



ETL1-63, ETL1-63H RESIDUAL CURRENT CIRCUIT BREAKER (RCCB)

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Thank you for choosing EK Series Residual Current Circuit Breakers.
Please read this manual before installation, operation and maintenance.

OVERVIEW

Residual Current Circuit Breaker is a switch that must be used against electrical shocks occurring in the respective grid and endangering human lives or against fires resulting from the mistakes in isolation. Residual Current Circuit Breaker is produced in the following two types with its fully "electromechanical" operating principle:

- Life Protection (10, 30mA)
- Fire Protection (100, 300mA)

STANDARD AND QUALITY CERTIFICATES IEC/EN 61008-1



Model No.	Type	In (A)	IΔn (mA)
2/4P ETL1-63 EKL1-63H	AC, A, S	16, 25, 32, 40, 63A	30, 100, 300mA
2P ETL1-63 EKL1-63H	AC, A	16, 25	10mA

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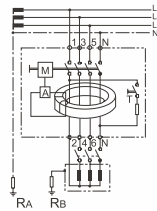
TECHNICAL SPECIFICATIONS

Model No.	Rated Voltage Ue	Short-circuit current Inc= IΔc	Rated Frequency	Number of Poles
ETL1-63	2P 230V~ (240)	6,000A	50/60Hz	2P(1P+N)
ETL1-63H	4P 400V~ (415)	10,000A		4P(3P+N)

EFFECTS OF RESIDUAL CURRENT

- 0,5 - 10 mA → Having pins and needles
- 10 mA → Beginning of convulsion
- 20 - 30 mA → Convulsion of diaphragm
- 70 - 100 mA → Beginning of heart trembling
- 100 mA → Stopping of heart and death

- A : Opening Relay
- M : Opening Coil
- RA : Protection Earth
- RB : Operation Earth
- T : Test Button



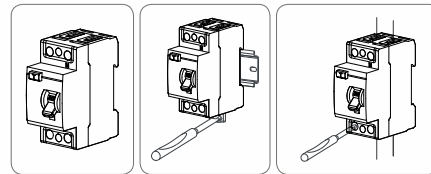
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PRODUCT ASSEMBLY

- Product calibrating and programming are performed during manufacture and each product is offered to sales after a through quality control. There are no maintenance or programming tasks that the users can perform.



- Ensure that the power is cut off before the assembly of the products.
- Connection and assembly of the electrical devices should be carried out only by the technical personnel having certificate of competency.



Maximum terminal for cable
Cable sections
Momentum power for electrical terminal connection
Suitable panel and rail for product assembly

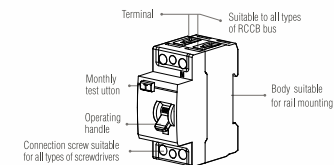
:25mm²
:13mm
:2,5Nm max.
:35mm Din rail

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THINGS TO CONSIDER DURING RESIDUAL CURRENT CIRCUIT BREAKER ASSEMBLY

- The nominal currents of the Residual Current Circuit Breaker should be at values in line with the size of the protected grid.
- The installation should be grounded.
- In two-pole Residual Current Circuit Breaker, two phase and one neutral, and in four-pole Residual Current Circuit Breaker, three phase and one neutral should be connected.
- To test Residual Current Circuit Breaker, "Test Monthly" button should be pressed. This test should be repeated once a month. Phase and neutral should never be bypassed to test Residual Current Circuit Breaker.

PRODUCT FUNCTIONS



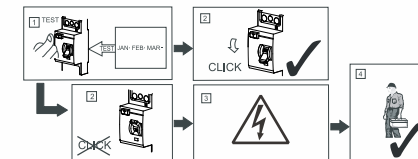
Connection screw suitable for all types of screwdrivers

Terminal Suitable to all types of RCCB bus

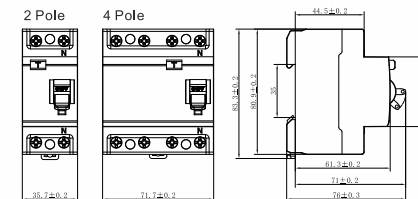
Body suitable for rail mounting

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Operation alarm of Test Button



Overalland Installation Dimension(mm)



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ELECTRICAL DIAGRAM (AC,A,S)



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