

Earth leakage relay with 2 operating thresholds, flush-mount. External CT. Fault current measurement. Digital display. Fail safe. Flag indicator, 110VAC/DC-240VAC-415VAC



Product designation

Earth leakage relays

Product type designation

R4D

General characteristics

Description

Flush mount with display and cover, 2 operating thresholds

Control circuit

Toroidal transformer

External

Adjustments

Tripping set-point ($I_{\Delta n}$)

(x0.1)	A	0.03...0.3
(x1)	A	0.3...3
(x10)	A	3...30
(external multiplier)	A	30...300

Prealarm set-point

$I_{\Delta n}$ 70% $I_{\Delta n}$ (fixed)

Tripping delay time

(tx1)	s	0.03...0.5
(tx10)	s	0.3...5

Selection of multiplier for $I_{\Delta n}$ and t

By dip switches

Resetting

Automatic by remote contact closing. Manual by button on front or remote contact closing

Test Button

Yes

Shunt circuit control

Yes

Auxiliary supply

Auxiliary rated supply voltage U_s

110...125/220...240/380...415VAC

Operational limits

110...125VAC or 220...240VAC or 380...415VAC

Output contacts

2

Rated frequency

Hz 50...60

Power consumption Max

VA 5.5

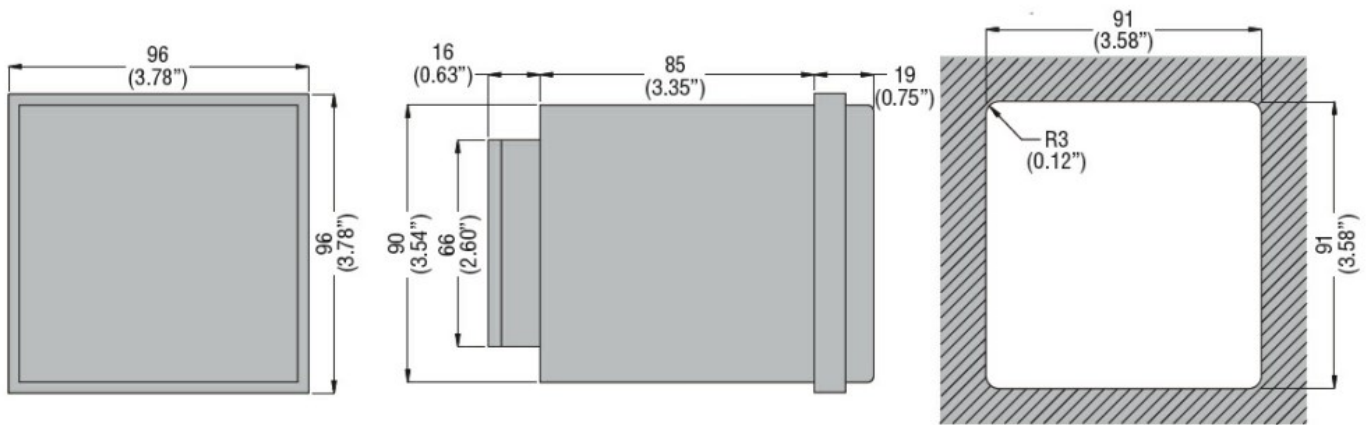
Relay outputs

Relay state

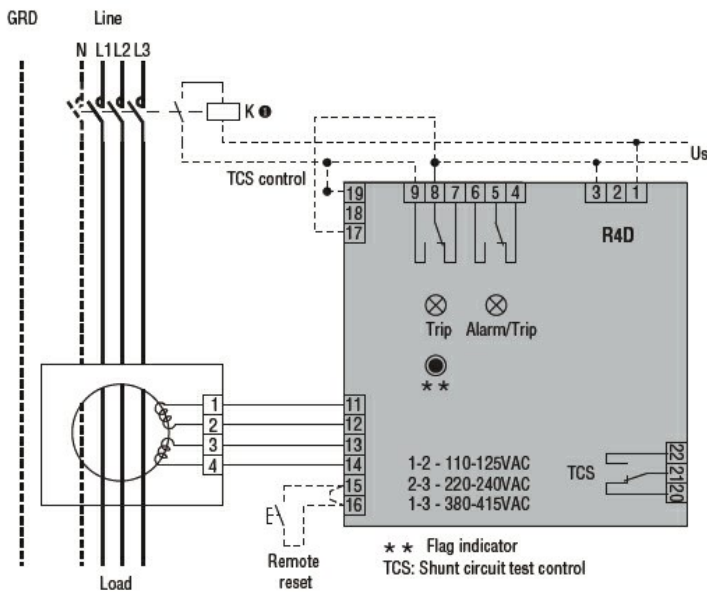
Configurable normally de-energised or energised

Contact arrangement				2 changeover SPDT each (configurable: 2 trip or 1 trip and 1 alarm)
Rated contact capacity IEC Ith				5A - 250VAC
Insulations				
Power frequency withstand voltage			kV	2.5kV for 60s
Indications				
Auxiliary voltage available (ON)				Green LED
Relay tripping (TRIP)				Red LED
Trip prealarm (ALARM)				Red LED
Mechanical (TRIP MEMORY)				Flag indicator
Shunt circuit tripping (TCS)				Red LED
Connections				
Terminals type				Removable, plug-in
Tightening torque for terminals			max Nm	0.5
			max lbin	4.5
Conductor section	AWG/Kcmil		min	24
			max	12
	IEC		min mm ²	0.2
			max mm ²	2.5
Operations				
Mechanical life			cycles	50000000
Electrical life			cycles	300000
Ambient conditions				
Temperature	Operating temperature		min °C	-10
			max °C	+60
	Storage temperature		min °C	-20
			max °C	+80
Relative humidity			%	≤90%
Housing				
Material				Self-extinguishing polycarbonate
Mounting				Flush mount
Degree of protection				IP40 with protecting cover, IP20 terminals
Dimensions (W x H x D)			mm	96x96x120
Weight			g	570
Dimensions				

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Wiring diagrams



Type	Us	Us Wiring	TCS Wiring
R4D 415	110-125VAC	1-2	17-18
	220-240VAC	2-3	17-18
	380-415VAC	1-3	17-19

Certifications and compliance

Compliant with standards

IEC/EN 60947-2

Certificates

EAC

ETIM classification

ETIM 8.0

EC001445 -
Residual current
monitoring relay