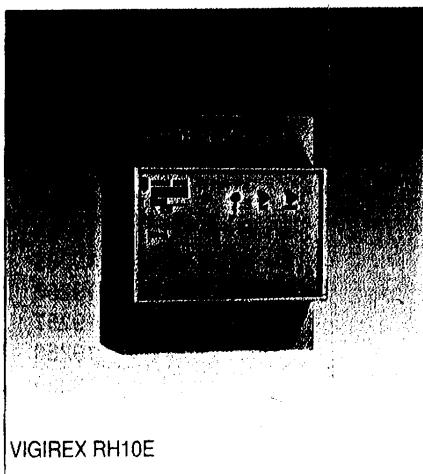


# VIGIREX RH10E/RH240E/RH248E residual current relays

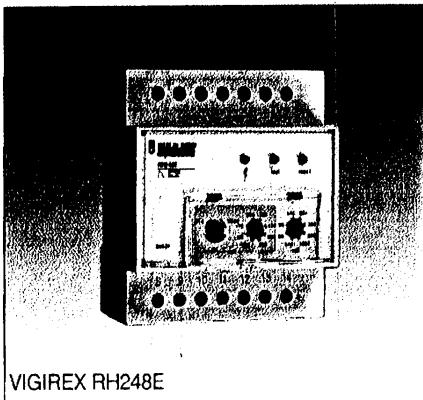
716-8639  
(= 50451)

30mA - 25A time delayed

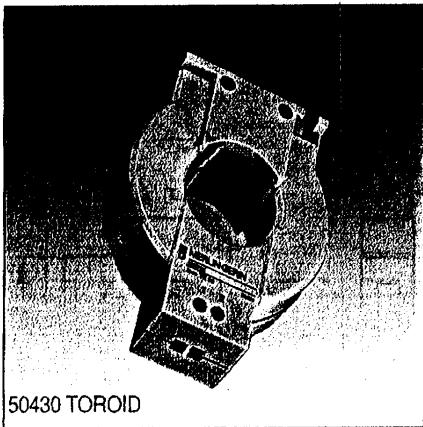
716 8652  
(= 50460).



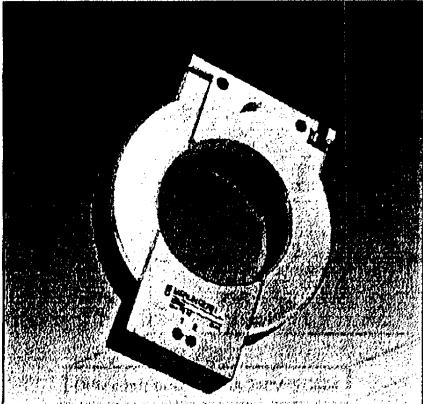
VIGIREX RH10E



VIGIREX RH248E



50430 TOROID



50431 TOROID

## Application

Protection of personnel, electrical equipment and distribution systems.

## Description

These residual current devices must be used in conjunction with toroidal core balanced current transformers. In the event of an earth leakage fault they ensure the opening of the protected circuit by a signal from a changeover contact to the release coil of a circuit breaker or contactor.

They are able to actuate:

- undervoltage release MN
- shunt trip MX
- Reflex remote controlled circuit breakers and switches
- contactors and impulse relays

Vigirex devices:

- permanently monitor the toroid-to-relay connection
  - can be locally or remotely reset.
  - offer local visual alarm indication.
- All devices are able to give fault indication

## ■ output contact:

changes state upon detection of earth leakage fault

## unwanted tripping:

Vigirex residual current devices are equipped with a filtering device preventing the risks of unwanted tripping due to transient voltages, (lightning, line disturbances on other equipment...) and transient currents (from high capacitive circuits).

■ cable capacity: tunnel terminals cables up to 2.5mm<sup>2</sup>

## Installation

■ on symmetrical DIN-rail horizontal or vertical

■ in Merlin Gerin enclosures

**Note:** must not be used as the sole means of providing protection against direct contact.

(IEE Regs. 16th edition 412-06-01)

## Toroids:

Vigirex RCD relays are used in conjunction with 30 mm or 50 mm internal diameter E type toroidal current transformers separately supplied. They can be mounted on plate or the cable to be protected.

## Vigirex RH10E, RH240E and RH248E rcd relay

device	width	sensitivity	n. of settings	time delay	n. of settings	auxiliary supply voltages	part n°.
	9mm	IΔn mods.		IΔn			
RH10E	8	30mA	1	Nil	0	48-120VDC / 48vAC	50450
RH10E	8	30mA	1	Nil	0	115 / 127vAC	50499
RH10E	8	30mA	1	Nil	0	230vAC	50451
RH10E	8	300mA	1	Nil	0	48-120VDC / 48vAC	50453
RH10E	8	300mA	1	Nil	0	115 / 127vAC	50452
RH10E	8	300mA	1	Nil	0	230vAC	50454
RH248E	8	30mA-25A	24	0-1s	8	48-120VDC / 48vAC	50459
RH248E	8	30mA-25A	24	0-1s	8	115 / 127vAC	50458
RH248E	8	30mA-25A	24	0-1s	8	230vAC	50460
RH240E	8	30-300mA	24	Nil	0	48-120VDC / 48vAC	50456
RH240E	8	30-300mA	24	Nil	0	115 / 127vAC	50455
RH240E	8	30-300mA	24	Nil	0	230vAC	50457

■ AC voltages - operating range -15%, +10%

■ DC voltages - operating range ± 20%

■ power consumption - 5VA max.

■ temp. range - -5 to +55 °C

■ output contact rating - 240VAC 3A

0.7 pf 220VDC 0.45A; 120VDC 0.65A,  
48VDC 2.5A, 24VDC 10A

■ weight 3Kg

■ toroid connection by shielded cable

**Note:** Consult Merlin Gerin for details on adjustable settings

## toroidal transformers for Vigirex

type	internal dia.	part n°.
TE	30mm	50430
PE	50mm	50431

larger sizes and split toroids available - consult us for full range of Vigirex relays and toroids.

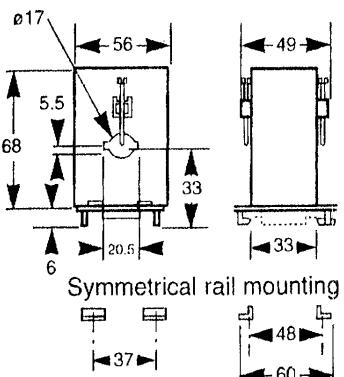
■ dimensions see page 127

# dimensions

# auxiliaries and accessories

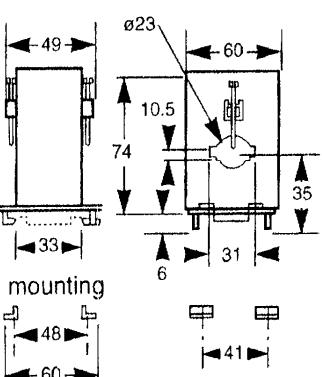
## current transformers

Part no. 15567

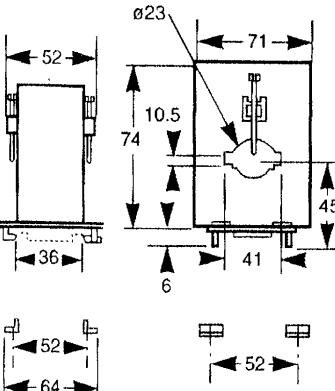


Screw fixing ( $\varnothing 5$ )

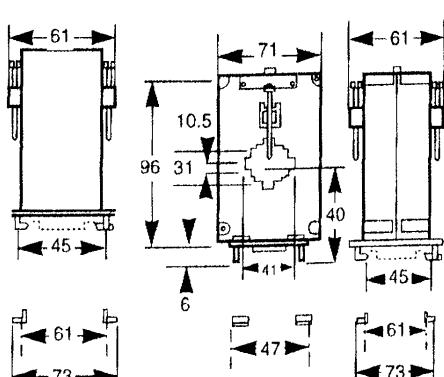
Part no. 15572



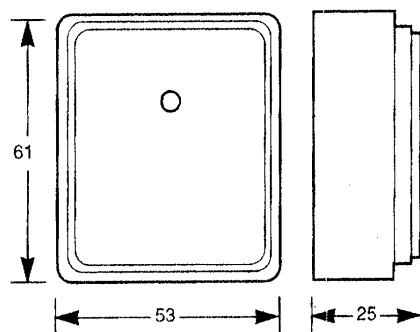
Part no. 15575



Part no. 15578 to 15580

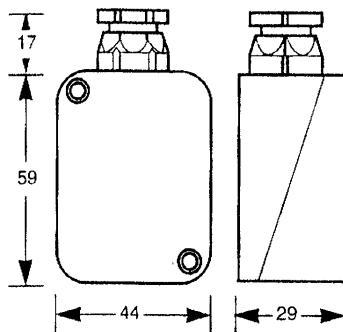


## ambient temp probe

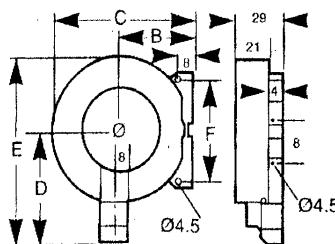
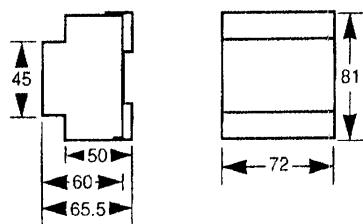


Vigirex RH10E, RH240E, RH248E

## outdoor temp probe

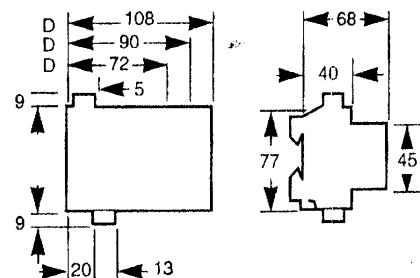


Vigirex toroidal current transformer  
type E dia.30and50

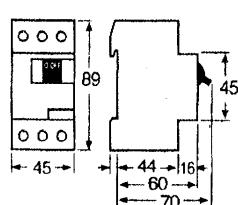


type	$\varnothing$	B	C	D	E	F
TA30	30	31	60	53	62	50
PA50	50	45	87	66	108	60

## Reflex XC40 remote controlled circuit breakers

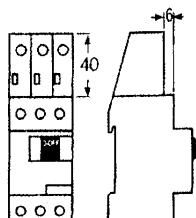


## P25M motor protection circuit breaker



auxiliary contact

## P25M limiter block



releases MX, MN