

### GENERAL INFORMATION

The ELR-61, ELR-m61, ELR-62, ELR-m62 are a new series manufactured within a modular enclosure, according with DIN 43800 Standard, with 6 modules width (module base 17.5mm).

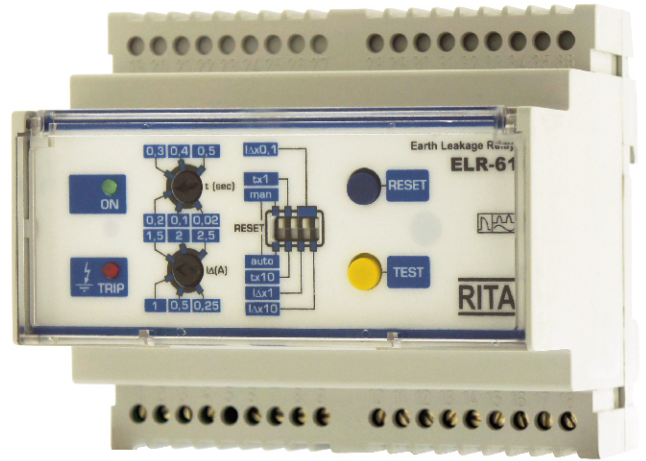
An outstanding characteristic of the present relays, is the permanent control of the Toroidal-ELR circuit. Its interruption brings along the immediate trip of the protection. This allows to identify the anomaly, without waiting to the preiodical control, made with the Test Push Button.

The instrument, fitted with filters at the input circuits, is practically immune to external disturbances, so as the pulse currents with dc components, complying with the requirements of VDE 0664 and project IEC 23 Standards.

The optional alarm feature (ELR-62/m62) tripping at 70% of the adjusted tripping current, may advise in advance about a lack of isolation situation.

These devices may be fitted optionally with the mechanical tripping indication (ELR-m61/m62), which is quite suitable for signalling of a tripped unit, in absence of auxiliary supply.

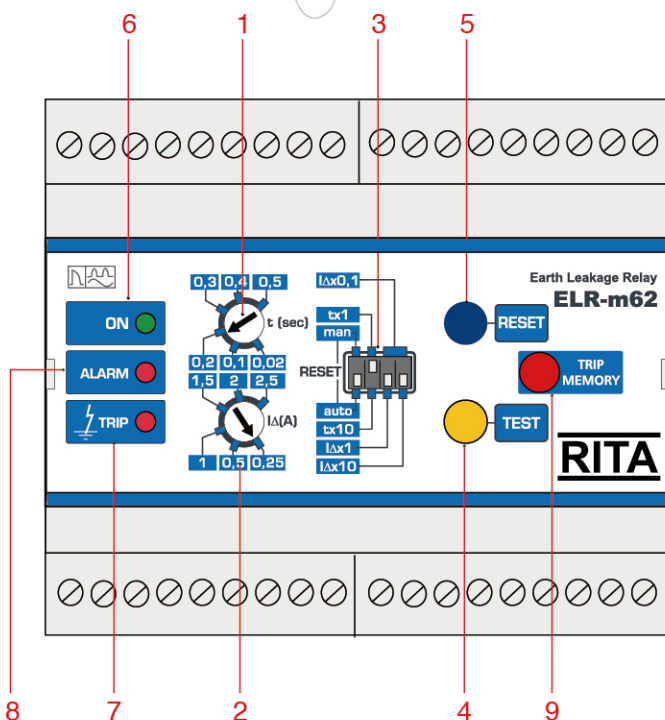
These series of relays may be coupled to any of the CT-1 Toroidal transformers.



### MODELS

ELR-61 / ELR-m61 / ELR-62 / ELR-m62	-----	110-230-400 V <sub>AC</sub>
ELR-61 / ELR-m61 / ELR-62 / ELR-m62	-----	110V <sub>DC</sub>
ELR-61 / ELR-m61 / ELR-62 / ELR-m62	-----	24-48 V <sub>AC/DC</sub>

### FUNCTIONS AND OPERATORS



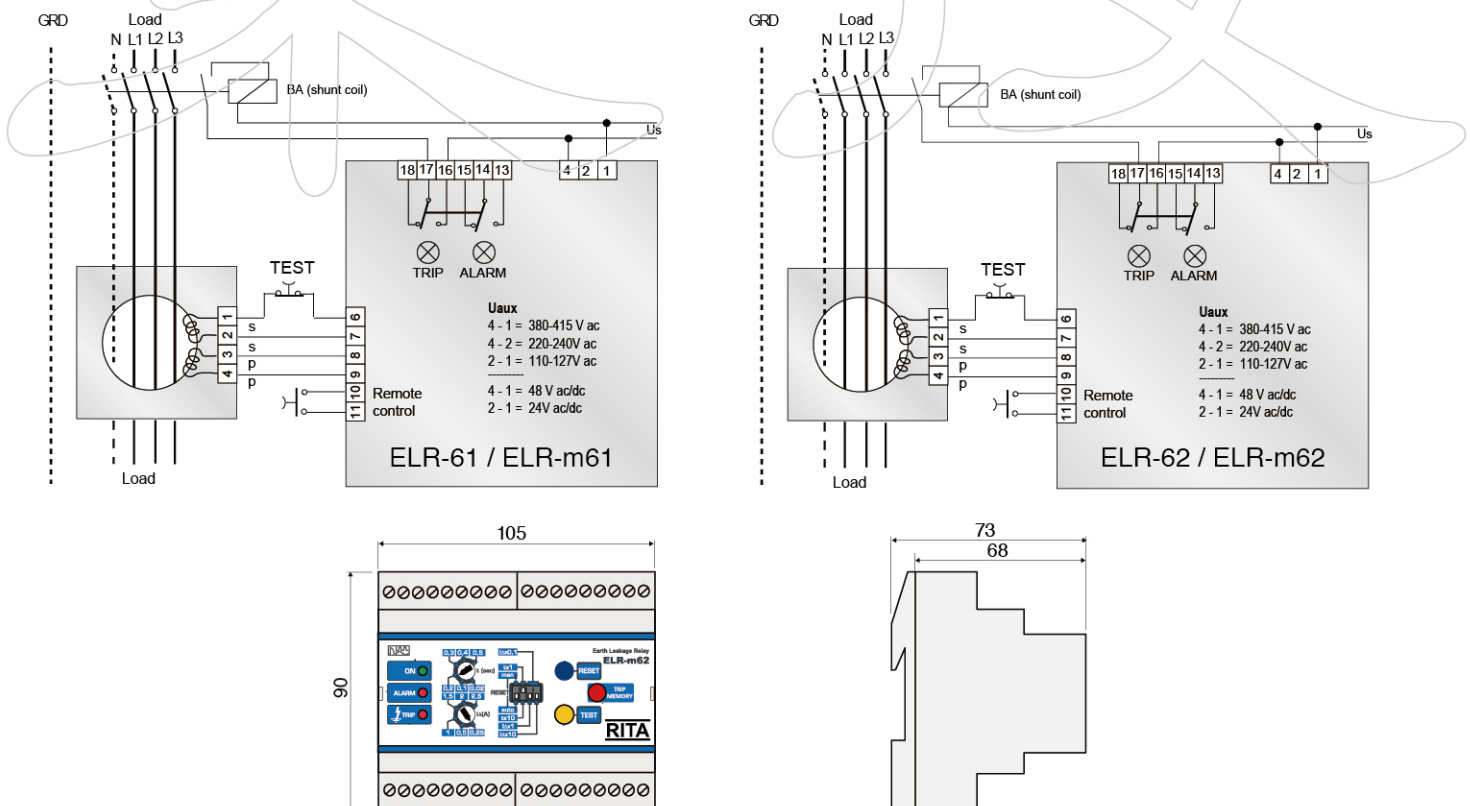
1. Tripping time delay setting potentiometer.
2. Tripping current setting potentiometer.
3. Constant selection microswitch:  
 RESET: auto=automatic reset ; man=manual reset  
 tx1 = delay time k=1 (0.02~0.5s)  
 tx10 = delay time k=10 (0.2 ~ 5s)  
 IΔx0.1= trip current K=0.1 (0.025~0.25A)  
 IΔx1 = trip current K=1 (0.25~2.5A)  
 IΔx10 = trip current K=10 (2.5~25A)
4. Test push button.
5. Manual reset push button.
6. Signalling lamp for Aux. Supply presence (green LED).
7. Signalling lamp for relay tripped (red LED).
8. Signalling lamp for alarm threshold over come at 70% of the IΔ (red LED, ELR-62/m62 only).
9. Mechanical trip indication (ELR-m61/m62 only).

## TECHNICAL CHARACTERISTICS

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CONTROL CIRCUIT	
Toroidal transformer	External
Adjustments tripping set-point ( $I\Delta$ )	0.025÷25A (25÷250A with external multiplier)
Adjustments tripping time (t)	0.02÷5s
Set-point prealarm	70% $I\Delta$ (fixed) (versions ELR-62, ELR-m62 only)
AUXILIARY SUPPLY	
Auxiliary voltage ( $U_s$ )	24-48 VAC/DC   110 VAC/DC-240-415 VAC
Rated frequency	50-60 Hz
Maximum power consumption	4 VA
OUTPUT RELAYS	
Contact arrangement	2 changeovers (both trip)
Rated contact capacity Ith	5 A (240 VAC)
INDICATIONS	
Auxiliary voltage available (ON)	Green LED
Relay tripping (TRIP)	Red LED
Alarm advance (ALARM)	Red LED (versions ELR-62, ELR-m62 only)
Mechanical flag (TRIP)	Flag indicator (versions ELR-m61, ELR-m62 only)
INSULATION	
Insulation test	2.5kV for 1 minute
AMBIENT OPERATING CONDITIONS	
Operating temperature	-10÷60 °C
Storage temperature	-20÷80 °C
Relative humidity	≤90%
ENCLOSURE	
Version	6 modules DIN
Degree of protection	IP20 terminals   IP40 with protective cover
CERTIFICATIONS AND COMPLIANCE	
Reference standards	IEC/EN 61010, IEC/EN 61000-6-2   IEC/EN 61000-6-3 IEC/TR 60755   CEI EN 60947-2 Annex M

## WIRING DIAGRAM & DIMENSIONS



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