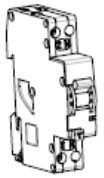

KZS-1M
KZS-1M LT
KZS 1M-DN

Miniature Residual Current Operated Circuit-Breaker with Overcurrent Protection (Mini RCBO 1P+N)

Instructions for mounting and application **EN**

1. MOUNTING

Miniature Residual Current Operated Circuit-Breaker with Overcurrent Protection can be used in TN-S,TN-C-S, TT and IT network systems which means in all places where neutral and protective conductor are not connected together.
RCBO shall be mounted onto a rail of 35 mm according to EN 50022 and EN 60715.

2. CONNECTION

Connections and internal connections are shown in Figure 1.
Disconnect during insulation test.

3.TECHNICAL DATA

Rated voltage U_n	~ 230/240 V
Minimum operating voltage U_{min}	~ 90 V
Rated current I_n	6 - 25 A
Tripping characteristic	B, C
Rated residual current $I_{\Delta n}$	10, 30, 100 mA
Rated frequency	50/60 Hz
Rated short-circuit capacity	6 kA
Energy limiting class	3
Cross section of connetcing lead	1 - 10 mm²
Standards	EN 61009-1, IEC 61009-1

* KZS-1M-DN Overvoltage characteristics	Break time and non-actuating time at a voltage equal to				
	255 V	**275 V**	**300 V**	**350 V**	**400 V**
Max. break time	No tripping	15 s	5 s	0,75 s	0,20 s
Min. non-actuating time		3 s	1 s	0,25 s	0,07 s

4. OPERATION

The conditions for the correct operation of the RCBO
- The phase conductor and the neutral conductor shall be conducted through the RCBO;
- The neutral conductor and phase conductor shall be behind the breaker insulated, otherwise there can appear false or unwanted tripping.

5. TESTING OF BREAKER OPERATION WITH THE TEST BUTTON

At least once in a half year the test button "T" shall be actuated. On doing this, the RCBO shall switch off.

6. EXPLANATION OF THE SYMBOLS ON THE BREAKER

- RCBO for residual sinusoidal alternating and residual pulsating direct currents
- lower temperature limit of the RCBO use
- lower temperature limit of RCBO LT use
- maximum tightening torque

* valid only for KZS-1M-DN

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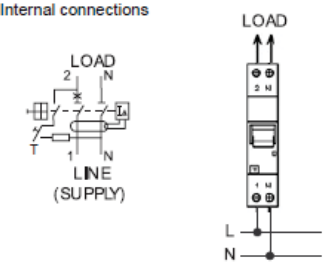
Figure 1: Internal connections



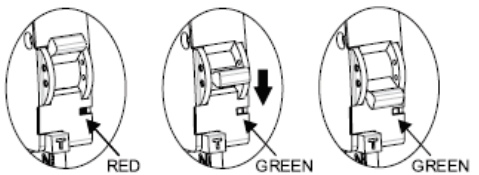
WARNING!
Installation by qualified contractors only!
The supply MUST BE connected on marked LINE side

Figure 2: Characteristic handle positions and their descriptions

ON ("1")
- Handle is up
- Indicator is RED

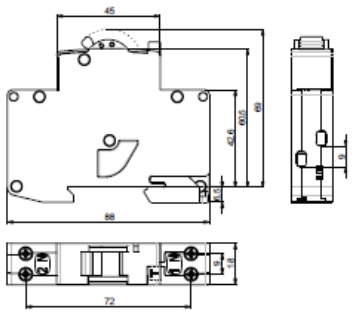
TRIP (after occurance of overcurrent or residual current)
- Handle is in the middle
- Indicator is GREEN

OFF ("0")
- Handle is down
- Indicator is GREEN



Reset force must be applied on handle before re-arming!

Figure 3: Dimensional drawing



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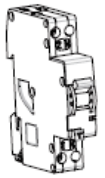

KZS-1M
KZS-1M LT
KZS 1M-DN

Miniaturno kombinirano zaščitno stikalo na diferenčni tok z nadtokovno zaščito

Navodila za montažo in uporabo **SL**

1. MONTAŽA

Kombinirano zaščitno stikalo z nadtokovno zaščito KZS 1M se lahko uporablja v TN-S, TN-C-S, TT in IT sistemih omrežja, torej povsod tam, kjer zaščitni in ničelni vodnik nista povezana. KZS-1M je namenjeno montaži na nosilno letev 35 mm po EN 50022 in EN 60715.

2. PRIKLJUČEVANJE

Način priključitve in notranje povezave so prikazane na skici 1. Med preizkusom izolacijske trdnosti inštalacije, aparat ne sme biti priključen na inštalacijske vodnike.

3. TEHNIČNI PODATKI

Nazivna napetost U_n	~ 230/240 V
Minimalna fukcionalna napetost U_{min}	~ 90 V
Nazivni tok I_n	6 - 25 A
Izklopna karakteristika	B, C
Nazivni tok napake $I_{\Delta n}$	10, 30, 100 mA
Nazivna frekvenca	50/60 Hz
Nazivna kratkostična zmogljivost	6 kA
Razred selektivnosti	3
Presek priključnih vodnikov	1 - 10 mm²
Standardi	EN 61009-1, IEC 61009-1

* KZS-1M-DN Nadnapetostna karakteristika	(Ne) prožilni časi v odvisnosti od napajalne napetosti				
	255 V	**275 V**	**300 V**	**350 V**	**400 V**
Max. čas proženja	Ne proži	15 s	5 s	0,75 s	0,20 s
Min. čas neproženja		3 s	1 s	0,25 s	0,07 s

4. DELOVANJE

Pogoji za pravilno delovanje zaščitnega stikala:
- Fazni in ničelni vodnik morata biti vodena skozi zaščitno stikalo;
- Ničelni in fazni vodnik morata biti za stikalom izolirana, sicer lahko prihaja do napačnih oziroma lažnih proženj.

5. PREISKUS DELOVANJA STIKALA S TESTNO TIPKO

Vsaj enkrat na pol leta je potrebno pritisniti testno tipko "T". Zaščitno stikalo mora pri tem izklopiti.

6. RAZLAGA SIMBOLOV NA STIKALU

- zaščitno stikalo za sinusne izmenične in pulzirajoče enosmerne toke napake
- spodnja temperaturna meja uporabe zaščitnega stikala
- spodnja temperaturna meja uporabe zaščitnega stikala (velja za LT izvedbo)
- maksimalni moment vijačenja

* velja samo za KZS-1M-DN

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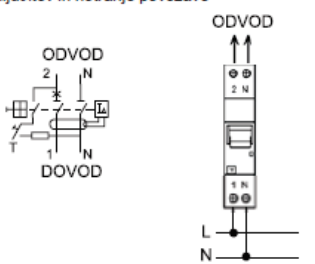
Skica 1: Priključitev in notranje povezave



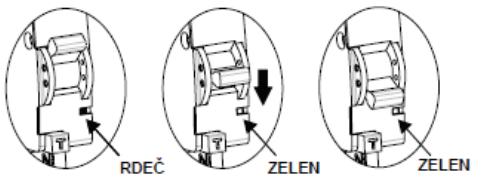
OPOZORILO!
Inštalacijo stikala sme opraviti samo kvalificirana oseba!
Dovod mora biti OBVEZNO priključen na označeni dovodni strani med sponkama 1 in N!

Skica 2: Opis karakterističnih položajev gumba

VKLOP ("1")
- Gumb zgoraj
- Indikator RDEČ

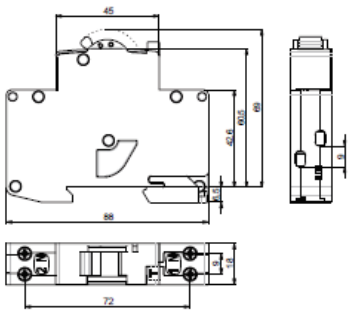
TRIP (po proženju na nadtok oziroma tok napake)
- Gumb na sredini
- Indikator ZELEN

IZKLOP ("0")
- Gumb spodaj
- Indikator ZELEN



Pred ponovnim vklopom stikala je potrebno gumb resetirati - potisniti v položaj IZKLOP!

Skica 3: Dimenzijske risbe



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