

ELR-4o | ELR-4mo | ELR-4v | ELR-4mv

EARTH LEAKAGE RELAY - FLUSH-MOUNT VERSION DIN 48x96 mm



GENERAL CHARACTERISTICS

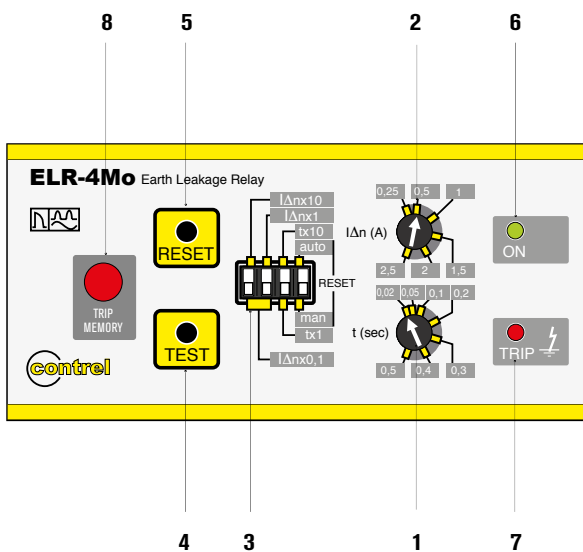
- Earth leakage relay type A
- External toroidal
- Green power LED indicator (ON)
- Red relay tripped LED indicator (TRIP)
- Front TEST and RESET buttons
- Configurable automatic or manual resetting
- Flag indicator (TRIP MEMORY) (ELR-m4o, ELR-m4v only)
- Flush mount 48x96mm housing with transparent cover
- Degree of protection: IP20 terminals, IP40 on front with cover

ORDER CODE	RATED AUXILIARY SUPPLY VOLTAGE	OUTPUTS CONTACTS	WT [kg]
ELR-4v 48	24-48 VAC/DC	2	0,390
ELR-4v 415	110 VAC/DC-240-415 VAC	2	0,390
ELR-4o 48	24-48 VAC/DC	2	0,390
ELR-4o 415	110 VAC/DC-240-415 VAC	2	0,390
ELR-m4v 48	24-48 VAC/DC	2	0,390
ELR-m4v 415	110 VAC/DC-240-415 VAC	2	0,390
ELR-m4o 48	24-48 VAC/DC	2	0,390
ELR-m4o 415	110 VAC/DC-240-415 VAC	2	0,390

OPTIONS	
T	Tropicalisation
F	Built-in filter for 3rd harmonic

ADJUSTMENTS	
Configurable tripping set-point ($I_{\Delta n}$)	0,025...0,25A 0,25...2,5A 2,5...25A 25...250A (with external multiplier CT1-M)
Configurable tripping delay time (t)	0,02...0,5s 0,2...5s.

LEGENDA	
1	Tripping delay time adjustment
2	Fault current to earth adjustment
3	<p>Dip switches settings:</p> <p>3a - auto reset (A) - man reset (M) auto reset = automatic reset man reset = manual reset through RESET key on the front. For remote resetting, simply shut off the auxiliary supply for about 1 second</p> <p>3b - tx10 - tx1 constant selection for tripping delay time adjustment. Examples: positioning the dip switch on tx10 and the potentiometer on 0.3 we will have a tripping delay upon exceeding the $I_{\Delta n}$ threshold of $0.3 \times 10 = 3$ seconds; positioning the dip switch on tx1 and the potentiometer on 0.3 we will have a tripping delay upon exceeding the $I_{\Delta n}$ threshold of $0.3 \times 1 = 0.3$ seconds</p> <p>3c - $I_{\Delta n} \times 0,1$ - $I_{\Delta n} \times 1$ - $I_{\Delta n} \times 10$ constant selection for fault current to earth adjustment. The constants in relation to the position of the 2 dip switches are the following:</p> <ul style="list-style-type: none"> • dip switch position $I_{\Delta n} \times 0,1$ and $I_{\Delta n} \times 0,1$ K = 0.1 • dip switch position $I_{\Delta n} \times 1$ and $I_{\Delta n} \times 0,1$ K = 1 • dip switch position $I_{\Delta n} \times 1$ and $I_{\Delta n} \times 10$ K = 10
4	TEST key. Causes tripping of the relay.
5	RESET key. To reset the relay after tripping. For remote reset, simply shut off the auxiliary supply for about 1 second.
6	ON LED. Indicates the presence of auxiliary voltage.
7	TRIP LED. Lighting up indicates the cutting in of the TRIP relay due to exceeding the $I_{\Delta n}$ set.
8	TRIP MEMORY (versions ELR-m4o, ELR-m4v) Mechanical trip relay indicator for exceeding the $I_{\Delta n}$ set. It stores the indication also in the lack of auxiliary voltage. The flag indicator resetting can only be made with the RESET button.

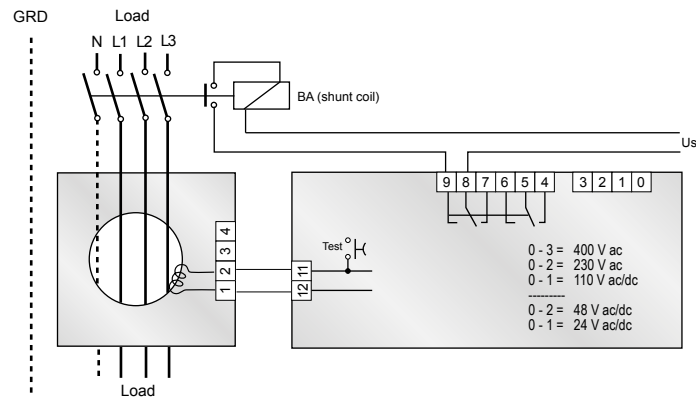


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EARTH LEAKAGE RELAY - FLUSH-MOUNT VERSION DIN 48x96 mm

TECHNICAL CHARACTERISTICS		ELR-4 / ELR-m4
CONTROL CIRCUIT		
Toroidal transformer		External
Adjustments tripping set-point (I Δ)		0.025÷25A (25÷250A with external multiplier)
Adjustments tripping time (t)		0.02÷5s
AUXILIARY SUPPLY		
Auxiliary voltage (Us)	24-48 VAC/DC	110 VAC/DC-240-415 VAC
Rated frequency		50-60 Hz
Maximum power consumption		4 VA
OUTPUT RELAYS		
Contact arrangement		1 changeover (trip)
Rated contact capacity Ith		5 A (240 VAC)
INDICATIONS		
Auxiliary voltage available (ON)		Green LED
Relay tripping (TRIP)		Red LED
Mechanical flag (TRIP)		Flag indicator (versioni ELR-m4)
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		Flush mount 48x96mm
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 CONNECTION



MECHANICAL DIMENSIONS

