A	110/120	96.0	33.0	3400	1.4
07A	200	160.0	60.0	11000	1.4
08A	220/240	192.0	66.0	13600	1.4

All figures are given for coil without preenergization, at ambient temperature +23°C, 50 Hz



Miniature Relay PCLH (Continued)

Insulation Data

Initial dielectric strength	
between open contacts	1000V _{rms}
between contact and coil	2000V _{rms}
between adjacent contacts	1500V _{rms}
Initial surge withstand voltage	
between contact and coil	3000V(1.2/50μs)
Initial insulation resistance	1000MΩ 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	-40 to 55°C
Category of environmental protection	
IEC 61810	RTI - dust protected
Vibration resistance (functional)	10 to 55Hz 1.0mm double amplitude
Vibration resistance (destructive)	10 to 55Hz 1.0mm double amplitude
Shock resistance (functional)	10g
Shock resistance (destructive)	100g
Terminal type	plug-in PCB-THT
Weight	approx. 32g
Packaging/unit	box/25, carton/500

Accessories

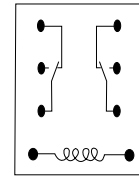
For details see datasheet K10 series sockets

Accessories

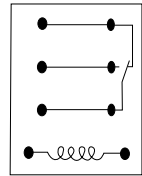
Product Code	Description	Part Number
PCLH-2F-E,000	2 pole DIN rail socket, quick connect terminals, with finger protection	1721883-1

Terminal assignment

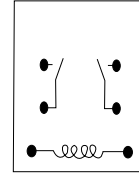
PCLH, 2 form C



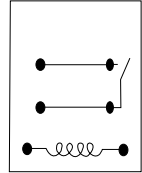
PCLH, 1 form C



PCLH, 2 form A

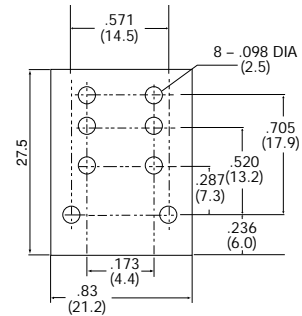


PCLH, 1 form A



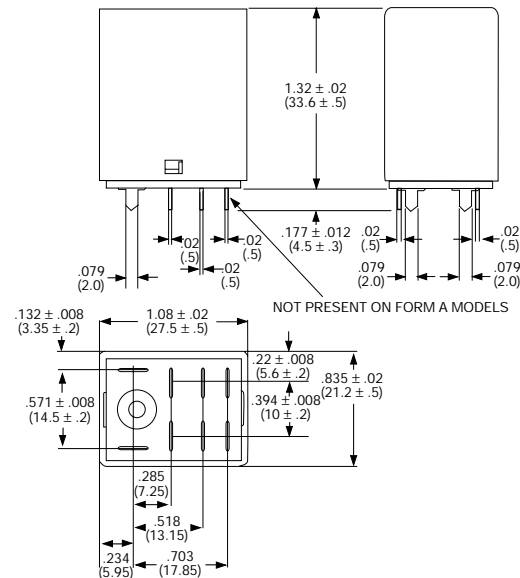
PCB layout

Bottom view on pins

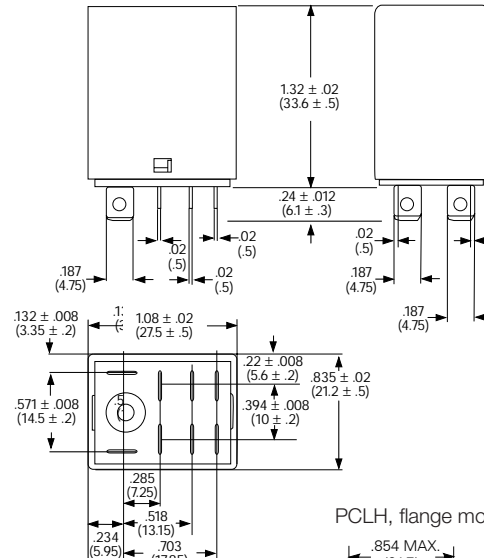


Dimensions

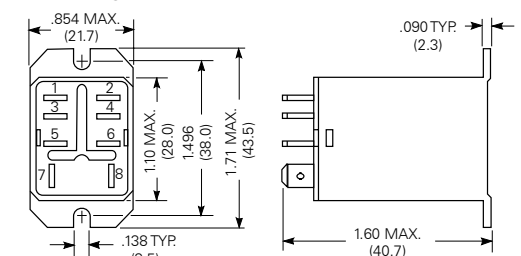
PCLH, PCB terminals



PCLH, plug-in terminals



PCLH, flange mount case



Miniature Relay PCLH (Continued)

Product code structure		Typical product code		PCLH	-2	02A	1		S		,000
Type											
PCLH		Miniature Relay PCLH									
Number of Poles											
1	1 pole			2	2 pole						
Coil Voltage											
		Coil code: please refer to coil versions table									
Contact Material											
1	AgCdO			2	AgSnO						
Contact Arrangement											
Blank	Form C (CO)			M	Form A (NO)						
Case Type											
S	Standard (smoke color)			F	Flange mount (smoke color)						
Terminal Type											
Blank	Plug-in			P	PCB						
Indicator Lamp											
Blank	None			L	Indicator Lamp						
Option											
.000	Standard model										

Product Code	Arrangement	Cont. material	Terminal	Coil	Coil voltage	Indicator	Part Number
PCLH-203D1S,000	2 Form C	AgCdO	Plug-in	DC coil	24VDC	none	7-1440007-1
PCLH-203D1SL,000						LED	1649693-1
PCLH-208A1S,000				AC coil	220/240VAC	none	7-1440007-5
PCLH-208A1SL,000						LED	1461542-3