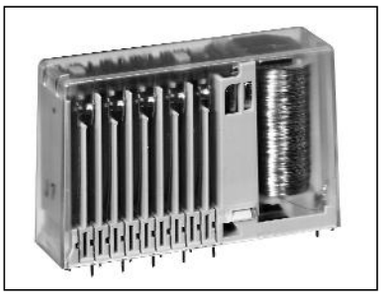
# Safety Relay K-RDM



**General**
- 8 or 10 contacts
- Forced guided contactset
- According to EN 50205, Application type A
- Ambient temperature –15 ... +70 °C
- Soldering heat resistance 260 °C/5s
- RoHS compliance

**Connections**
- Soldering pins for PCB, pre-soldered with Sn100

**Drive**
- Direct current, neutral monostable

**Approvals**
- cULus • TÜV

**Standards**
- EN 50205 • IEC 61810-1 • UL 508

## Technical Data
mechanical

| | |
|---|---|
| Dimensions L x W x H (in mm) | 70 x 20,5 x 44 |
| Shock resistance NO-contact/NC-contact | 10/10 g, 16 ms Half sinus |
| Vibration resistance NO-contact/NC-contact | 5/5 g, 5 – 55 Hz |
| Operating time NC-contact, contact opens | typical 13 ms |
| Operating time NO-contact, contact closes | typical 15 ms |
| Releasing time NO-contact, contact opens | typical 5 ms |
| Releasing time NC-contact, contact closes | typical 7 ms |
| Mechanical service life (without load) | $>10^7$ cycles |
| Weight | 85 g |

## Technical Data
electrical

| | |
|---|---|
| Max. switching capacity | AC 2.000 VA, DC *W |
| Max. switching voltage | AC 230/240 V, DC *V |
| Max. switching current | 8 A |
| Constant current $I_{th2}$ | 8 A |
| Constant current $I_{th2}$ at the same time over 2 contacts | 5,6 A |
| Constant current $I_{th2}$ at the same time over 3 contacts | 4,6 A |
| Constant current $I_{th2}$ at the same time over 4 contacts | 4 A |
| Constant current $I_{th2}$ at the same time over 5 contacts | 3,5 A |
| Constant current $I_{th2}$ at the same time over 6 contacts | 3,2 A |
| Constant current $I_{th2}$ at the same time over 7 contacts | 3,0 A |
| Constant current $I_{th2}$ at the same time over 8 contacts | 2,8 A |
| Switching capacity NO/NC-contact AC-15 230/240 V | Ie = 4/1,5 A |
| DC-13 24 V | Ie = 1,2/1,2 A |
| Electrical service life (with nominal load) | $>10^5$ cycles |
| Short-circuit capacity 1.000 A/AC 230 V | 10 A gL/gG-fuse |

* see DC-switching capacity

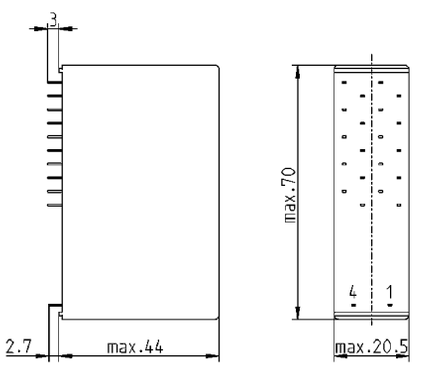
## Insulation

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

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

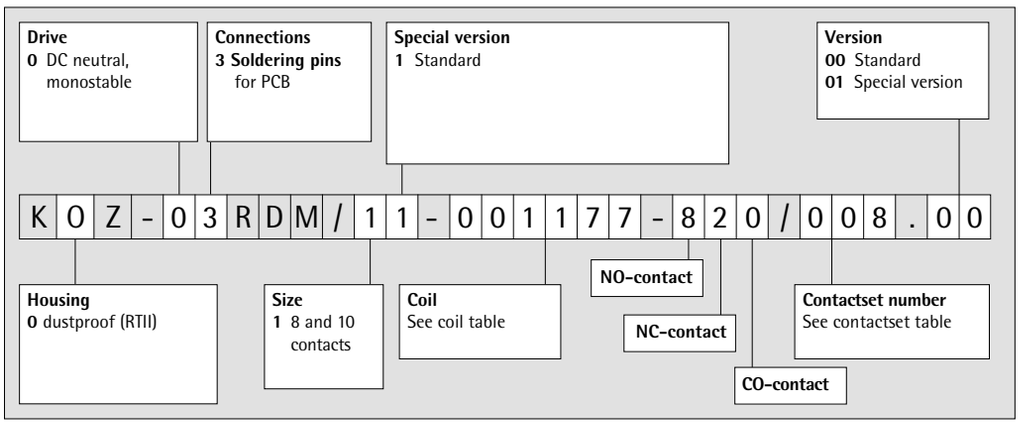
| Insulation between | Nominal voltage network system | | Air -/ creeping distance | Test voltage 50Hz/60s |
|---|---|---|---|---|
| | AC 120/240 V | AC 230/400 V | | |
| Contact – Contact | V-I | B-I | > 3 mm | AC 2.500 V |
| Contactset – Drive | V-I | B-I | > 3 mm | AC 2.500 V |

## Dimensions



# Safety Relay K-RDM

## Type key




## Contactset table

| Number of contacts NO/NC/CO-contacts | $AgSnO_2$ +0,2 µm Au | $AgSnO_2$ +2 µm Au | Contact material |
|---|---|---|---|
| **260** | 009 | 010 | Contactset number |
| **440** | 001 | 002 | |
| **460** | 003 | 004 | |
| **530** | 014 | 013 | |
| **620** | 011 | 012 | |
| **730** | 005 | 006 | |
| **820** | 007 | 008 | |

## 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 |
|---|---|---|---|---|---|---|---|
| 1028 | 30 | 5% | 4,1 | 10,3 | 10 | 0,3 | 6 |
| 1321 | 140 | 6% | 9,4 | 22,2 | 23 | 0,6 | 12 |
| 1177 | 335 | 8% | 15,1 | 34,1 | 37 | 0,9 | 24 |
| 1412 | 1.800 | 7% | 34,3 | 79,4 | 85 | 2,1 | 48 |
| 1468 | 2.500 | 7% | 39,5 | 93,5 | 98 | 2,5 | 60 |
| 1506 | 11.500 | 9% | 89,3 | 199,2 | 214 | 5,4 | 120 |
| 1103 | 42.600 | 12% | 176,2 | 379,1 | 404 | 10,2 | 230 |
| | | | | | | | |

$U_1$: 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 type

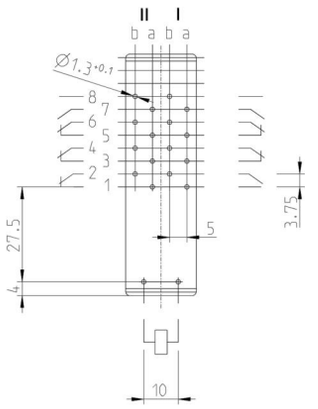
| Article-No. | Type key | Printing $U_{nom}$ | $U_1$/V | $U_2$/V | $U_3$/V | $U_{rück}$/V |
|---|---|---|---|---|---|---|
| RDM-0853 | KOZ-03RDM/11-001177-730/006.00 | DC 24 V | 15,1 | 34,1 | 37 | 0,9 |
| RDM-0854 | KOZ-03RDM/11-001177-820/008.00 | DC 24 V | 15,1 | 34,1 | 37 | 0,9 |
| RDM-0885 | KOZ-03RDM/11-001177-530/013.00 | DC 24 V | 15,1 | 34,1 | 37 | 0,9 |
| RDM-0887 | KOZ-03RDM/11-001177-260/010.00 | DC 24 V | 15,1 | 34,1 | 37 | 0,9 |
| | | | | | | |

# Safety Relay K-RDM

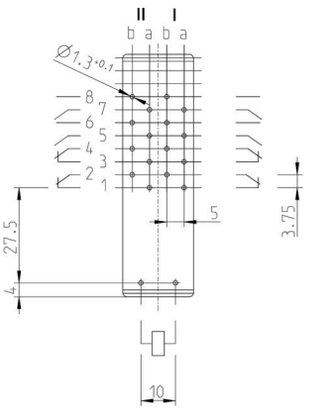
**Connection grid**
View on soldering side

8 contacts

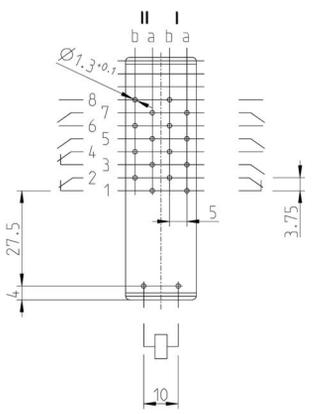
2 NO-contacts / 6 NC-contacts (260)



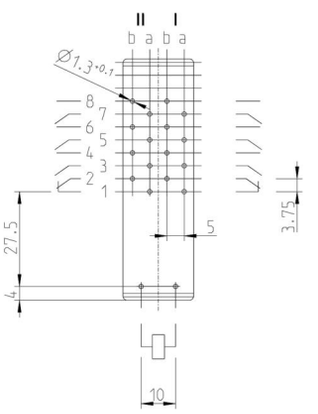

4 NO-contacts / 4 NC-contacts (440)




5 NO-contacts / 3 NC-contacts (530)




6 NO-contacts / 2 NC-contacts (620)

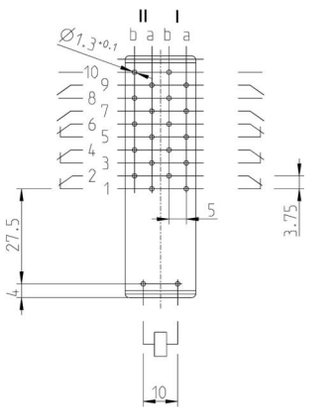


# Safety Relay K-RDM

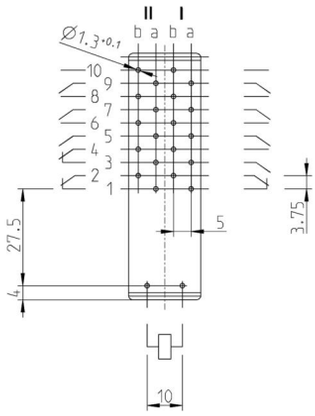
**Connection grid**
Few on soldering side

10 contacts

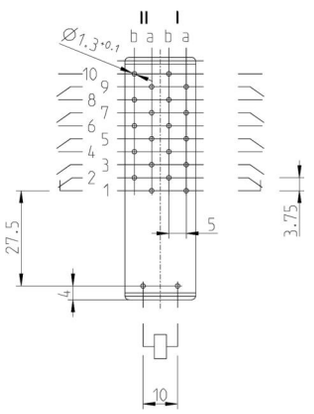
4 NO-contacts / 6 NC-contacts (460)



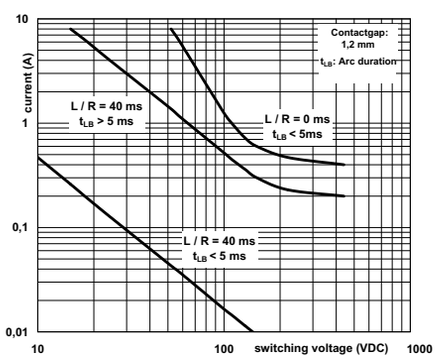

7 NO-contacts / 3 NC-contacts (730)



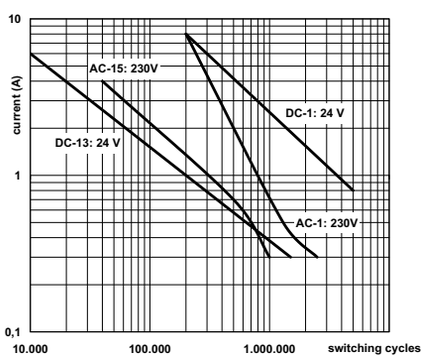

8 NO-contacts / 2 NC-contacts (820)




**Diagrams**




DC-switching capacity




Electrical service life