

# Safety Relay H-473



## General

- 5 contacts
- Forced guided contact set
- According to EN 50205, application type A
- Ambient temperature –25 ... +75 °C
- Soldering heat resistance 260 °C/5s
- RoHS compliance
- Reinforced (double) insulation
- Fault-tolerant contact behavior
- Signal relay according to UIC 736e

## Connections

- Soldering pins for PCB, pre-soldered with Sn100

## Drive

- Direct current, polarized monostable

## Approvals

- cULus • TÜV

## Standards

- EN 50205 • IEC 61810-1 • UL 508

## Technical Data mechanical

Dimensions L x W x H (in mm)	47,7 x 35,7 x 15,7
Shock resistance NO-contact/NC-contact	10/8 g, 11 ms half sinus
Vibration resistance NO-contact/NC-contact	10/5 g, 10 – 200 Hz
Operating time NC-contact, contact opens	typical 16 ms
Operating time NO-contact, contact closes	typical 21 ms
Releasing time NO-contact, contact opens	typical 6 ms
Releasing time NC-contact, contact closes	typical 11 ms
Mechanical service life (without load)	>10 <sup>7</sup> cycles
Weight	50 g

## Technical Data electrical

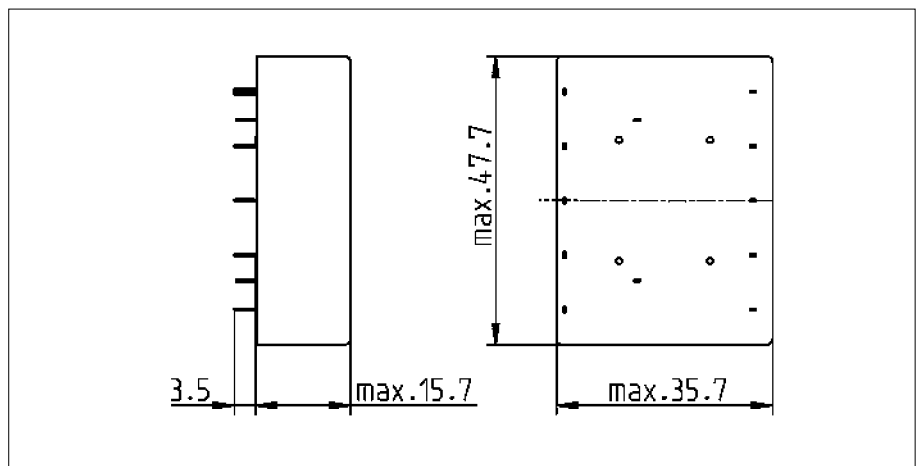
Max. switching capacity	AC 1.380 VA, DC *W
Max. switching voltage	AC 230/240 V, DC *V
Max. switching current	6 A
Constant current I <sub>th</sub>	6 A
Constant current I <sub>th2</sub> at the same time over 2 contacts	6,0 A
Constant current I <sub>th2</sub> at the same time over 3 contacts	4,9 A
Constant current I <sub>th2</sub> at the same time over 4 contacts	4,2 A
Switching capacity	AC-15 230/240 DC-13 24
	I <sub>e</sub> = 3 A I <sub>e</sub> = 2,5 A
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	

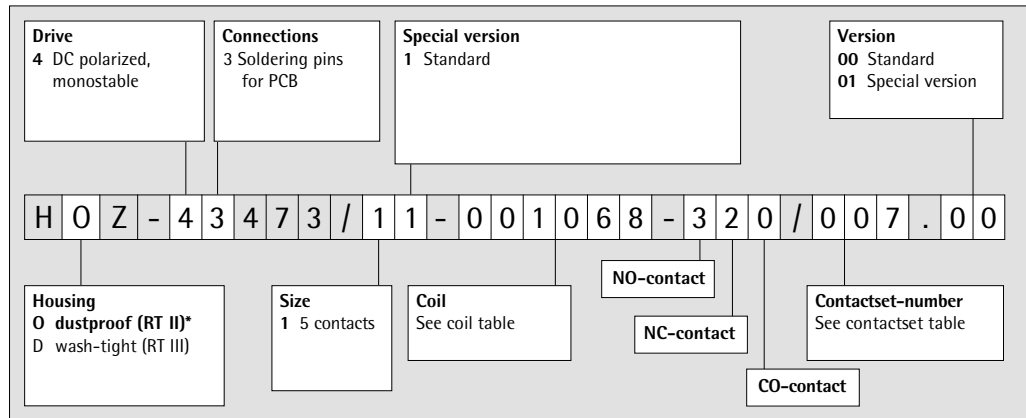
Insulation between	Nominal voltage network system		Air-/creeping distance	Test voltage 50Hz/60s
	AC 120/240 V	AC 230/400		
Contact – Contact	V-I	V-I	> 5,5 mm	AC 4.000 V
Contactset – Drive	V-I	V-I	> 5,5 mm	AC 4.000 V

## Dimensions



# Safety Relay H-473

## Type key



\* Preferred version

## Contactset table

Number of contacts NO/NC/CO-contacts	AgNi +0,2 µm Au	AgNi +2 µm Au	AgNi +5 µm Au	AgSnO <sub>2</sub> +0,2 µm Au	AgSnO <sub>2</sub> +2 µm Au	Contact material
230	003	004	010	001	002	Contactset number
320	007	008	012	005	006	
410	016	017	018	013	014	

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 $U_{nom}/V$
1021	38	6%	4,1	10,6	15	0,5	6
1089	150	8%	8,2	20,9	30	0,9	12
1068	580	7%	16,5	41,4	61	1,9	24
1087	2.340	9%	33,0	82,5	120	3,8	48
1083	3.330	9%	41,7	98,3	149	4,7	60
1003	11.800	12%	76,1	183,3	264	8,3	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

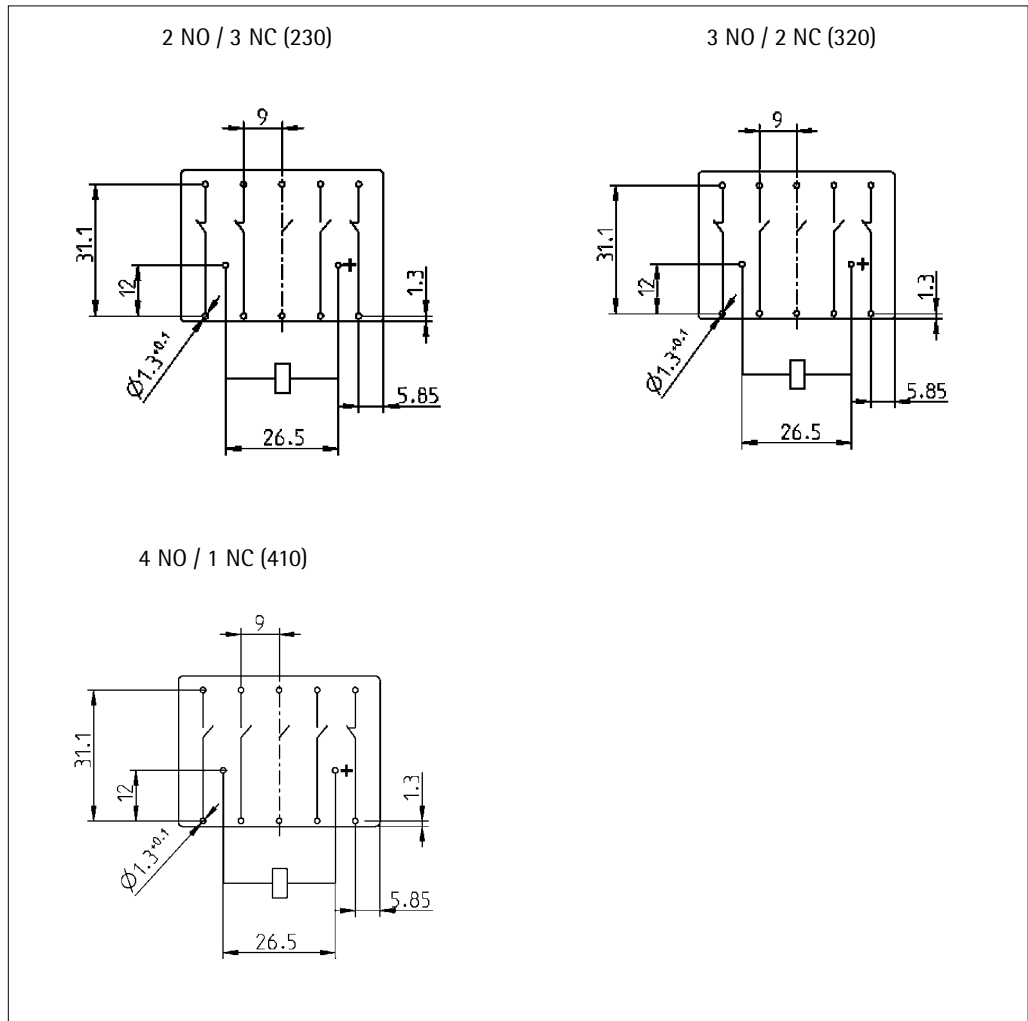
Further coils are possible and available

## Running types

Article-No.	Type key	Printing $U_{nom}$	$U_1/V$	$U_2/V$	$U_3/V$	$U_{rück}/V$
473-1052	HOZ-43473/11-001089-320/006.00	DC 12 V	8,2	20,9	30	0,9
473-1053	HOZ-43473/11-001068-320/006.00	DC 24 V	16,5	41,4	61	1,9
473-1067	HDZ-43473/11-001068-320/006.00	DC 24 V	16,5	41,4	61	1,9
473-1068	HOZ-43473/11-001068-320/012.01	DC 24 V	16,5	41,4	61	1,9
473-1069	HOZ-43473/11-001087-320/006.00	DC 48 V	33,0	82,5	120	3,8
473-1077	HOZ-43473/11-001089-320/007.00	DC 12 V	8,2	20,9	30	0,9
473-1083	HOZ-43473/11-001068-410/013.00	DC 24 V	16,5	41,4	61	1,9

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**Connection grid**  
View on soldering side



**Diagram**

