

# ELR-4o / ELR-m4o ELR-4v / ELR-m4v

EARTH LEAKAGE RELAY  
FLUSH MOUNTING VERSIONS DIN 48X96 mm

MICROENER

## GENERALITY



The ELR-4 and ELRm-4 series, maintain all the basic characteristics of the DIN 96x96 mm. series, although their reduced dimensions.

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 periodical 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.

### MODELS

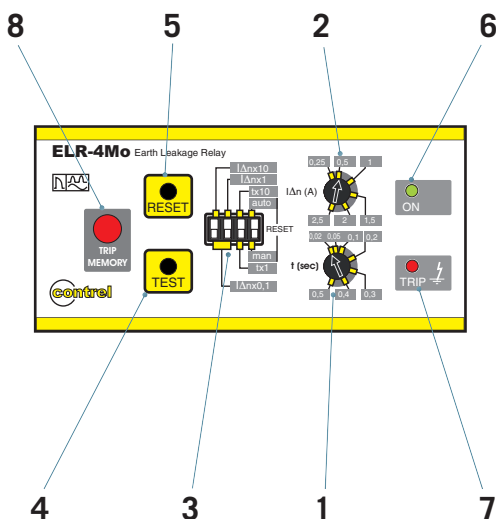
ELR-4v / ELR-m4v ELR-4o / ELR-m4o	110Vac/dc - 230 - 400 Vac
ELR-4v / ELR-m4v ELR-4o / ELR-m4o	24-48 Vac/dc

### OPTIONS

F	built - in filter for 3rd harmonic
T	tropicalisation

Following versions available:  
DIN 96x48 mm ELR-40 and ELR-m40  
DIN 48x96 mm ELR-4V and ELR-m4V  
With reduced depth of 75 mm.

## LEGEND



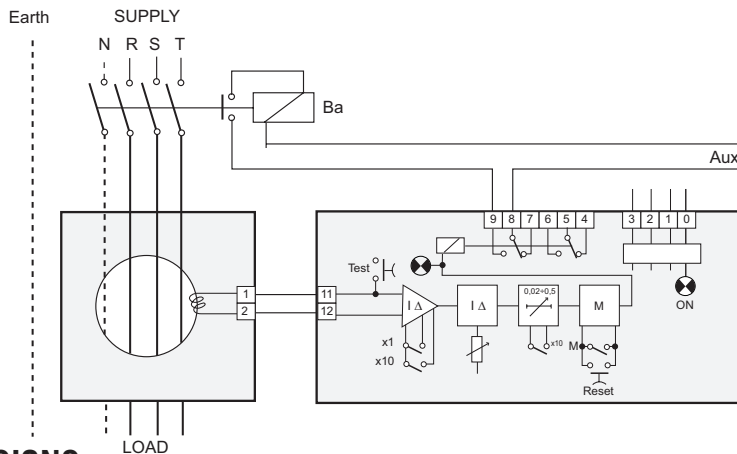
1	Tripping time delay setting potentiometer
2	Tripping current setting potentiometer
3	Constant selection micro switch: <ul style="list-style-type: none"> <li>• a Automatic reset with micro (a) in position 1</li> <li>• b Constant selection for time settings: K= 1 for micro(b) in position 0; K=10 for micro (b) in position 1;</li> <li>• c Constant selection for current settings: K=0,1 for micros (c-d) in position 0; K= 1 for micro (c) in position 1 and (d) in position 0; K=10 for micro (c) in position 1 and micro (d) in position 1.</li> </ul>
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	Mechanical Signalling (only for ELRm)

**ELECTRICAL CHARACTERISTICS**

models and value	ELR- 40	ELR-m40	ELR-4V	ELR-mV
Auxiliary Voltage supply	24-48V ac/dc 110Vac/dc - 230 - 400 Vac ±20% (standard)			
Frequency	50 ÷ 60 Hz			
Maximum consumption	4 VA			
Current tripping setting range IΔN	0,025÷0,25A K=0,1 - 0,25÷2,5A K=1 - 2,5÷25A K=10 25÷250A*			
Tripping time setting range t	0,02÷0,5 sec K=1 - 0,2÷5 sec K=10			
Mechanical Signalisation	-	•	-	•
Output: 2 changeover contacts	5A 250V			
Working Temperature	-10 + 60°C			
Storing Temperature	-20 + 80°C			
Relative humidity	90%			
Insulation Test	2,5 kV 60 sec.			
Standards	CEI 41-1/IEC 255/VDE 0664/IEC 755/CEI 64.8/ EN 61008-1(1999-11)/EN 62020 (1999-09) / EN 61543 (1996-09) /EN61326-1(1998-04) / EN 61326/A1 (1999-05)-IEC 60947-2 ANNEX M			
Wiring method	Screw terminals for cross section wires 2,5 mm <sup>2</sup>			
Protection degree according DIN 40050	IP 20			
Frontal protection degree	Ip52 (opt. IP54)			

\* By means of an external multiplier ( see pag. 40 )

**WIRING DIAGRAM - LEGEND**



**LEGENDA**

- 0-3 = 400 V ac
- 0-2 = 230 V ac
- 0-1 = 110 V ac/dc

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- 0-2 = 48 V ac/dc
- 0-1 = 24 V ac/dc

**DIMENSIONS**

