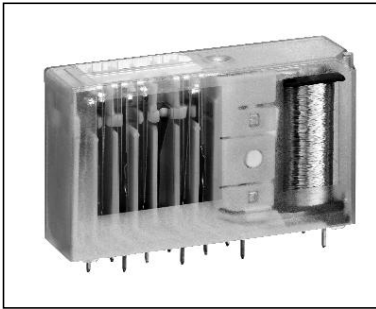


# Safety Relay H-468



## General

- 4 or 6 contacts
- Forced guided contact set
- According to EN 50205 application type A
- Ambient temperature -25 ... +80 °C
- Soldering heat resistance 260 °C/5s
- RoHS compliance

## Connections

- Soldering pins for PCB, pre-soldered with Sn100

## Drive

- Direct current, polarized monostable

## Approvals

- cUL/US\* • TÜV

(\* for 6 contacts pending)

## Standards

- EN 50205 • IEC 61810-1 • UL 508

## Technical Data mechanical

Dimensions L x W x H (in mm)	Size 1: 44,6 x 12,5 x 30 Size 2: 50 x 12,5 x 30
Shock resistance NO-contact/NC-contact Vibration resistance NO-contact/NC-contact	10/9 g, 16 ms half sinus 5/5 g, 5 - 200 Hz
Operating time NC-contact, contact opens Operating time NO-contact, contact closes Releasing time NO-contact, contact opens Releasing time NC-contact, contact closes	typical 15 ms typical 17 ms typical 6 ms typical 8 ms
Mechanical service life (without load)	>10 <sup>7</sup> cycles
Weight	Size 1: 35 g Size 2: 38 g

## Technical Data electrical

Max. switching capacity	AC 1.500 VA, DC *W
Max. switching voltage	AC 230/240 V, DC *V
Max. switching current	8 A
	Size 1
Constant current I <sub>th2</sub>	6 A
Constant current I <sub>th2</sub> at same time over 2 contacts	4,2 A
Constant current I <sub>th2</sub> at same time over 3 contacts	3,5 A
	Size 2
Constant current I <sub>th2</sub>	6 A
Constant current I <sub>th2</sub> at same time over 2 contacts	5,2 A
Constant current I <sub>th2</sub> at same time over 3 contacts	4,2 A
Constant current I <sub>th2</sub> at same time over 4 contacts	3,7 A
Switching capacity	AC-15 230/240 V      I <sub>e</sub> = 4/2 A (contact AgNi/AgSnO <sub>2</sub> ) DC-13 24 V              I <sub>e</sub> = 2/1,5A (contact AgNi/AgSnO <sub>2</sub> )
Electrical service life (with nominal load)	>10 <sup>5</sup> cycles
Short-circuit capacity 1.000 A/AC 230 V	6 A gL/gG-fuse
* see DC-switching capacity	

## Insulation

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

Size 1

Insulation between	Nominal voltage network system		Air-/creeping distance	Test voltage 50 Hz/60 s
	AC 120/240 V	AC 230/400 V		
Contact - Contact	V-I	B-I	> 3 mm	AC 2.000 V
Contactset - Drive	V-I	B-I	> 3 mm	AC 2.500 V

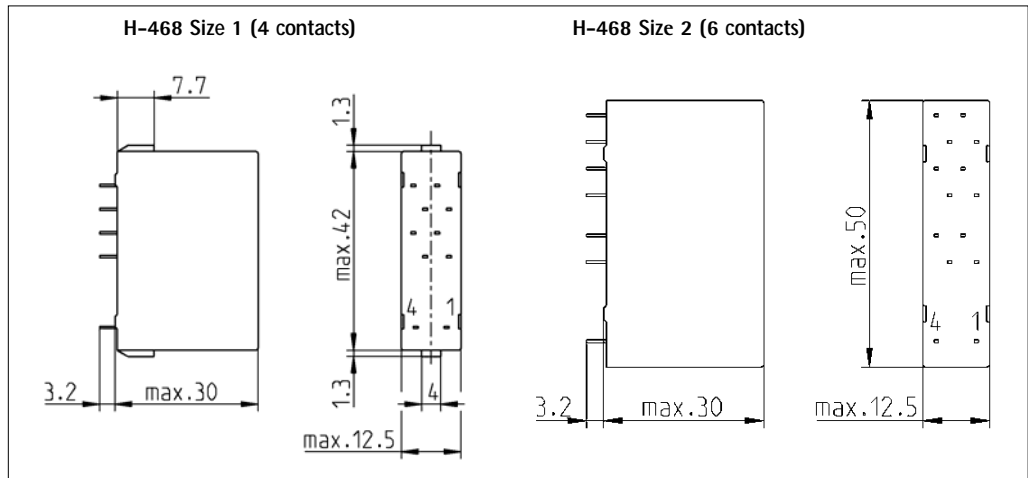
Size 2

Insulation between	Nominal voltage network system		Air-/creeping distance	Test voltage 50 Hz/60 s
	AC 120/240 V	AC 230/400 V		
Drive-contact-group A*	V-I	B-I	> 3,0 mm	1.500 V
Drive-contact-group B*	V-I	V-I	> 5,5 mm	3.000 V
Contacts within contactgroup A	V-I	B-I	> 3,0 mm	1.500 V
Contacts within contactgroup B	V-I	B-I	> 3,0 mm	1.500 V
Contactgroup A and B	V-I	V-I	> 5,5 mm	3.000 V

\* Contactgroup A and B see connection grid

# Safety Relay H-468

## Dimensions



## Type key

<b>Drive</b> 4 DC polarized, monostabil	<b>Connections</b> 3 Soldering pins for PCB and sockets	<b>Special version</b> 1 Standard	<b>Version</b> 00 Standard 01 Special version
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H D Z - 4 3 4 6 8 / 1 1 - 0 0 1 0 8 2 - 3 1 0 / 0 0 7 . 0 0

<b>Housing</b> 0 dustproof (RT II) D wash-tight (RT III)*	<b>Size</b> 1 4 contacts 2 6 contacts	<b>Coil</b> See coil table	<b>NO-contact</b>	<b>NC-contact</b>	<b>CO-contact</b>	<b>Contactset-number</b> See contactset table
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\* Preferred version

## Contactset table

Number of contacts NO/NC/CO-contacts	AgNi +0,2 µm Au	AgNi +2 µm Au	AgSnO <sub>2</sub> +0,2 µm Au	AgSnO <sub>2</sub> +2 µm Au	Contact material
220	002	008	010	012	Contactset number
310	001	007	009	011	
420	051	053	055	057	
510	050	052	054	056	

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

## Coil table

Coil-No.	Resistance R/Ω	Resistance- tolerance ±	$U_1/V$	$U_2/V$	$U_3/V$	$U_{rück}/V$	Printing $U_{nom}/V$
1088	67	7%	4,6	13,0	38	1,1	6
1080	255	8%	9,1	25,2	74	2,2	12
1082	1.020	8%	18,1	50,4	148	4,3	24
1083	3.910	9%	37,3	98,2	297	8,7	48
1084	6.140	10%	46,8	122,6	369	10,8	60
1002	18.855	14%	85,8	212,1	641	18,7	110

$U_1$ : Minimum operating voltage with consideration of coil self heating

$U_2$ : Thermal restricted maximum coil voltage

$U_3$ : Maximum admissible coil voltage to realize a contact gap of > 0.5 mm also at a contact fault

$U_{rück}$ : Releasing voltage

Further coils are possible and available.

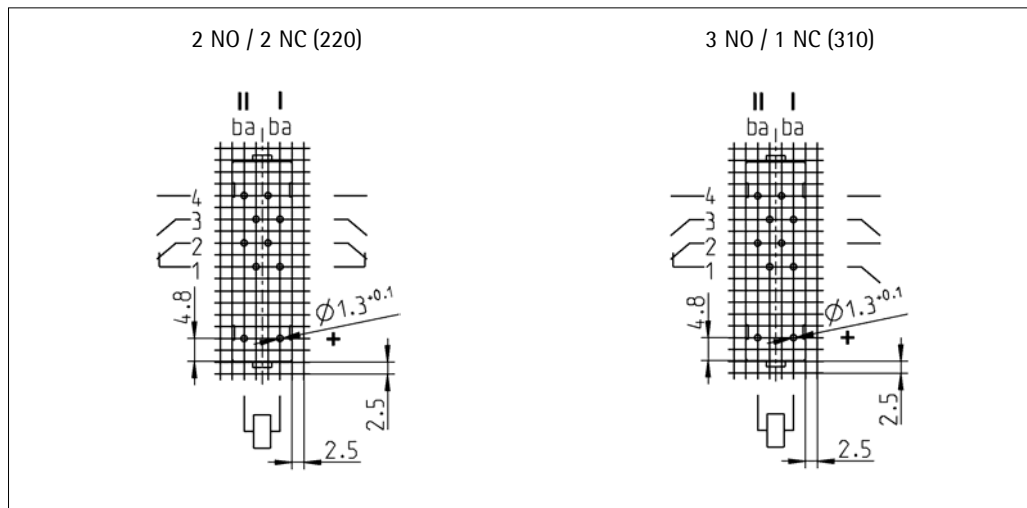
# Safety Relay H-468

## Running types

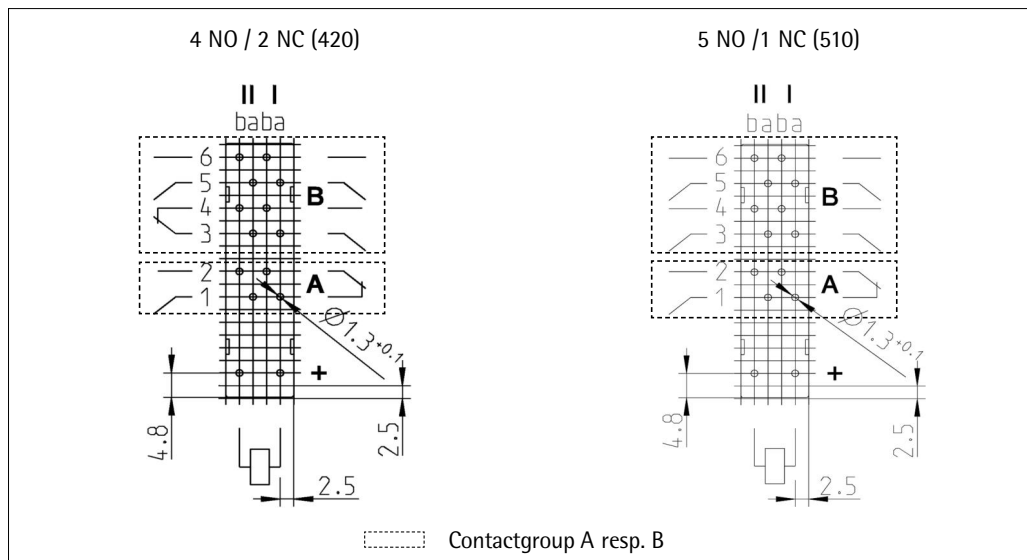
Article-No.	Type key	Printing $U_{nom}$	$U_1/V$	$U_2/V$	$U_3/V$	$U_{rück}/V$
468-1001	HDZ-43468/11-001088-310/001.00	DC 6 V	4,6	13,0	38	1,1
468-1002	HDZ-43468/11-001080-310/001.00	DC 12 V	9,1	25,2	74	2,2
468-1003	HDZ-43468/11-001082-310/001.00	DC 24 V	18,1	50,4	148	4,3
468-1009	HDZ-43468/11-001080-310/007.00	DC 12 V	9,1	25,2	74	2,2
468-1010	HDZ-43468/11-001082-310/007.00	DC 24 V	18,1	50,4	148	4,3
468-1012	HDZ-43468/11-001083-310/007.00	DC 48 V	37,3	98,2	297	8,7
468-1016	HDZ-43468/11-001080-220/002.00	DC 12 V	9,1	25,2	74	2,2
468-1017	HDZ-43468/11-001082-220/002.00	DC 24 V	18,1	50,4	148	4,3
468-1021	HDZ-43468/11-001002-220/002.00	DC 110 V	85,8	212,1	641	18,7
468-1023	HDZ-43468/11-001080-220/008.00	DC 12 V	9,1	25,2	74	2,2
468-1024	HDZ-43468/11-001082-220/008.00	DC 24 V	18,1	50,4	148	4,3
468-1026	HDZ-43468/11-001083-220/008.00	DC 48 V	37,3	98,2	297	8,7
468-1027	HDZ-43468/11-001084-220/008.00	DC 60 V	46,8	122,6	369	10,8
468-1064	HDZ-43468/11-001082-310/009.00	DC 24 V	18,1	50,4	148	4,3
468-1133	HOZ-43468/11-001082-310/001.01	DC 24 V	18,1	50,4	148	4,3
468-1140	HOZ-43468/11-001082-310/007.00	DC 24 V	18,1	50,4	148	4,3
468-1141	HOZ-43468/11-001082-220/008.00	DC 24 V	18,1	50,4	148	4,3
468-1160	HOZ-43468/11-001080-310/007.00	DC 12 V	9,1	25,2	74	2,2
468-1165	HDZ-43468/21-001082-510/050.00	DC 24 V	18,1	50,4	148	4,3
468-1166	HDZ-43468/21-001082-420/051.00	DC 24 V	18,1	50,4	148	4,3
468-1167	HOZ-43468/21-001082-510/050.00	DC 24 V	18,1	50,4	148	4,3
468-1168	HOZ-43468/21-001082-420/051.00	DC 24 V	18,1	50,4	148	4,3

## Connection grid Few on soldering side

Size 1

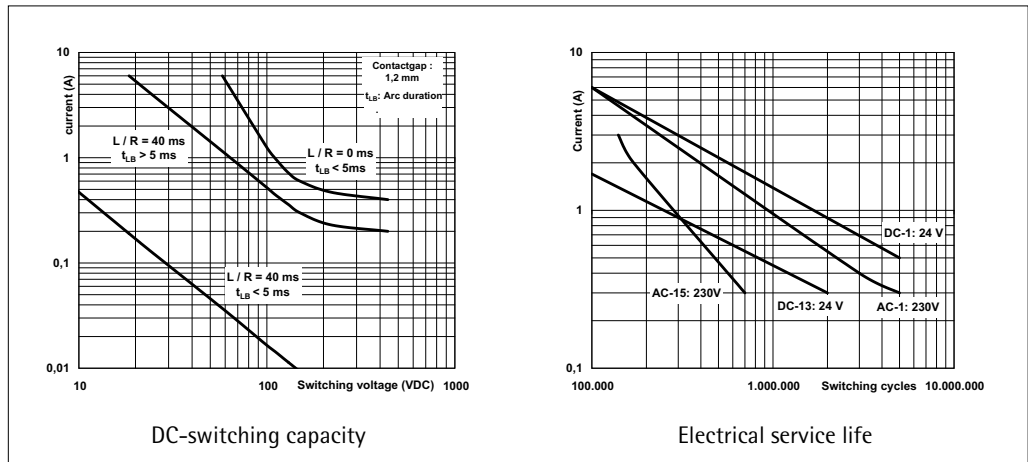


Size 2



# Safety Relay H-468

## Diagram



## Accessories H-468/1 (4 contacts)

