Earth leakage monitoring
Monitoraggio delle correnti verso terra

RD1-UA Earth Leakage Protection Relay

## **RD1-UA SERIAL**

Ultra-immune earth leakage system and signaling via external transformer of the TARD/TARD-A series.

#### **GENERAL DESCRIPTION**

 $\epsilon$ 

Earth Leakage Relay RD1-UA is a microprocessor based electronic protection device has been designed. Recognizes low level leak. The main feature of RD1-UA is Preventive control of system insulation with Continuous display of earth leakage current It is obtained by using the TARD/TARD-A current transformer.

Electronic earth leakage protection relay connected to external transformers of the TARD/ TARD-A series. Ultraimmune system type relay with high-frequency current filtering and high immunity. Type A relay harmonic filter. True root mean square (TRMS) measurement. Daily triggered residual current.

#### **FEATURES**

Intervention delay time adjustment

Earth fault current regulation

Dip switch for programming

- Auto reset (A) - manual reset (M)

Auto reset = Automatic

Man reset = Manual reset with the RESET button on the front. For Remote reset simply disconnect the auxiliary power supply approximately 1 second

- Fixed selection for tx10 - tx1 delay time adjustment interrupt.

- Fixed selection for  $x0.1I\Delta$  -  $x1I\Delta$  -  $x10I\Delta$  regulation Earth fault current  $I\Delta$ . Constants, as a function of The positions of the 2 dip switches are as follows:

- dip switch position  $x0.1I\Delta$  and  $x0.1I\Delta$  K = 0.1

– dip switch position x1I $\Delta$  and x0.1I $\Delta$  K = 1

– dip switch position x1I $\Delta$  and 10I $\Delta$  K = 10

TEST button. Triggers the relay.

RESET button. To reset the relay after intervention.

POWER LED. Indicates the presence of auxiliary voltage



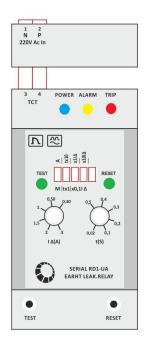
# RD1-UA Earth Leakage Protection Relay

## **SPECIFICATIONS**

SUPPLY VOLTAGE	120/270 Vac -15%, +10% 50-60 Hz
POWER CONSUPTION	3VA (W) max
TEMPERATURE RANGE	Operational: da 0 °C a +50 °C
	Storage: da –20 °C a + 60 °C
RELATIVE HUMIDITY	Max. 90% (non condensing)
BURN IN	48 hours at 50 °C
DIELECTRIC WITHSTAND VOLTAGE	2 kVac, 60 s
CONSTRUCTION	According to , UL*, CEI standards
OUTPUT CONTACT	Rated current: 8A resitif @ 250Vac or 24Vdc
	3A cosfi=0,4 @250Vac
	Max. operating Voltage: 250 Vac, 125 Vdc
INPUT	Rated Frequency Fn: 47 to 63 Hz
	Current Transformer (CT) ratio: 1/500
	Input Impedance: 20 Ohm
DIGITAL INPUT (RD-1-UHD)	Type: Dry contacts only, 500 Ohm ON resistance
TRIP & ALARM PICKUP	30mA to 30A, steps of 1mA
INI & ALANVI FICKUF	Accuracy: ±5% ±1 digit
DELAYTIME ALADAM & TRIP DICKLID	
DELAY TIME ALARM & TRIP PICKUP	0.02 to 10 sec in steps of 10 ms Accuracy: ±5% or ± 10 ms
	whichever is greater
FILTER	3ª arm -21ª arm harmonic components
TERMINAL BLOCK	Fixed terminals, 2,5mm2-section cable (14 AWG).
FRAME	IP40, IP20 on back panel
INSTALLATION	35mm DIN rail
WEIGHT	200g
EN MICCIONIC TECT	Positiva de catalante
EMISSIONS TEST	Radiated emissions  Reference Standard: EN 55022
	Conducted emissions
	Reference Standard: EN 55014
IN AN ALIBERTY TECTS	
IMMUNITY TESTS	Conducted disturbances induced by RF field     Reference Standard: EN 61000-4-6
	Radiated electromagnetic field
	Reference Standard: EN 61000-4-3
	Electrostatic discharge
	Reference Standard: EN 60255-22-5
	• Fast transients (Burst)
	Reference Standard: References: EN 60255-22-4  • Surge
	Reference Standard: EN 61000-4-5
	Voltage dips and short interruptions
	Reference Standard: IEC 60255-11
	• 1MHz Burst
	Reference Standard: EN 60255-22-1
INSULATING TEST	Dielectric test and Pulse test  Reference Standard, EN 603EE E. Reference Standard, EN 603EE E.
	Reference Standard: EN 60255-5 - Reference Standard: EN 60255-5



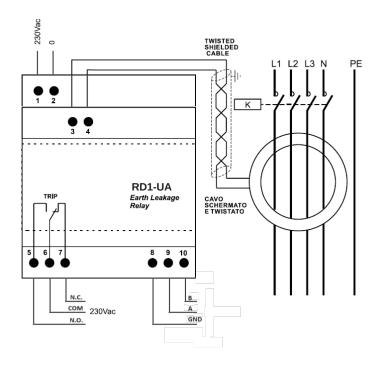
#### **RD1-UA - OPERATORS AND ALARMS WITH VISUAL INDICATIONS**

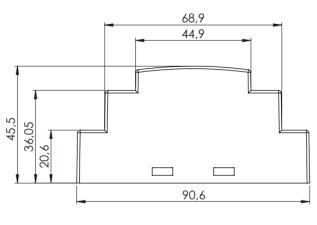




## RD1-UA - WIRING DIAGRAM

## RD1-UA - OVERALL DIMENSIONS





# BMS OLÇUM ANALIZ MUHENDISLIK ELEKTRIK PROJE OTOMASYON INS.VE TIC.LTD.STI ABDURRAHMAHGAZI MAH.ATAYOLU CAD.HÜSEYİN ÇİÇEK PLAZA NO 31 KAT 5

Sancaktepe/ISTANBUL TURCHIA/TURKEY

www.bmsmuhendislik.com

info@bmsmuhendislik.com

Phone +90 850 220 10 22

Satış ve Teknik Destek +90 536 741 34 11