

Harmony 3 phase voltage monitoring relay, Range 208 to 480 VAC, phase sequence, phase failure, Phase imbalance, 1 CO

RM10TE00N

## Main

Range of product	Harmony Control Relays	
Relay type	Control relay	
Product or component type	3-phase control relay	
Relay name	RM10TE	
Relay monitored parameters	Phase sequence Phase failure detection Asymmetry Overvoltage and undervoltage detection	
Measurement range	208480 V AC	
Time delay type	Adjustable 0100 s, +/- 10 % of the full scale value	
Output contacts	1 C/O	
Nominal output current	5 A	
Product specific application	For 3-phase supply	

## Complementary

oompromontary			
Supply voltage limits	183528 V AC, 3 phases		
[le] rated operational current	5 A 250 V AC-1 conforming to IEC 60947-5-1 5 A 28 V DC-1 conforming to IEC 60947-5-1 1.5 A 240 V AC-15 conforming to IEC 60947-5-1 2 A 24 V DC-13 conforming to IEC 60947-5-1		
Reset time	1.5 s time delay		
Power consumption in VA	04.5 VA		
Voltage detection threshold	< 175 V AC		
Hysteresis	2 %		
delay at power up	5 s		
Maximum measuring cycle	150 ms measurement cycle as true rms value		
Voltage range	208480 V		
Repeat accuracy	0.5 % for input and measurement circuit 3 % for time delay		
Measurement error	< 0.05 %/°C with temperature variation < 1 % over the whole range with voltage variation		
Response time	< 550 ms (in the event of a fault)		
Insulation resistance	> 100 MOhm at 500 V DC		
[Ui] rated insulation voltage	400 V		
Supply frequency	4763 Hz		

Connections - terminals	minals Screw terminals, 2 x 0.52 x 1.5 mm² (AWG 20AWG 16) solid with or without cable end			
Tightening torque	0.50.7 N.m			
Housing material	Polycarbonate			
Local signalling	LED (green) for ST (status) LED (red) for overvoltage LED (red) for undervoltage LED (red) for alarm asymmentry failure triggered			
Mounting support	35 mm symmetrical DIN rail conforming to IEC 60715			
Electrical durability	100000 cycles			
Mechanical durability	10000000 cycles			
Safety reliability data	MTTFd = 158 years			
Height	58.5 mm			
Width	18 mm			
Depth	90 mm			
Net weight	75 g			

## **Environment**

Electromagnetic compatibility	conforming to IEC 61000-6-4 conforming to IEC 61000-6-3 conforming to IEC 61000-6-2
Standards	IEC 60255-1
Product certifications	cULus CE UKCA CCC
Marking	CULus CE UKCA CCC
Ambient air temperature for storage	-2080 °C
Ambient air temperature for operation	-1560 °C
Relative humidity	1095 %
Shock resistance	30 gn for 6 ms
IP degree of protection	IP20 (terminals) IP40 (casing)
Pollution degree	2
Overvoltage category	П
Dielectric test voltage	1.89 kV, 1 min AC 50 Hz
Non-dissipating shock wave	4 kV

# **Packing Units**

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.500 cm
Package 1 Width	7.000 cm
Package 1 Length	11.000 cm

Package 1 Weight	85.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	48
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	4.727 kg



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

#### Environmental Data explained >

How we assess product sustainability >

☑ Environmental footprint		
Total lifecycle Carbon footprint	81	

#### **Use Better**

EU RoHS Directive	Compliant with Exemptions
REACh Regulation	REACh Declaration

## **Use Again**

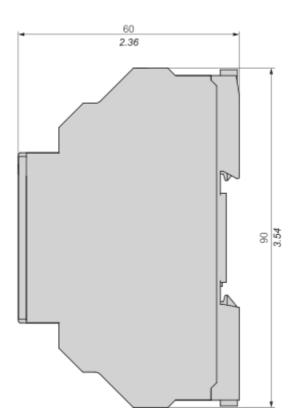
○ Repack and remanufacture				
Take-back	No			
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins			

## **Dimensions Drawings**

## **Dimensions**

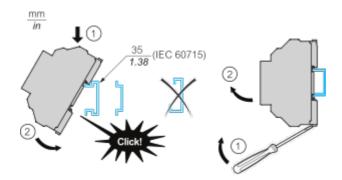






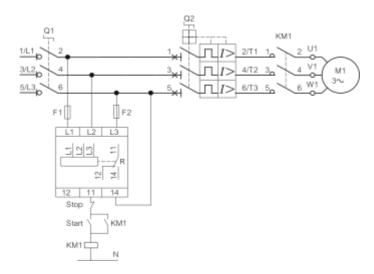
Mounting and Clearance

## Mounting



#### Connections and Schema

#### Wiring



#### NOTE:

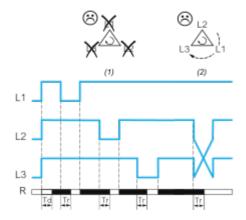
- Use copper conductors only
- TORQUE: 0.5...0.7 N.m (4.4...6.2 lbf.in)
- 0.31 2x (0.5...1.5mm² / 20...16AWG)

## **Technical Description**

## **Function Diagram**

#### Phase Loss & Phase Sequence



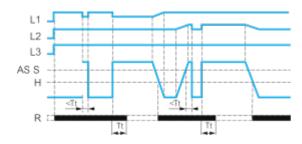


**Td**: Delay at power up **Tr**: Response time

R: Relay
(1): Phase Loss

(2): Phase Sequence Fault

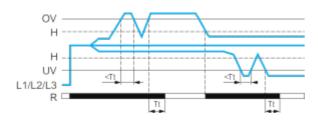
#### **Asymmetry**



AS S : Asymmetry Setting H : Hysterisis 2% fixed

Tt : On delay

#### Over Voltage (OV) & Under Voltage (UV)



**OV**: Over voltage setting **UV**: Under voltage setting

H: Hysterisis 2% fixed



## **Product datasheet**

## RM10TE00N

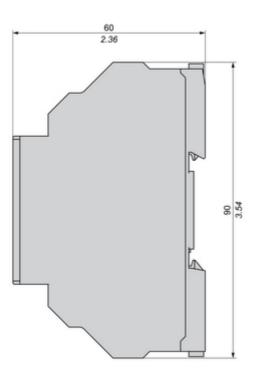
	Normal	Phase Seq. Fault	Phase Loss	UV/OV/AS Fault
St	ON	BLINKING	OFF	ON
UV/OV/AS	OFF	OFF	OFF	ON
R				

## RM10TE00N

## **Technical Illustration**

## **Dimensions**





## RM10TE00N

Offer Marketing Illustration

#### Product benefits / Features



## Offer Marketing Illustration

#### Product benefits / Features

# **Technical Benefits**

#### Harmony Control Relay

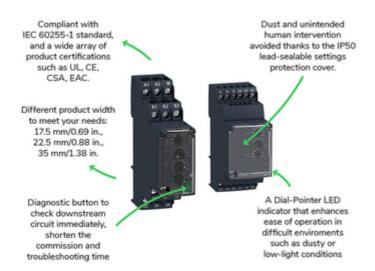


Image of product / Alternate images

## **Alternative**





