

RESIDENTIAL AND COMMERCIAL INSTALLATIONS

ETI provides high-quality and integral solutions for protection of electrical installations in buildings. We supply all kinds of type D, D0 and C fuse-links, as well as MCB's and various types of residual current protection switches from ASTI group. In our sales program you will also find various types of switches and supervision & control devices of EVE group. Very important is also overvoltage protection ETITEC. All together shall be built, of course, into a distribution cabinet DIDO of your choice. The products are internationally certified and carry several quality marks.



RCBOs - Residual current circuit breakers with integral overcurrent protection KZS

Advantages of residual current circuit breakers with integral overcurrent protection KZS - 1M

→ Combining the features of miniature circuit breaker and a residual current circuit breaker, functionally dependent on line voltage (minimum supply voltage 90V)

→ Version with operating temperature down to -35°C also available

→ Real contact position indication for easier identification, whether RCBO is in ON or OFF position

→ Added protection against any pulsating DC component that can be generated from electrical appliances

→ Energy limiting class 3: highest energy limiting performance for optimal protection of cable insulation and maximally reducing risk of fire and other damage

→ Sealing possibility

→ 1-module housing (18 mm), with switched neutral line

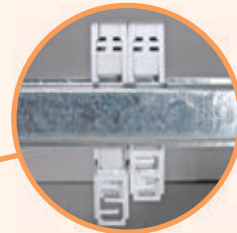
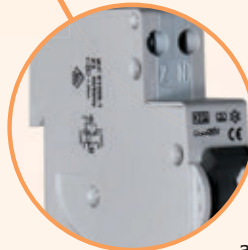
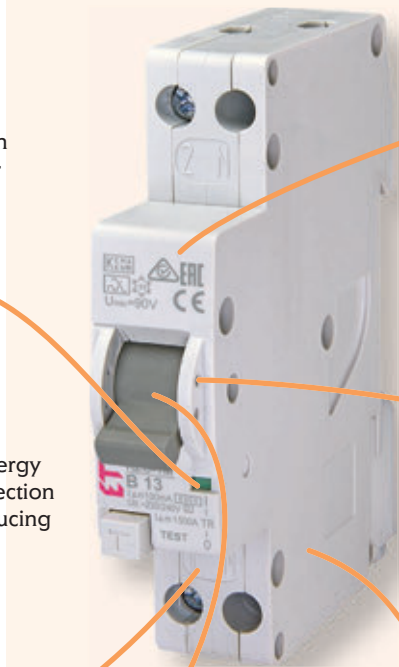
→ Clearly marked terminals to ensure appropriate connection

→ In case of overcurrent or differential current, the button moves to the "trip" (middle) position. In case of manual turn off, the button moves to the "off" (lowest) position.

→ All necessary technical and installation information can be found on the front and side of the device

→ The terminals accept not only wires but also time saving busbars

→ Advanced method of mounting enables an easy removal of single RCBO without disconnecting other units from the busbar



Residual current circuit breakers with integral overcurrent protection

Residual current circuit breaker with integral overcurrent protection KZS-4M 3p+N

Rated short-circuit capacity 6 kA	Rated current 6 - 32 A	Tripping characteristic B, C	Rated residual current 0,03 A - 0,5 A
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KZS-4M 3p+N I_{Δn} = 30 mA

I _n [A]	Type A		Type AC		Weight [g]	Packaging [pcs]
	Code No. B	Code No. C	Code No. B	Code No. C		
6	002174901	002174921	002174001	002174021	515	1/27
10	002174902	002174922	002174002	002174022	515	1/27
13	002174903	002174923	002174003	002174023	515	1/27
16	002174904	002174924	002174004	002174024	515	1/27
20	002174905	002174925	002174005	002174025	515	1/27
25	002174906	002174926	002174006	002174026	515	1/27
32	002174907	002174927	002174007	002174027	515	1/27

KZS-4M 3p+N I_{Δn} = 100 mA

I _n [A]	Type A		Weight [g]	Packaging [pcs]
	Code No. B	Code No. C		
6	002174401	002174421	515	1/27
10	002174402	002174422	515	1/27
13	002174403	002174423	515	1/27
16	002174404	002174424	515	1/27
20	002174405	002174425	515	1/27
25	002174406	002174426	515	1/27
32	002174407	002174427	515	1/27

KZS-4M 3p+N I_{Δn} = 300 mA

I _n [A]	Type A		Weight [g]	Packaging [pcs]
	Code No. B	Code No. C		
6	002174501	002174521	515	1/27
10	002174502	002174522	515	1/27
13	002174503	002174523	515	1/27
16	002174504	002174524	515	1/27
20	002174505	002174525	515	1/27
25	002174506	002174526	515	1/27
32	002174507	002174527	515	1/27

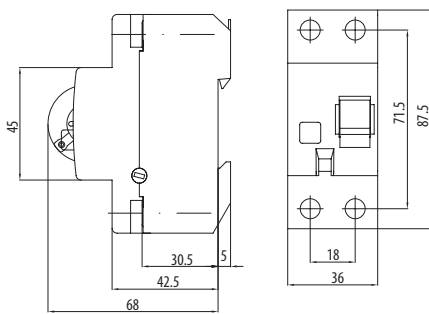
KZS-4M 3p+N I_{Δn} = 500 mA

I _n [A]	Type A		Weight [g]	Packaging [pcs]
	Code No. B	Code No. C		
6	002174601	002174621	515	1/27
10	002174602	002174622	515	1/27
13	002174603	002174623	515	1/27
16	002174604	002174624	515	1/27
20	002174605	002174625	515	1/27
25	002174606	002174626	515	1/27
32	002174607	002174627	515	1/27

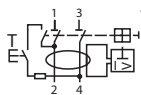


Residual current circuit breaker EFI-2

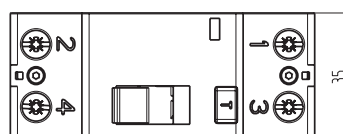
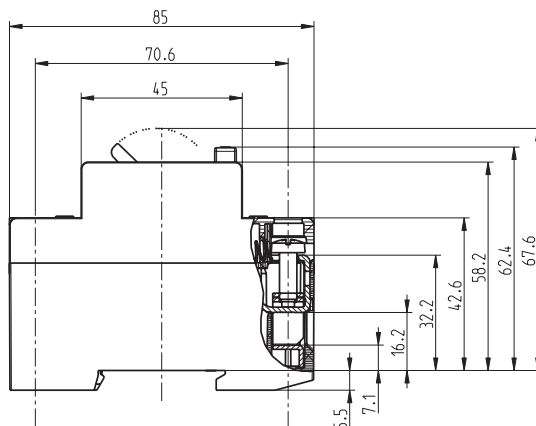
Technical data			
Type	Instantenous	G/KV type	S type
Electrical			
Rated voltage U_n	230/240V AC	230/240V AC	230/240V AC
Rated current I_n	16, 25, 40, 63, 80, 100A	25, 40, 63A	25, 40, 63A
Rated Insulation voltage U_i	440V	440V	440V
Rated frequency f_n	50/60Hz	50/60Hz	50/60Hz
Peak withstand current	-	3kA (8/20ms) surge current proof	5kA (8/20ms) surge current proof
Electrical isolation	> 4mm contact space	> 4mm contact space	> 4mm contact space
Rated residual operating current $I_{\Delta n}$	0,03; 0,1 & 0,3A	0,03; 0,1 & 0,3A	0,1 & 0,3A
Rated conditional short-circuit current I_{cn}	10kA	10kA	10kA
Rated making and breaking capacity I_m	800A	630A	630A
Maximum back-up fuse	100A gG	80A gG	80A gG
Isolation class	B	B	B
Standard	IEC/EN 61008	IEC/EN 61008, OVE E 8601	IEC/EN 61008
Mechanical endurance (op. c.)	> 4000	> 4000	> 4000
Electrical endurance (op. c.)	> 2000	> 2000	> 2000
Mechanical			
Frame size	45mm	45mm	45mm
Device height	68mm (DIN rail acc to EN60715)	68mm (DIN rail acc to EN60715)	68mm (DIN rail acc to EN60715)
Device width	36mm (2 x Module units 18mm)	36mm (2 x Module units 18mm)	36mm (2 x Module units 18mm)
Degree of protection	IP20	IP20	IP20
Upper and lower terminals	open mounted/lift terminals	open mounted/lift terminals	open mounted/lift terminals
Terminal capacity	1-25mm ²	1-25mm ²	1-25mm ²
Terminal screw	M5 (Pozidrive PZ2)	M5 (Pozidrive PZ2)	M5 (Pozidrive PZ2)
Terminal torque	2-2,5Nm	2-2,5Nm	2-2,5Nm
Busbar thickness	0,8 - 2 mm	0,8 - 2 mm	0,8 - 2 mm
Operating temperature	-25°C ... +55°C	-25°C ... +55°C	-25°C ... +55°C
Storage and transport temperature	-40°C ... +70°C	-40°C ... +70°C	-40°C ... +70°C
Resistance to climatic conditions	IEC/EN 61008	IEC/EN 61008	IEC/EN 61008
Resistance to vibrations acc. to IEC 60068-2-7	5g (10,60 & 500Hz)	5g (10,60 & 500Hz)	5g (10,60 & 500Hz)
Contact position indicator	mechanical red/green	mechanical red/green	mechanical red/green
Supply possibility	Top or bottom	Top or bottom	Top or bottom
Mounting position	any	any	any



EFI-2 16-80 A



EFI-2 100 A



EFI-2 100 A