

# PCB Relays H-045



<p><b>General</b></p> <ul style="list-style-type: none"> <li>• 1, 2, and 4 CO-contacts</li> <li>• Horizontal version</li> <li>• Ambient temperature -25 ... +70 °C</li> <li>• Soldering heat resistance 260 °C/5s</li> <li>• RoHS compliance</li> </ul>	<p><b>Connections</b></p> <ul style="list-style-type: none"> <li>• Soldering pins for PCB</li> </ul> <p><b>Drive</b></p> <ul style="list-style-type: none"> <li>• Direct current, monostable</li> <li>• Direct current, bistable</li> </ul> <p><b>Approvals</b></p> <ul style="list-style-type: none"> <li>• cULus</li> </ul> <p><b>Standards</b></p> <ul style="list-style-type: none"> <li>• IEC 61810-1 • UL 508</li> </ul>
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## Technical Data mechanical

Dimensions L x W x H (in mm)	Size 1, dustproof: 28,7 x 30,7 x 11,0 Size 1, wash tight: 29,6 x 31,6 x 11,5 Size 2, dustproof: 28,7 x 38,2 x 11,0 Size 2, wash tight: 29,6 x 39,1 x 11,5
Shock resistance	10 g, 11 ms Half sinus
Vibration resistance	5 g, 10 – 55 Hz
Operating time	typical 15 ms
Releasing time	typical 8 ms
Mechanical service life (without load)	>10 <sup>7</sup> cycles
Weight	30 g

## Technical Data electrical

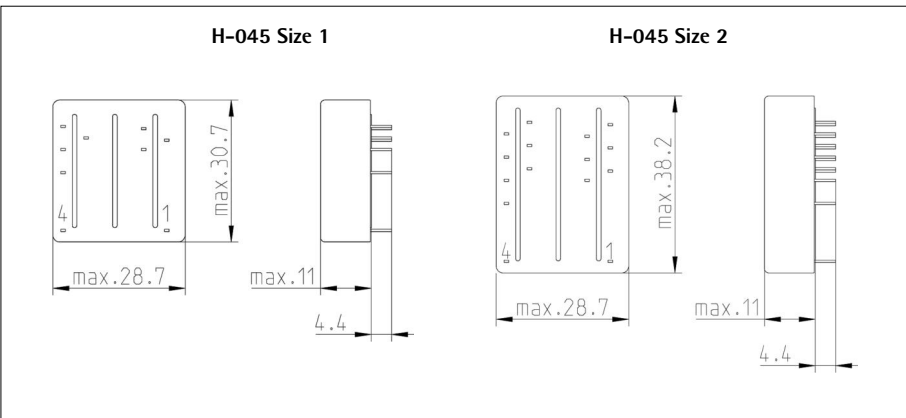
Max. switching capacity	Size 1 (1 CO-contact) Size 2 (2 CO-contact)
Max. switching current	AC 750 VA, DC *W 5 A
Max. switching capacity	Size 1 (2 CO-contacts) Size 2 (4 CO-contacts)
Max. switching current	AC 100 VA, DC *W 3 A
Max. switching voltage	AC 230/240 V, DC *V
Electrical service life (with nominal load)	>10 <sup>5</sup> cycles
* see DC-switching capacity	

## Insulation

Over voltage category (Ü) III (AC 120/240 V)	B-I = Basic insulation
Over voltage category(Ü) II (AC 230/400 V)	V-I = Reinforced (double) insulation
Degree of pollution (V) 2	
Insulating material group II	

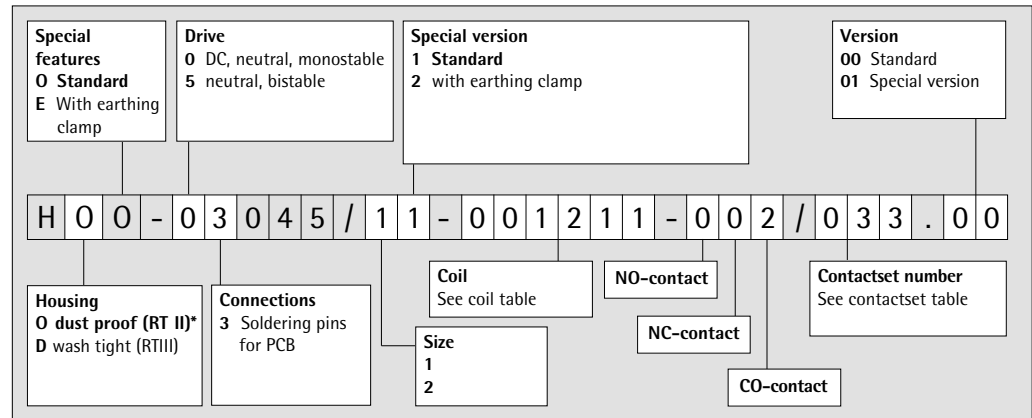
Insulation between	Nominal voltage network system		Air-/creeping distance	Test voltage 50Hz/60s
	AC 120/240 V	AC 230/400 V		
Contact – Contact	B-I	B-I	> 2 mm	AC 1.300 V
Contactset – Drive	B-I	B-I	> 2 mm	AC 2.000 V

## Dimensions



# PCB Relays H-045

## Type key



\* Preferred version

## Contactset table Size 1

Number of contacts NO/NC/CO-contact	AgCdO	AgCdO + 10 µm Au	Contact material
001	003	033	Contactset number
002	002	056	

## Size 2

Number of contacts NO/NC/CO-contact	AgCdO	AgCdO + 10 µm Au	Contact material
002	030	064	Contactset number
004	001	052	

All values at ambient temperature  $T_u = 20\text{ °C}$

## Coil table Size 1

Coil-No.	Resistance $R/\Omega$	Resistance- tolerance $\pm$	$U_1/V$	$U_2/V$	$U_{rück}/V$	Printing $U_{nom}/V$
001120	50	9%	2,9	11,0	0,4	6
001114	190	9%	5,7	21,5	0,7	12
001211	750	11%	11,4	42,5	1,4	24
001306	2.900	14%	23,5	82,7	2,8	48
001105	4.500	14%	29,1	103,0	3,5	60
001202	17.000	18%	58,9	196,9	6,6	110

All values at ambient temperature  $T_u = 20\text{ °C}$

## Size 2

Coil-No.	Resistance $R/\Omega$	Resistance- tolerance $\pm$	$U_1/V$	$U_2/V$	$U_{rück}/V$	Printing $U_{nom}/V$
001120	50	9%	4,6	11,0	0,6	6
001114	190	9%	9,0	21,5	1,1	12
001211	750	11%	18,1	42,5	2,2	24
001406	2.500	14%	36,4	76,8	4,3	48
001205	3.900	14%	45,0	95,9	5,3	60
001103	11.200	17%	73,7	160,7	8,3	110

$U_1$ : Minimum operating voltage with consideration of coil self heating  
 $U_2$ : Thermal restricted maximum coil voltage  
 $U_{rück}$ : Releasing voltage

Further coils are possible and available

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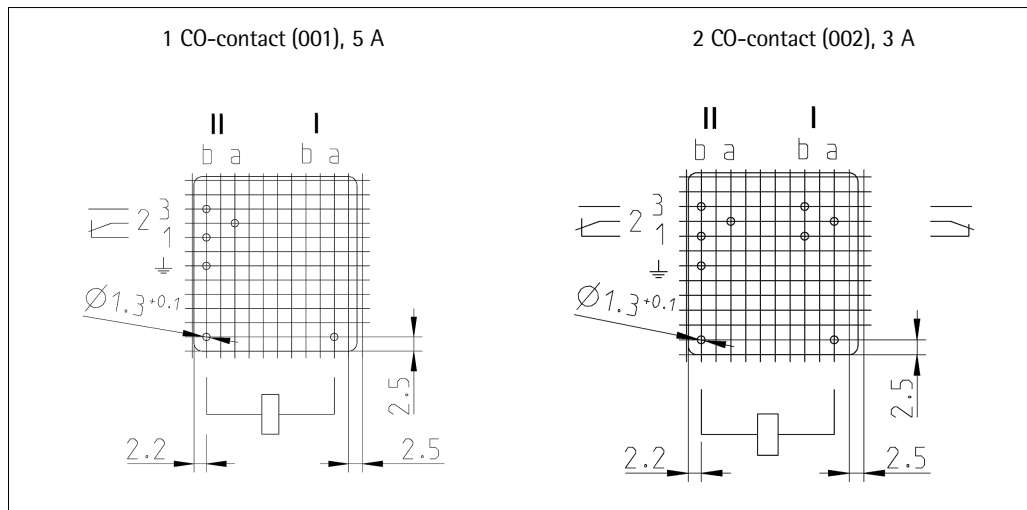
## Running types

Article-No.	Type key	Printing $U_{nom}$	$U_1/V$	$U_2/V$	$U_{rück}/V$
045-1014	H00-03045/21-001114-004/001.00	DC 12 V	9,0	21,5	1,1
045-1188	H00-03045/21-001114-002/030.00	DC 12 V	9,0	21,5	1,1
045-1200	H00-03045/21-001114-004/001.00	DC 12 V	9,0	21,5	1,1
045-1322	HDE-03045/12-001114-002/056.00	DC 12 V	5,7	21,5	0,7
045-1394	H00-03045/11-001211-002/002.00	DC 24 V	11,4	42,5	1,4
045-1405	H00-03045/21-001211-002/030.00	DC 24 V	18,1	42,5	2,2

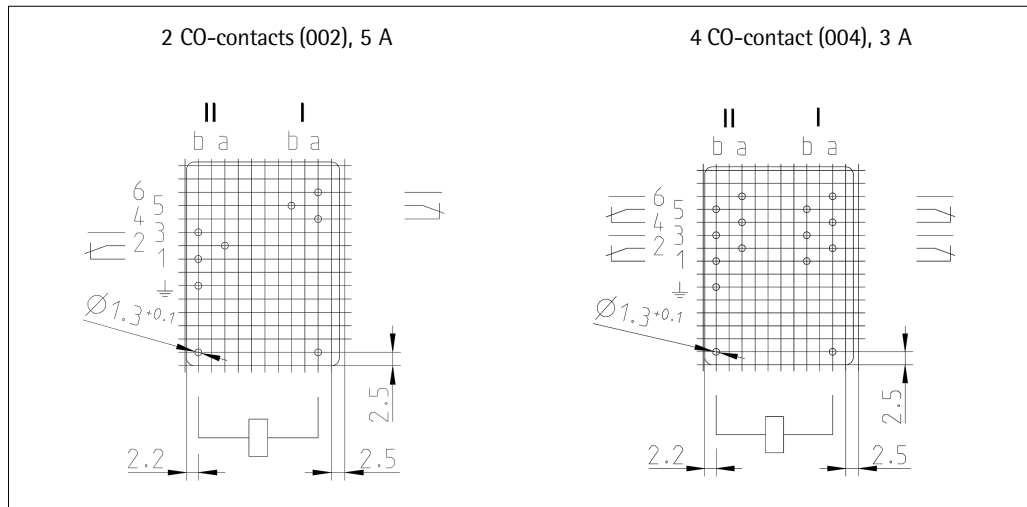
## Connection grid

View on soldering side

Size 1



Size 2



## Diagrams

