

Miniature Power PCB Relay PCH

- 1pole 5 A, 1CO or 1NO contact
- Sensitive 200 mW coil available
- Version PCH-WG with tracking resistance PTI 250 on relay base and cover
- WG version: Product in accordance to IEC60335-1
- RoHS compliant (Directive 2002/95/EC) as per product date code 0424





F-PCH

Applications

Domestic appliances, heating control, building control, measurement&control

Approvals

PCH / PCH-WG:  119568  us E82292
 Technical data of approved types on request

Contact data	PCH	PCH-WG
Contact configuration	1 CO or 1 NO	
Contact set	single contact	
Type of interruption	micro-disconn.	
Rated current	5 A	
Rated voltage / max.switching voltage AC	250/400 VAC	
Maximum breaking capacity AC	1250 VA	
Contact material	AgSnO	
Mechanical endurance	1.5x10 ⁶ cycles	10x10 ⁶ cycles
Rated frequency of operation with / without load	6/600 min ⁻¹	

Contact ratings

Type	Load	Cycles
PCH-XXX2M-WG	N/O, 5 A, 250VAC, 85°C, resistive, EN61810-1	100x10 ³
PCH-XXX2-WG	C/O (N/O tested): 5 A, 250VAC, 85°C, res. EN61810-1	100x10 ³
PCH-XXXD2M	N/O, 5 A, 250VAC, 70°C, resistive, EN61810-1	100x10 ³
PCH-XXXL2M	N/O, 5 A, 250VAC, 70°C, resistive, EN61810-1	30x10 ³
PCH-XXXD2	C/O, 3 A, 250VAC, 40°C, resistive, EN61810-1	30x10 ³

Coil data	standard	sensitiv
Rated coil voltage range DC coil	5...48 VDC	5...24 VDC
Coil power DC coil	typ. 400 mW	typ. 200 mW
Operative range	1	
Coil insulation system according UL1446	class F	

Coil versions, DC-coil - standard

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ohm	Rated coil power mW
05	5	3.75	0.5	62.5±10%	400
06	6	4.5	0.6	80±10%	400
09	9	6.3	0.9	202.5±10%	400
12	12	8.4	1.2	360±10%	400
24	24	16.8	2.4	1440±10%	400
48	48	33.6	4.8	5760±10%	400

All figures are given for coil without preenergization, at ambient temperature +23°C
 Other coil voltages on request

Miniature Power PCB Relay PCH (Continued)

Coil versions, DC-coil - sensitive

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ohm	Rated coil power mW
05	5	3.75	0.5	125±10%	200
06	6	4.5	0.6	180±10%	200
09	9	6.75	0.9	400±10%	200
12	12	9.0	1.2	720±10%	200
24	24	18.0	2.4	2800±10%	200

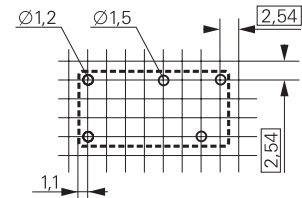
All figures are given for coil without preenergization, at ambient temperature +23°C
Other coil voltages on request

Insulation	PCH	PCH-WG
Dielectric strength coil-contact circuit		4000 V _{rms}
open contact circuit		1000 V _{rms}
Clearance / creepage coil-contact circuit		
N/O:		5.5 / 9 mm
C/O:		4.5 / 9 mm
Material group of insulation parts		IIIa
Tracking index of relay base	PTI 175	PTI 250
Insulation to IEC 60664-1		
Type of insulation coil-contact circuit		basic
open contact circuit		functional
Rated insulation voltage		250 V
Pollution degree	2	3
Rated voltage system		250 V
Overvoltage category		III

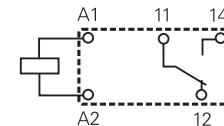
Other data	PCH	PCH-WG
RoHS - Directive 2002/95/EC	compliant as per product date code 0424	
For WG version: GWFI to IEC 60695-2-12		960°C
GWIT to IEC 60695-2-13		775°C
Flammability class according to UL94		V0
Ambient temperature range		
all WG-versions:		-40...85°C
Standard N/O:		-30...70°C
Standard C/O:		-30...40°C
Operate- / release time		typ. 10/5 ms
Bounce time N/O / N/C contact		typ. 1 / 3 ms
Vibration resistance (function) NO / NC contact		>14 / 8 g, 30...400 Hz
Shock resistance (destruction)		100 g
Category of protection		RTII - flux proof RTIII - wash tight
Mounting		PCB
Resistance to soldering heat flux-proof version		270°C / 10 s
wash-tight version		260°C / 5 s
Relay weight		7 g
Packaging unit		25/1000 pcs

PCB layout / terminal assignment

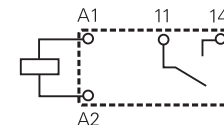
Bottom view on solder pins



S0550-AA

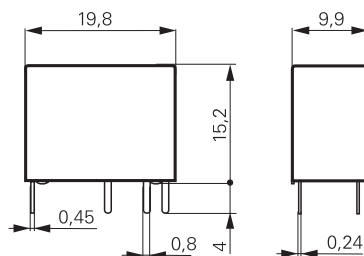


S0550-AB



S0550-AC

Dimensions



S0551A

Miniature Power PCB Relay PCH (Continued)

Product key



Type

Version

1 1 pole

Coil

05	5 VDC	12	12 VDC
06	6 VDC	24	24 VDC
09	9 VDC	48	48 VDC

Coil power

D	standard 400 mW	L	sensitive 200 mW (for NO contact only)
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Contact material

2 AgSnO₂

Contact configuration

Blank	1 CO contact	M	1 NO contact
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Enclosure

Blank	flux proof	H	wash tight
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Version

Blank	standard version	WG	Product in accordance with IEC 60335-1 (domestic appliances)
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Other types on request

Product Key	Version	Contact material	Contacts	Coil	Part number
PCH-105D2M	flux proof	AgSnO ₂	1 NO contact	5 VDC	1461350-2
PCH-106D2M	standard			6 VDC	1461350-3
PCH-109D2M				9 VDC	1461350-4
PCH-112D2M				12 VDC	1461350-5
PCH-124D2M				24 VDC	1461350-6
PCH-148D2M				48 VDC	1461350-7
PCH-105D2			1 CO contact	5 VDC	9-1440003-7
PCH-106D2				6 VDC	9-1440003-8
PCH-109D2				9 VDC	9-1440003-9
PCH-112D2				12 VDC	1440004-0
PCH-124D2				24 VDC	1440004-1
PCH-148D2				48 VDC	1461410-2
PCH-105L2M	flux proof		1 NO contact	5 VDC	1461352-2
PCH-106L2M	sensitive			6 VDC	1461352-3
PCH-109L2M				9 VDC	1461352-4
PCH-112L2M				12 VDC	1461352-5
PCH-124L2M				24 VDC	1461352-6
PCH-105D2M-WG	flux proof			5 VDC	1721767-2
PCH-106D2M-WG	standard			6 VDC	1721767-3
PCH-109D2M-WG	materials according			9 VDC	1721767-4
PCH-112D2M-WG	IEC 60335-1			12 VDC	1721767-5
PCH-124D2M-WG				24 VDC	1721767-6
PCH-148D2M-WG				48 VDC	1721767-7
PCH-105D2-WG			1 CO contact	5 VDC	1721766-2
PCH-106D2-WG				6 VDC	1721766-3
PCH-109D2-WG				9 VDC	1721766-4
PCH-112D2-WG				12 VDC	1721766-5
PCH-124D2-WG				24 VDC	1721766-6
PCH-148D2-WG				48 VDC	1721766-7
PCH-105L2M-WG	flux proof		1 NO contact	5 VDC	1721768-2
PCH-106L2M-WG	sensitive			6 VDC	1721768-3
PCH-109L2M-WG	materials according			9 VDC	1721768-4
PCH-112L2M-WG	IEC 60335-1			12 VDC	1721768-5
PCH-124L2M-WG				24 VDC	1721768-6