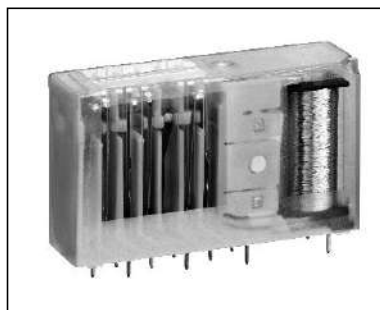


Safety Relay H-468



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

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	10/9 g, 16 ms half sinus
Vibration resistance NO-contact/NC-contact	5/5 g, 5 - 200 Hz
Operating time NC-contact, contact opens	typical 15 ms
Operating time NO-contact, contact closes	typical 17 ms
Releasing time NO-contact, contact opens	typical 6 ms
Releasing time NC-contact, contact closes	typical 8 ms
Mechanical service life (without load)	>10 ⁷ 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 _{th2}	6 A
Constant current I _{th2} at same time over 2 contacts	4,2 A
Constant current I _{th2} at same time over 3 contacts	3,5 A
	Size 2
Constant current I _{th2}	6 A
Constant current I _{th2} at same time over 2 contacts	5,2 A
Constant current I _{th2} at same time over 3 contacts	4,2 A
Constant current I _{th2} at same time over 4 contacts	3,7 A
Switching capacity	AC-15 230/240 V DC-13 24 V
	I _e = 4/2 A (contact AgNi/AgSnO ₂) I _e = 2/1,5A (contact AgNi/AgSnO ₂)
Electrical service life (with nominal load)	>10 ⁵ cycles
Short-circuit capacity 1.000 A/AC 230 V	6 A gL/gG-fuse
* see DC-switching capacity	

Insulation

Size 1

Size 2

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

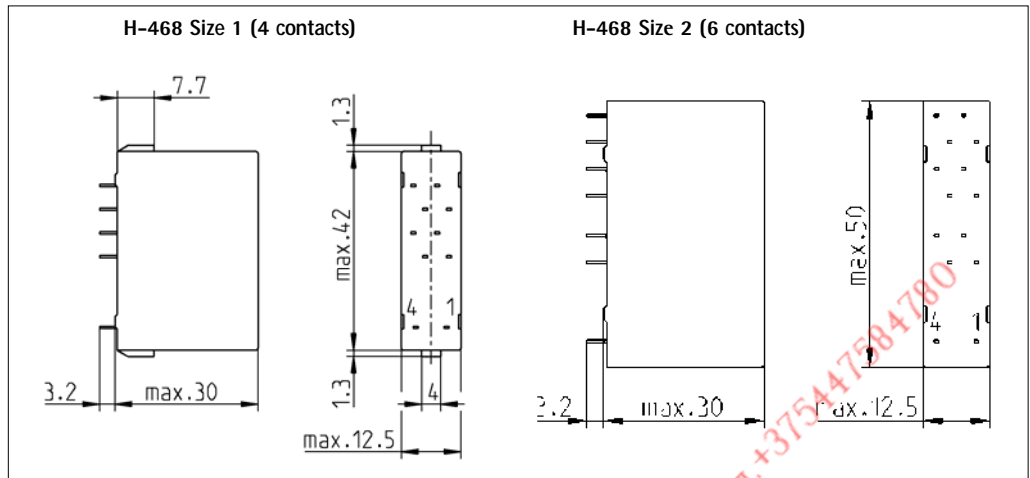
Insulation between	Nominal voltage network system		Air-/creeping distance	Test voltage 50 Hz/60 s
	AC 120/240 V	AC 230/400 V		
Contact - Contact	V-I	B-I	> 3 mm	AC 2.000 V
Contactset - Drive	V-I	B-I	> 3 mm	AC 2.500 V

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

Drive 4 DC polarized, monostabil	Connections 3 Soldering pins for PCB and sockets	Special version 1 Standard	Version 00 Standard 01 Special version
--	--	--------------------------------------	---

H D Z - 4 3 4 6 8 / 1 1 - 0 0 1 0 8 2 - 3 1 0 / 0 0 7 . 0 0

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

* Preferred version

Contactset table

Number of contacts NO/NC/CO-contacts	AgNi +0,2 μm Au	AgNi +2 μm Au	AgSnO ₂ +0,2 μm Au	AgSnO ₂ +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

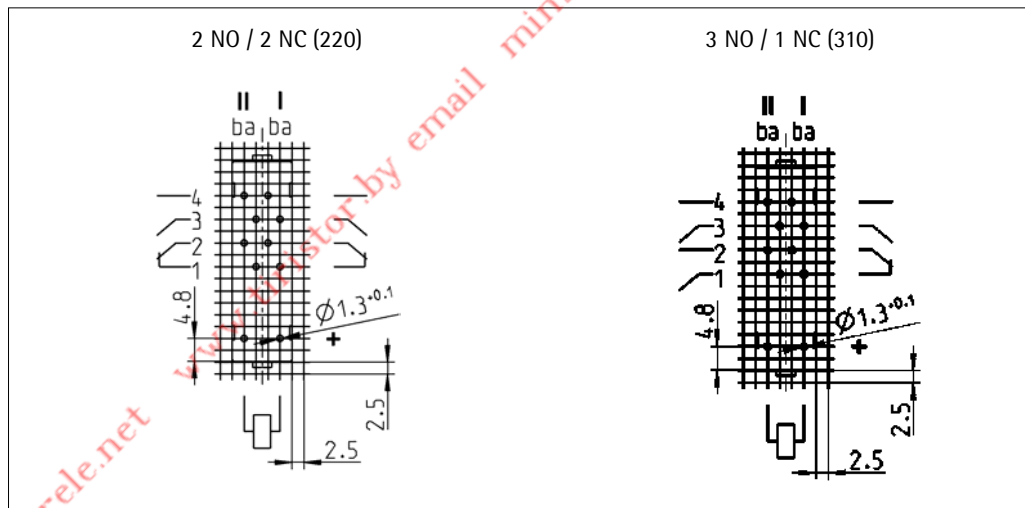
Running types

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

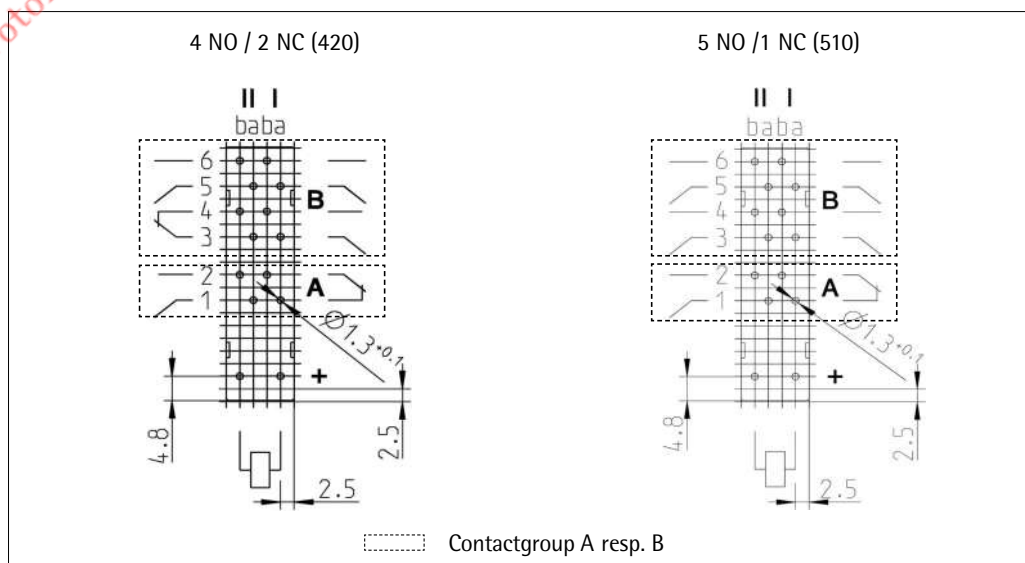
Connection grid

View on soldering side

Size 1

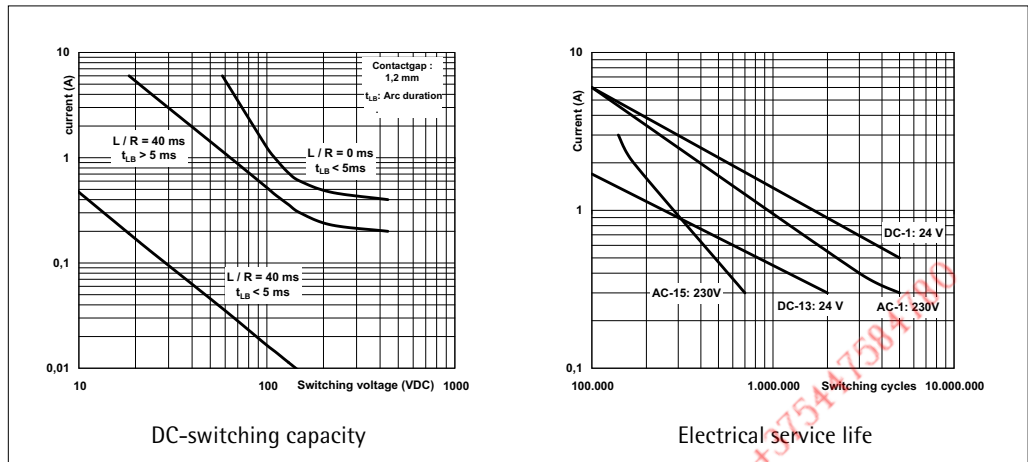


Size 2



Safety Relay H-468

Diagram



Accessories H-468/1 (4 contacts)

