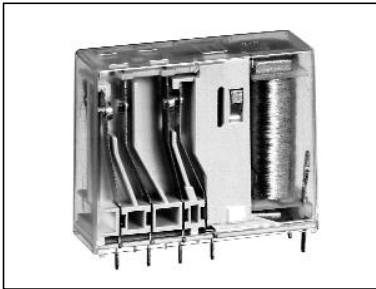


Safety Relay K-RAS



General

- 4 contacts
- Forced guided contact set
- According to EN 50205, application type A
- Ambient temperature -25 ... +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)	36 x 12,5 x 29
Shock resistance NO-contact/NC-contact	10/10 g, 16 ms half sinus
Vibration resistance NO-contact/NC-contact	5/5 g, 10 – 55 Hz
Operating time NC-contact, contact opens	typical 6 ms
Operating time NO-contact, contact closes	typical 12 ms
Releasing time NO-contact, contact opens	typical 4 ms
Releasing time NC-contact, contact closes	typical 6 ms
Mechanical service life (without load)	>10 ⁷ cycles
Weight	30 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	6 A
Constant current I _{th2}	6 A
Constant current I _{th2} at the same time over 2 contacts	4,2 A
Constant current I _{th2} at the same time over 3 contacts	3,4 A
Switching capacity NO-contact/NC-contact	AC-15 230/240 V I _e =4/1,2 A
NO-contact/NC-contact	DC-13 24 V I _e =2/1,2 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	

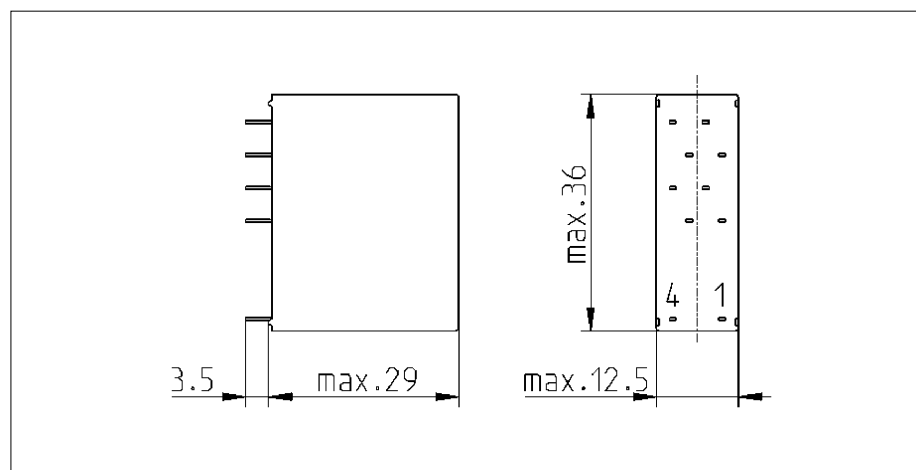
Insulation

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

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

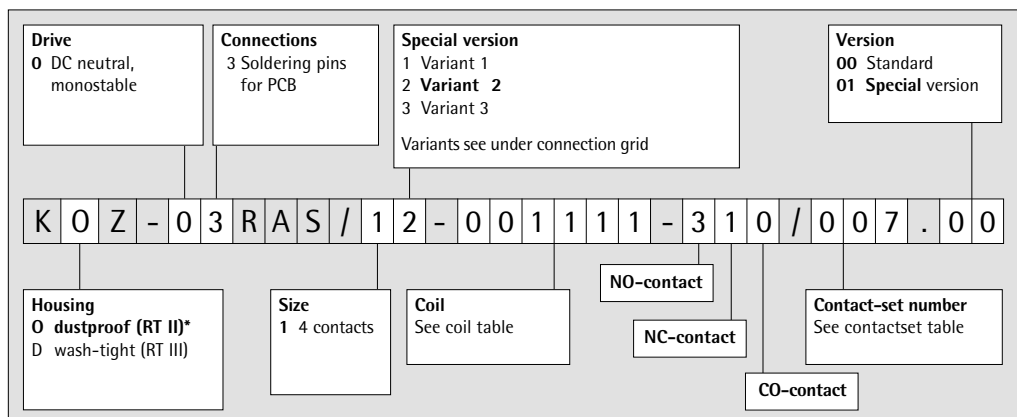
Insulation between	Nominal voltage network system		Air-/creeping distance	Test voltage 50Hz/60s
	AC 120/240 V	AC 230/400		
Contact - Contact	V-I	B-I	> 3 mm	AC 2.500 V
Contactset - Drive	V-I	B-I	> 3 mm	AC 4.000 V

Dimensions



Safety Relay K-RAS

Type key



* Preferred version

Contactset table

Variants see under connection grid	Number of contacts NO/NC/CO-contacts	AgSnO ₂ + 0,2 μm Au	AgSnO ₂ + 2 μm Au	Contact material
Variant 1	220	001	002	Contactset- number
Variant 1	310	003	004	
Variant 2	220	005	006	
Variant 2	310	007	008	
Variant 3	220	014	016	
Variant 3	310	015	017	

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
1020	45	7%	3,7	10,0	9	0,2	6
1180	190	8%	8,1	20,4	20	0,5	12
1111	730	7%	14,9	40,2	37	1,0	24
1006	2.770	9%	30,5	77,8	74	1,9	48
1094	4.950	10%	42,9	103,4	101	2,6	60
1002	15.440	14%	77,2	180,4	174	4,5	110

U₁: Minimum operating voltage with consideration of coil self heating

U₂: Thermal restricted maximum coil voltage

U₃: 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

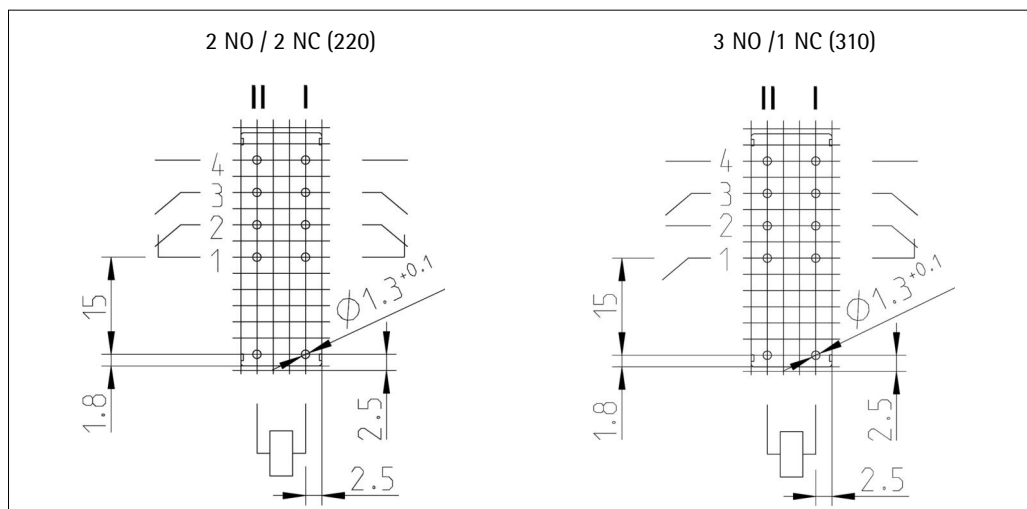
Safety Relay K-RAS

Running types

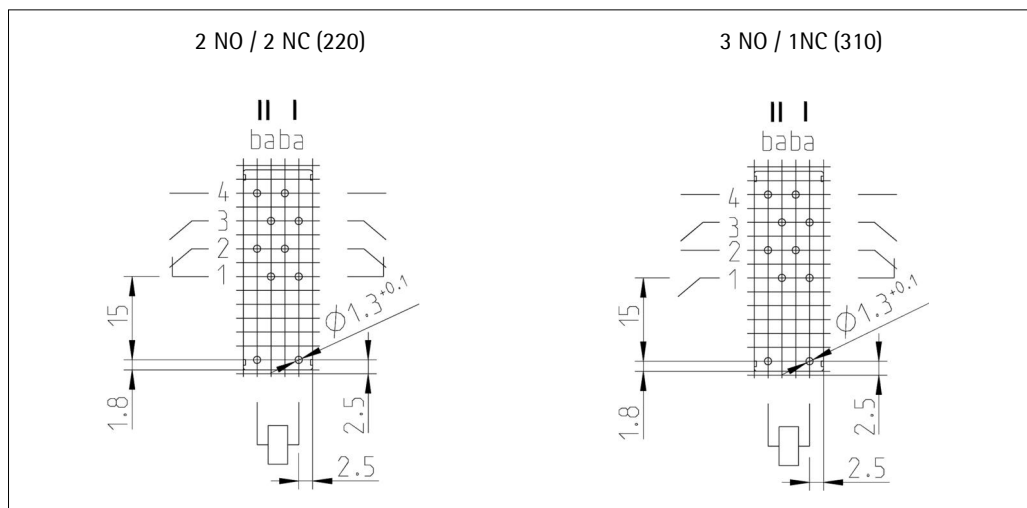
Article-No.	Type key	Printing U_{nom}	U_1/V	U_2/V	U_3/V	$U_{rück}/V$
RAS-2702	KOZ-03RAS/12-001111-310/008.00	DC 24 V	14,9	40,2	37	1,0
RAS-2704	KOZ-03RAS/12-001111-310/007.00	DC 24 V	14,9	40,2	37	1,0
RAS-2705	KOZ-03RAS/11-001111-310/003.00	DC 24 V	14,9	40,2	37	1,0
RAS-2709	KOZ-03RAS/12-001111-220/006.00	DC 24 V	14,9	40,2	37	1,0
RAS-2710	KOZ-03RAS/11-001111-220/002.00	DC 24 V	14,9	40,2	37	1,0
RAS-2711	KOZ-03RAS/12-001180-220/006.00	DC 12 V	8,1	20,4	20	0,5
RAS-2713	KOZ-03RAS/11-001111-220/001.00	DC 24 V	14,9	40,2	37	1,0
RAS-2714	KOZ-03RAS/12-001180-310/008.00	DC 12 V	8,1	20,4	20	0,5
RAS-2721	KOZ-03RAS/12-001111-220/005.00	DC 24 V	14,9	40,2	37	1,0
RAS-2722	KOZ-03RAS/11-001180-220/001.00	DC 12 V	8,1	20,4	20	0,5
RAS-2723	KOZ-03RAS/11-001180-310/003.00	DC 12 V	8,1	20,4	20	0,5
RAS-2724	KOZ-03RAS/11-001180-220/002.00	DC 12 V	8,1	20,4	20	0,5
RAS-2725	KOZ-03RAS/11-001180-310/004.00	DC 12 V	8,1	20,4	20	0,5
RAS-2727	KOZ-03RAS/12-001180-310/007.00	DC 12 V	8,1	20,4	20	0,5
RAS-2731	KOZ-03RAS/12-001006-220/005.00	DC 48 V	30,5	77,8	74	1,9
RAS-2733	KOZ-03RAS/12-001006-220/006.00	DC 48 V	30,5	77,8	74	1,9
RAS-2734	KOZ-03RAS/12-001006-310/008.00	DC 48 V	30,5	77,8	74	1,9
RAS-2748	KOZ-03RAS/12-001002-310/008.00	DC 110 V	77,2	180,4	174	4,5
RAS-2767	KOZ-03RAS/12-001111-220/006.00	DC 24 V	14,9	40,2	37	1,0
RAS-2768	KOZ-03RAS/12-001180-220/006.00	DC 12 V	8,1	20,4	20	0,5

Connection grid View on soldering side

Variant 1



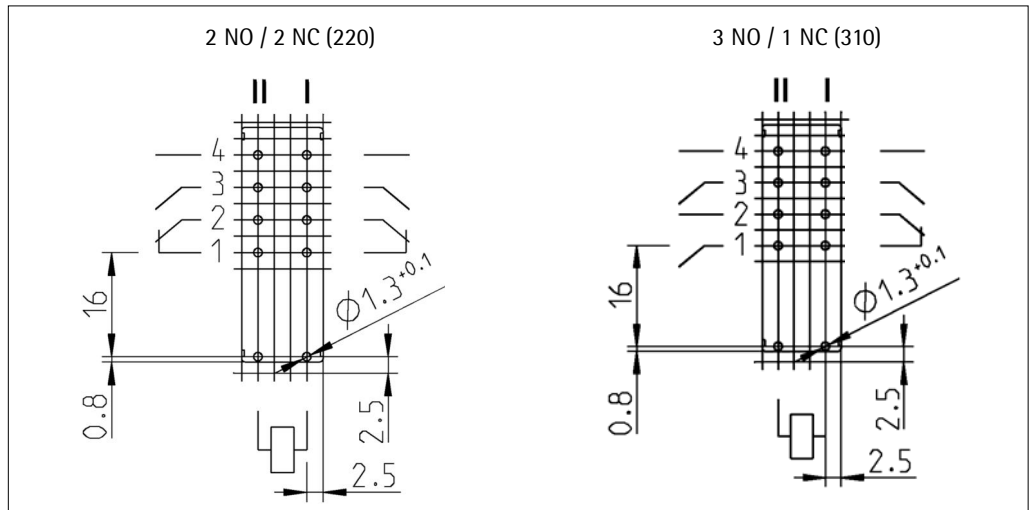
Variant 2



Safety Relay K-RAS

Connection grid
Few on soldering side

Variant 3



Diagram

