

# Safety Relay H-463



## General

- 4 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

## Drive

- Direct current, neutral monostable
- Bistable upon request

## Approvals

- CSA • TÜV

## Standards

- EN 50205 • IEC 61810-1

## Technical Data mechanical

|  |  |
|--|--|
| Dimensions L x W x H (in mm)               | dustproof: 42,7 x 16 x 38,8<br>washtight: 42,7 x 16 x 39,9 |
| Shock resistance NO-contact/NC-contact     | 15/15 g, 11 ms Half sinus                                  |
| Vibration resistance NO-contact/NC-contact | 1,5/1,5 g, 10 - 150 Hz                                     |
| Operating time NC-contact, contact opens   | typical 10 ms  |
| Operating time NO-contact, contact closes  | typical 14 ms  |
| Releasing time NO-contact, contact opens   | typical 3,5 ms   |
| Releasing time NC-contact, contact closes  | typical 4,5 ms   |
| Mechanical service life (without load)     | >10 <sup>7</sup> cycles                                    |
| Weight                                     | 50 g   |

## Technical Data electrical

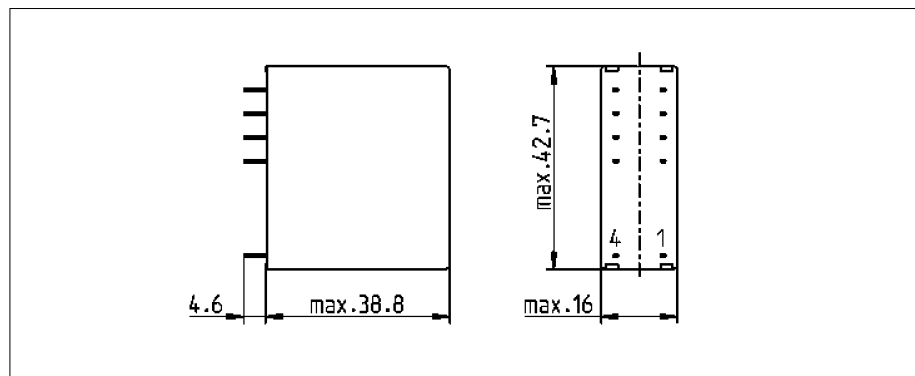
|  |   |
|--|---|
| Max. switching capacity  | AC 1.200 VA, DC *W  |
| Max. switching voltage   | AC 230/240 V, DC *V   |
| Max. switching current NO-contact                                  | 6 A   |
| Constant current I <sub>th2</sub>                                  | 6 A   |
| Constant current I <sub>th2</sub> at the same time over 2 contacts | 6 A   |
| Constant current I <sub>th2</sub> at the same time over 3 contacts | 5 A   |
| Switching capacity NO-contact                                      | AC-15 230/240 V      I <sub>e</sub> = 1,5 A<br>DC-13 24 V              I <sub>e</sub> = 2 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  |                                      |

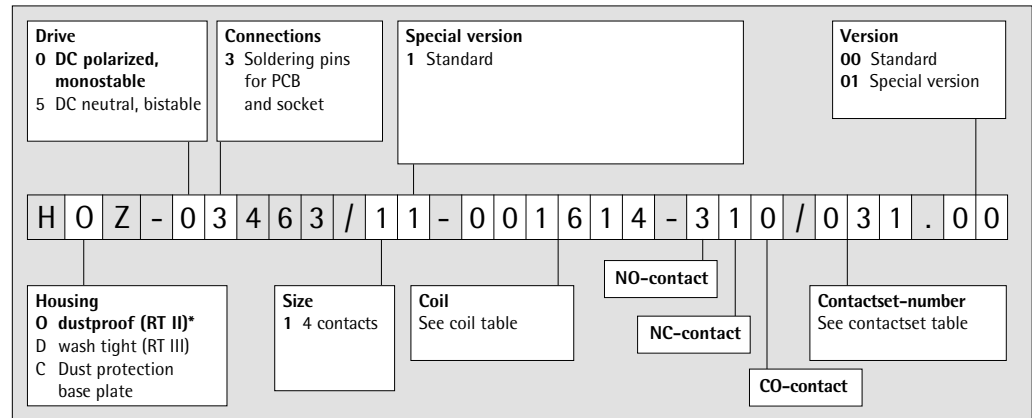
| Insulation between | Nominal voltage network system |              | Air-/creeping distance | Test voltage 50Hz/60s |
|--------------------|--------------------------------|--------------|------------------------|-----------------------|
|                    | AC 120/240 V                   | AC 230/400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

## Dimensions



# Safety Relay H-463

## Type key



\* Preferred version

## Contactset table

Contact material AgCdO  
since 2018 no longer available!

| Number of contacts<br>NO/NC/CO-contacts | AgCdO<br>+0,2 µm Au | AgCdO<br>+ 5 µm Au | AgCdO<br>+ 10 µm Au | AgSnO <sub>2</sub><br>+0,2 µm Au | AgSnO <sub>2</sub><br>+ 5 µm Au | Contact<br>material  |
|---|---------------------|--------------------|---------------------|----------------------------------|---------------------------------|----------------------|
| 220                                     | 030                 | 038                | 034                 | 040                              | 041                             | Contactset<br>number |
| 310                                     | 031                 | 037                | 032                 | 043                              | 044                             |                      |

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

## Coil table

Number of contacts  
310

| Coil-No. | Resistance<br>R/Ω | Resistance-<br>tolerance ± | $U_1/V$ | $U_2/V$ | $U_3/V$ | $U_{rück}/V$ | Printing<br>$U_{nom}/V$ |
|----------|-------------------|----------------------------|---------|---------|---------|--------------|-------------------------|
| 1626     | 32                | 5%                         | 3,9     | 10,3    | 11      | 0,7          | 6                       |
| 1620     | 130               | 7%                         | 8,0     | 20,7    | 23      | 1,5          | 12                      |
| 1614     | 500               | 8%                         | 16,1    | 40,4    | 45      | 2,9          | 24                      |
| 1611     | 1.900             | 7%                         | 31,6    | 79,0    | 89      | 5,7          | 48                      |
| 1709     | 3.100             | 7%                         | 40,4    | 100,9   | 114     | 7,3          | 60                      |
| 1083     | 10.000            | 9%                         | 73,9    | 179,9   | 202     | 13,0         | 110                     |
| 1303     | 25.000            | 12%                        | 125,5   | 281,7   | 328     | 21,1         | 220                     |

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

Number of contacts  
220

| Coil-No. | Resistance<br>R/Ω | Resistance-<br>tolerance ± | $U_1/V$ | $U_2/V$ | $U_3/V$ | $U_{rück}/V$ | Printing<br>$U_{nom}/V$ |
|----------|-------------------|----------------------------|---------|---------|---------|--------------|-------------------------|
| 1626     | 32                | 5%                         | 3,9     | 10,3    | 11      | 0,5          | 6                       |
| 1620     | 130               | 7%                         | 8,0     | 20,7    | 23      | 1,1          | 12                      |
| 1614     | 500               | 8%                         | 16,1    | 40,4    | 45      | 2,1          | 24                      |
| 1611     | 1.900             | 7%                         | 31,6    | 79,0    | 89      | 4,2          | 48                      |
| 1709     | 3.100             | 7%                         | 40,4    | 100,9   | 114     | 5,4          | 60                      |
| 1083     | 10.000            | 9%                         | 73,9    | 179,9   | 202     | 9,5          | 110                     |
| 1303     | 25.000            | 12%                        | 125,5   | 281,7   | 328     | 15,4         | 220                     |

$U_1$ : 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

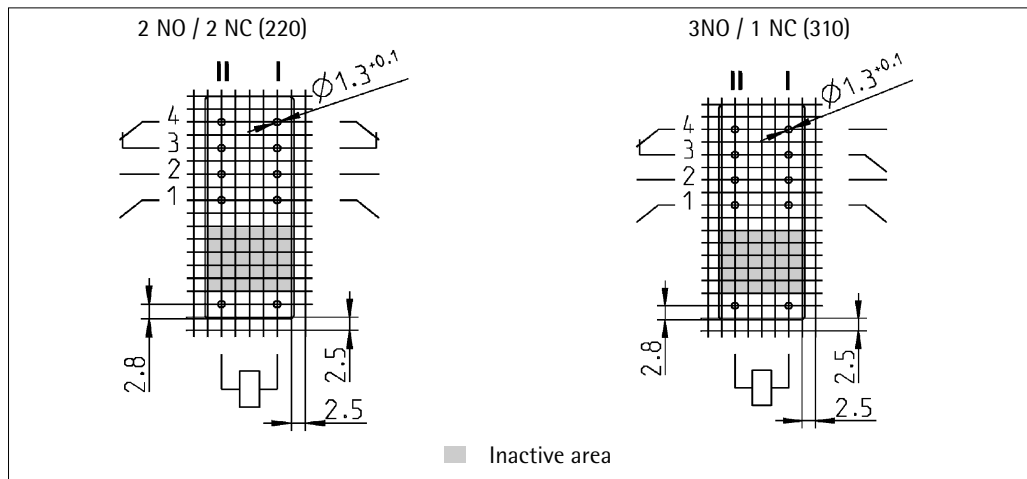
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## Running types

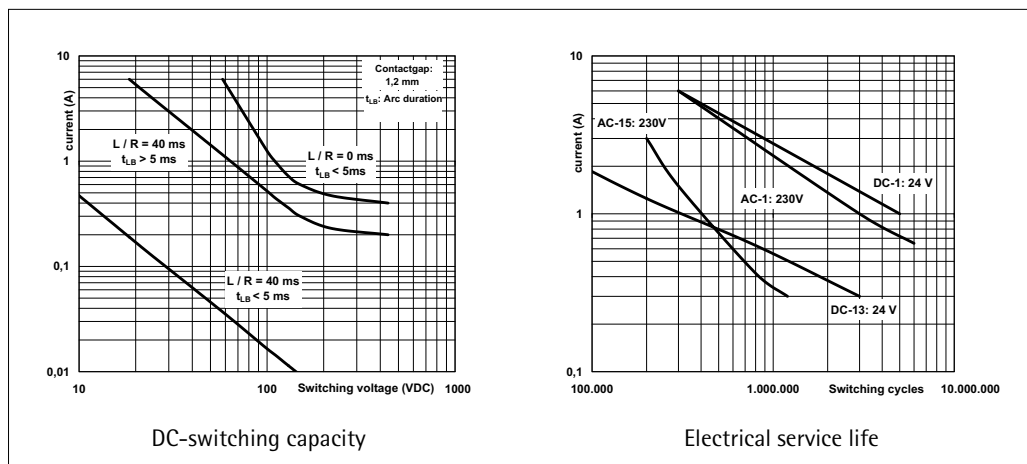
| Article-No. | Type key                       | Printing<br>$U_{nom}$ | $U_1/V$ | $U_2/V$ | $U_3/V$ | $U_{rück}/V$ |
|-------------|--------------------------------|-----------------------|---------|---------|---------|--------------|
| 463-1242    | HOZ-03463/11-001620-220/040.00 | DC 12 V               | 8,0     | 20,7    | 23      | 1,1          |
| 463-1243    | HOZ-03463/11-001620-310/043.00 | DC 12 V               | 8,0     | 20,7    | 23      | 1,5          |
| 463-1246    | HOZ-03463/11-001614-310/043.00 | DC 24 V               | 16,1    | 40,4    | 45      | 2,9          |
| 463-1247    | HOZ-03463/11-001626-220/040.00 | DC 6 V                | 3,9     | 10,3    | 11      | 0,5          |
| 463-1240    | HOZ-03463/11-001614-220/040.00 | DC 24 V               | 16,1    | 40,4    | 45      | 2,1          |
| 463-1251    | HOZ-03463/11-001614-220/041.00 | DC 24 V               | 16,1    | 40,4    | 45      | 2,1          |
| 463-1260    | HOZ-03463/11-001303-220/040.00 | DC 220 V              | 125,5   | 281,7   | 328     | 15,4         |
| 463-1248    | HOZ-03463/11-001614-310/044.00 | DC 24 V               | 16,1    | 40,4    | 45      | 2,9          |
| 463-1236    | HDZ-03463/11-001614-220/041.00 | DC 24 V               | 16,1    | 40,4    | 45      | 2,1          |
| 463-1255    | HOZ-03463/11-001520-220/041.01 | DC 12 V               | 8,0     | 20,7    | 23      | 1,1          |
|             |                                |                       |         |         |         |              |
|             |                                |                       |         |         |         |              |

## Connection grid

View on soldering side



## Diagrams



# Safety Relay H-463

## Accessories

