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)	$>10^7$ 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_{th}		6 A
Constant current I_{th2} at the same time over 2 contacts		6,0 A
Constant current I_{th2} at the same time over 3 contacts		4,9 A
Constant current I_{th2} at the same time over 4 contacts		4,2 A
Switching capacity	AC-15 230/240	Ie = 3 A
	DC-13 24	Ie = 2,5 A
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

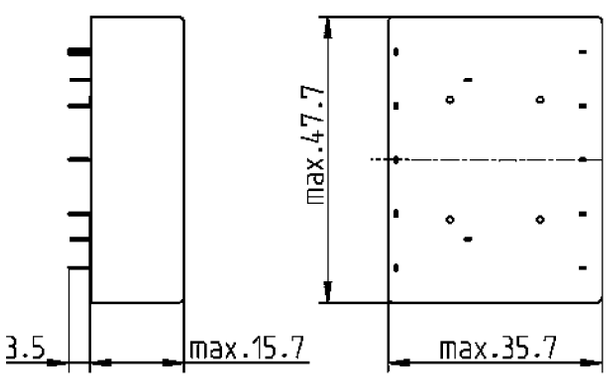
Insulation

Over voltage category (Ü) III
Degree of pollution (V) 2
Insulating material group II

B-I = Basic insulation
V-I = Reinforced (double) insulation

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



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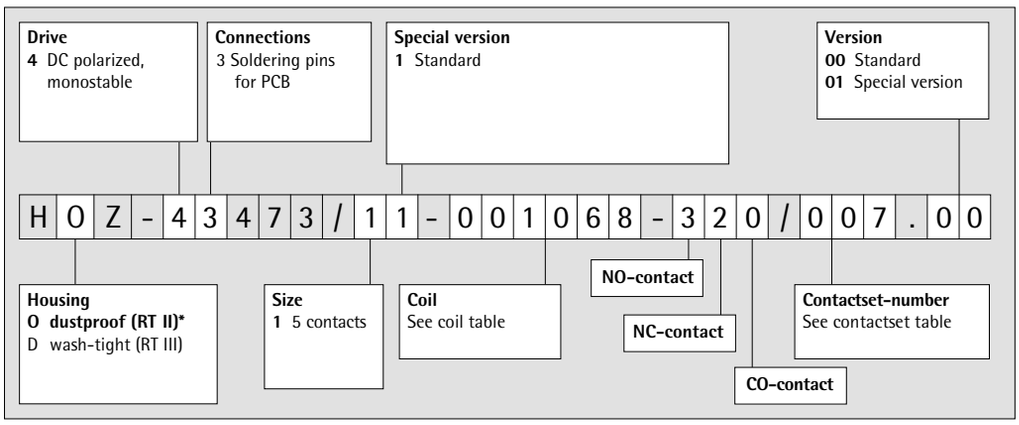
Type key



*** Preferred version**

Contactset table

Number of contacts NO/NC/CO-contacts	AgNi +0,2 µm Au	AgNi +2 µm Au	AgNi +5 µm Au	$AgSnO_2$ +0,2 µm Au	$AgSnO_2$ +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	

Coil table

All values at ambient temperature Tu = 20 °C

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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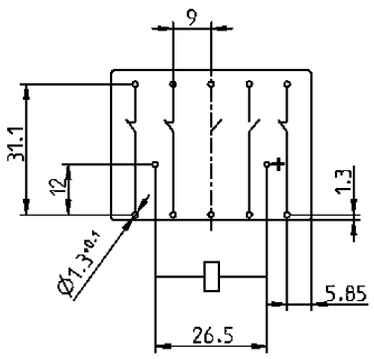
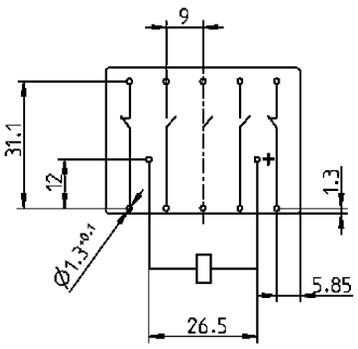
Connection grid

Few on soldering side

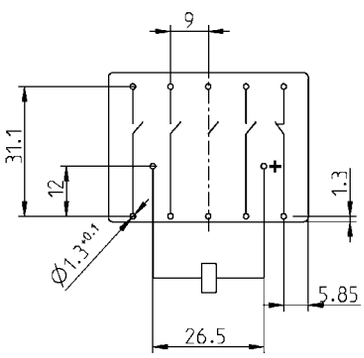
2 NO / 3 NC (230)



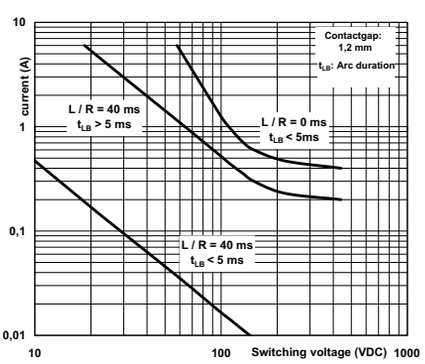
3 NO / 2 NC (320)



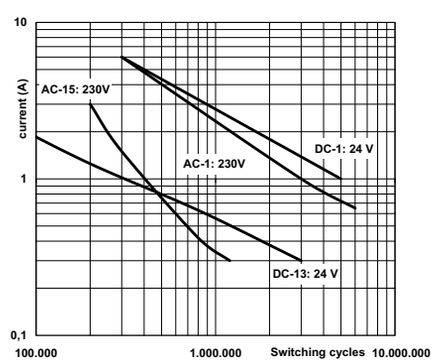
4 NO / 1 NC (410)



Diagram



DC-switching capacity



Electrical service life