

ELR-1 D

EARTH LEAKAGE RELAY - MODULAR VERSION 1 MODULE



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
- Modular DIN housing, 1 module, with transparent cover, suitable for fixing on 35mm DIN rail (IEC/EN 60715)
- IEC degree of protection: IP20 terminals, IP40 on front with cover.

ORDER CODE	RATED AUXILIARY SUPPLY VOLTAGE	OUTPUTS CONTACTS	WT [kg]
ELR-1D 24	24 VAC/DC	1	0,190
ELR-1D 48	48 VAC/DC	1	0,190
ELR-1D 110	110 VAC/DC	1	0,190
ELR-1D 230	230 VAC/DC	1	0,190

OPTIONS	
T	Tropicalisation

ADJUSTMENTS	
Configurable tripping set-point ($I_{\Delta n}$)	0,03...0,30A 0,3...3A 3...30A
Configurable tripping delay time (t)	0,02...0,5s 0,2...5s.

LEGENDA

Dip switches settings:

1a - 0.3 - 3 - selection of fault current to earth tripping threshold $I_{\Delta n}$. Positioning the dip switch on 0.3 we will have a tripping threshold $I_{\Delta n}$ of 0.3A; in position 3 the threshold will be 3A.

1b - $I_{\Delta n} \times 0,1$ - $I_{\Delta n} \times 1$ - $I_{\Delta n} \times 10$ 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

1c - 0.5(0.2+0.1+0.1) - 0.02 tripping delay time selection
Positioning the dip switch on 0.2,0.2,0.1 we will have a tripping delay upon exceeding the $I_{\Delta n}$ threshold of 0.5 sec; in the 0.02 position the delay will be 0.02sec

1d - 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

1

2

3

4

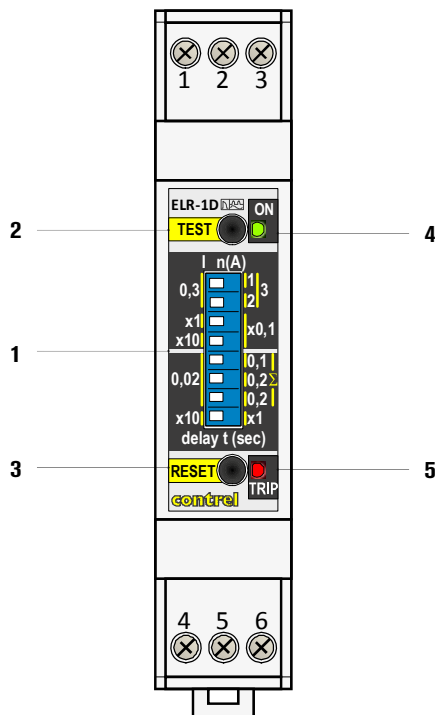
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2 TEST key. Causes tripping of the relay.

3 RESET key. To reset the relay after tripping. For remote reset, simply shut off the auxiliary supply for about 1 second.

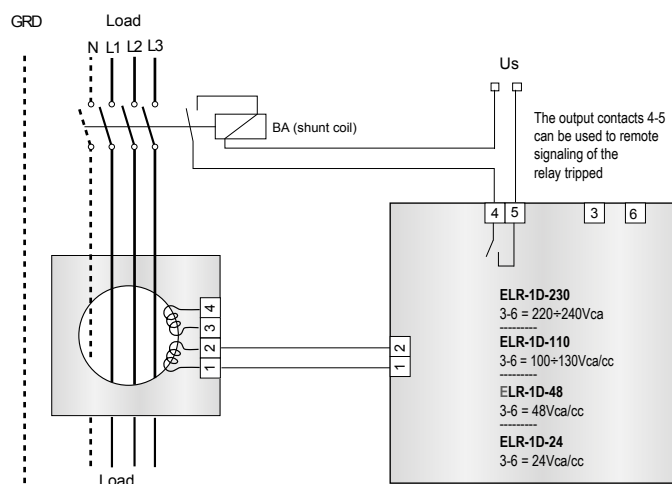
4 ON LED. Indicates the presence of auxiliary voltage.

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



TECHNICAL CHARACTERISTICS	ELR-1D			
CONTROL CIRCUIT				
Toroidal transformer	External			
Adjustments tripping set-point ($I\Delta$)	0.03÷30A			
Adjustments tripping time (t)	0.02÷5s			
AUXILIARY SUPPLY				
Auxiliary voltage (Us)	24 VAC/DC	48 VAC/DC	110 VAC/DC	240-415 VAC
Rated frequency	50-60 Hz			
Maximum power consumption	3 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			
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	1 module 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 CONNECTION



MECHANICAL DIMENSIONS

