

ELR - 7

EARTH LEAKAGE RELAY - FLUSH-MOUNT VERSION **DIN 48x48** mm



GENERAL CHARACTERISTICS

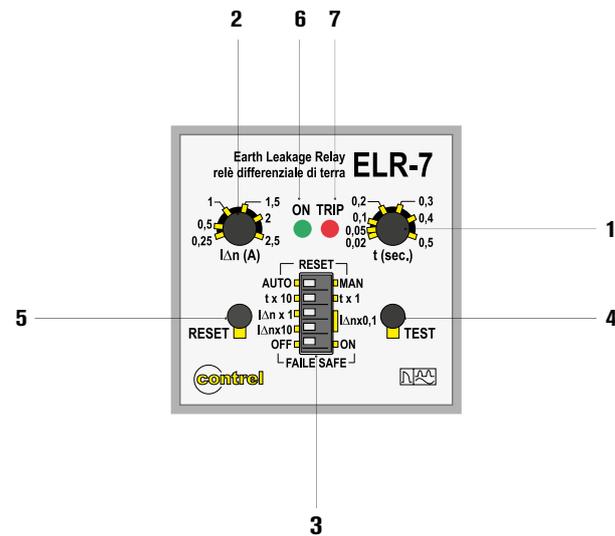
- Earth leakage relay type A
- Configurable fail safe operation
- Green power LED indicator (ON)
- Red relay tripped LED indicator (TRIP)
- Front TEST and RESET buttons
- Configurable automatic or manual resetting
- Flush mount 96x96mm housing with transparent cover
- Degree of protection: IP20 terminals, IP40 on front with cover.

ORDER CODE	RATED AUXILIARY SUPPLY VOLTAGE	OUTPUTS CONTACTS	WT [kg]
ELR-7 48	24-48 VAC/DC	2	0,112
ELR-7 240	110 VAC/DC-240 VAC	2	0,112

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



Dip switches settings:

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

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

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:

- 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

3d - fail safe off - fail safe on
 Fail safe off = positive safety deactivated.
 Output relay normally deenergised
 Fail safe on = positive safety activated; in this condition the output relay is normally energised; therefore in the event of the lack of auxiliary voltage the output contacts move to the tripping condition.

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.

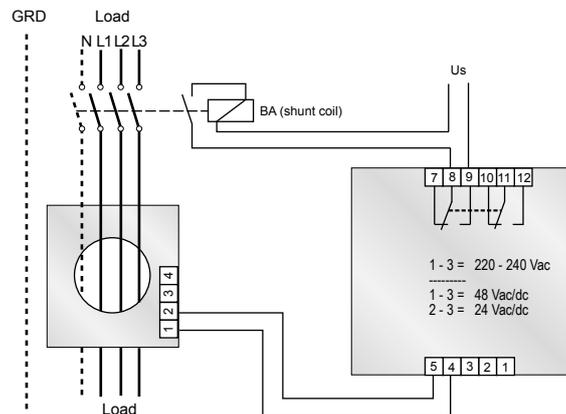
7 TRIP LED. Lighting up indicates the cutting in of the TRIP relay due to exceeding the $I_{\Delta n}$ set.

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TECHNICAL CHARACTERISTICS	ELR-7
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 VAC
Rated frequency	50-60 Hz
Maximum power consumption	3 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
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 48x48mm
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

