

PCB Relays H-045



General

- 1, 2, and 4 CO-contacts
- Horizontal version
- Ambient temperature -25 ... +70 °C
- Soldering heat resistance 260 °C/5s
- RoHS compliance

Connections

- Soldering pins for PCB

Drive

- Direct current, monostable
- Direct current, bistable

Approvals

- cULus

Standards

- IEC 61810-1 • UL 508

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 ⁷ 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 ⁵ cycles
* see DC-switching capacity	

Insulation

Over voltage category (Ü) III (AC 120/240 V) B-I = Basic insulation

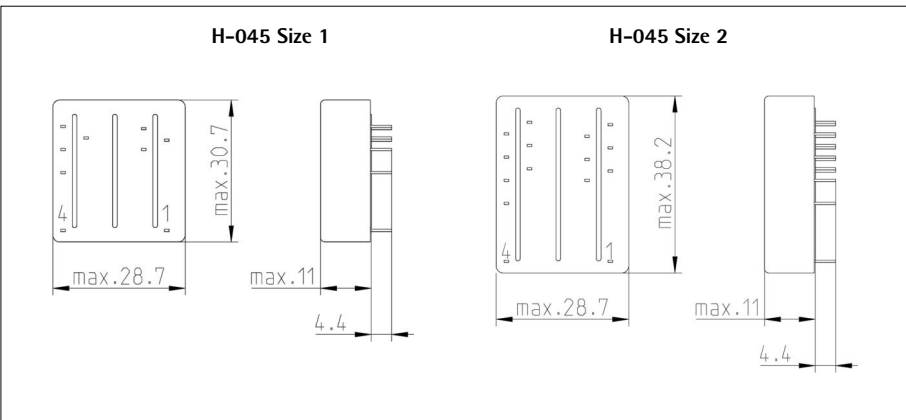
Over voltage category(Ü) II (AC 230/400 V)

Degree of pollution (V) 2 V-I = Reinforced (double) insulation

Insulating material group II

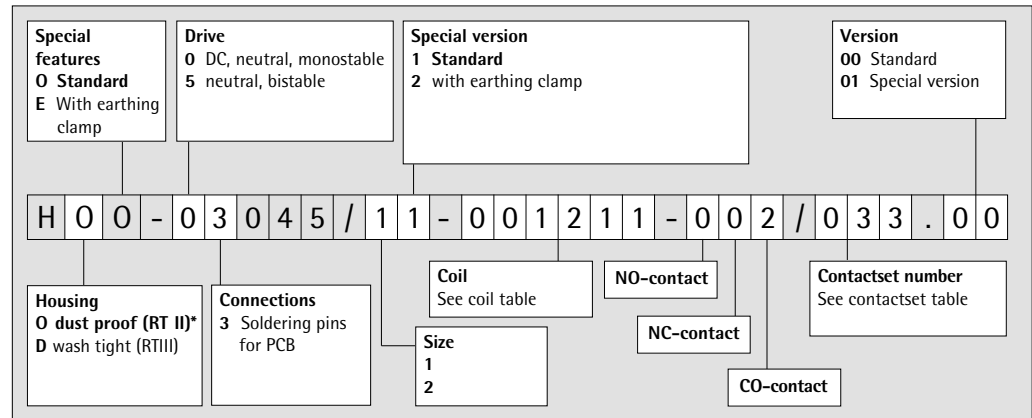
Insulation between	Nominal voltage network system		Air-/ creeping distance	Test voltage 50Hz/60s
	AC 120/240 V	AC 230/400 V		
Contact – Contact	B-I	B-I	> 2 mm	AC 1.300 V
Contactset – Drive	B-I	B-I	> 2 mm	AC 2.000 V

Dimensions



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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/Ω	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/Ω	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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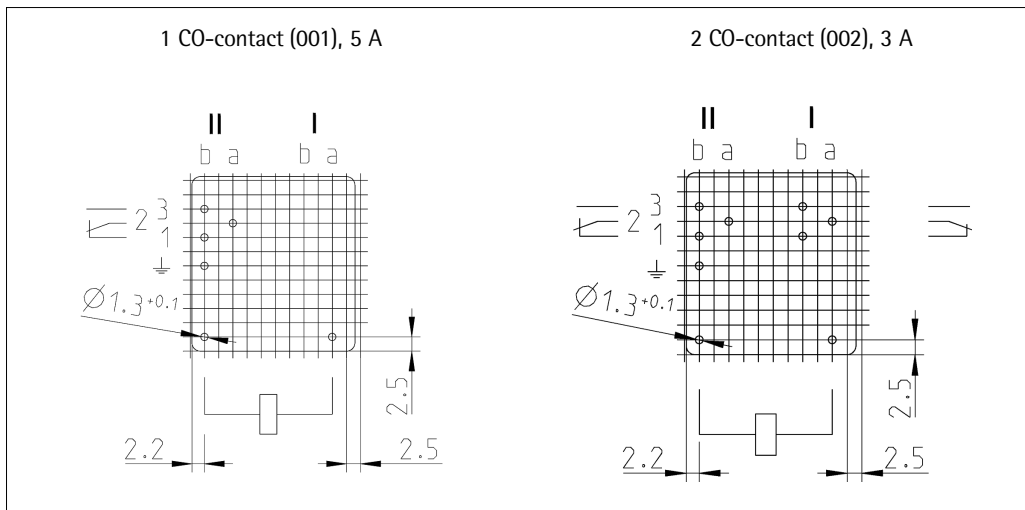
Running types

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

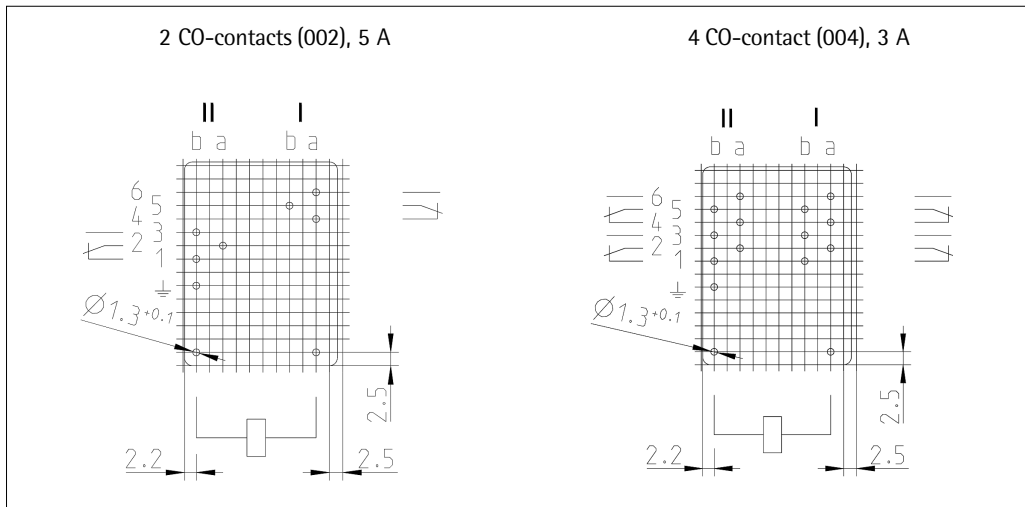
Connection grid

Few on soldering side

Size 1



Size 2



Diagrams

