

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

RM10TA00N

Main

Range of product	Harmony Control Relays	
Relay type	Control relay	
Product or component type	3-phase control relay	
Relay name	RM10TA	
Relay monitored parameters	Phase sequence Phase failure detection Asymmetry	
Measurement range	208480 V AC	
Time delay type	Adjustable 015 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

J 2 J		
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	
Adjustment of asymmetry threshold	515 % of Un selected	
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	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)	
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	II
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	4.709 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

⊗ Materials and Substances	
EU RoHS Directive	Compliant with Exemptions
REACh Regulation	REACh Declaration

Use Again

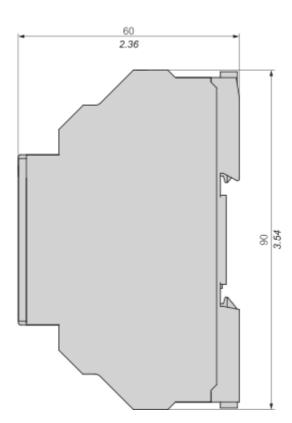
○ Repack and remanufacture	
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

Dimensions

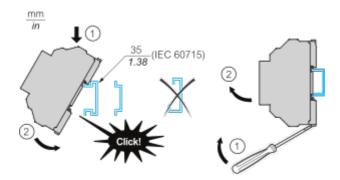






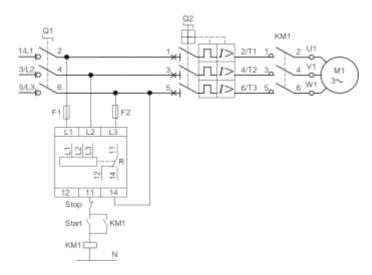
Mounting and Clearance

Mounting



Connections and Schema

Wiring



NOTE:

- Use copper conductors only
- TORQUE: 0.5...0.7 N.m (4.4...6.2 lbf.in)

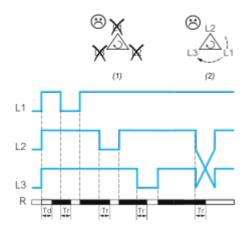


Technical Description

Function Diagram

Phase Loss & Phase Sequence



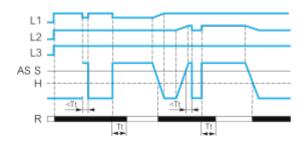


Td: Delay at power up **Tr**: Response time

R: Relay
(1): Phase Loss

(2) : Phase Sequence Fault

Asymmetry



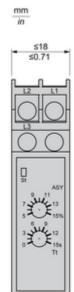
AS S : Asymmetry Setting H : Hysterisis 2% fixed

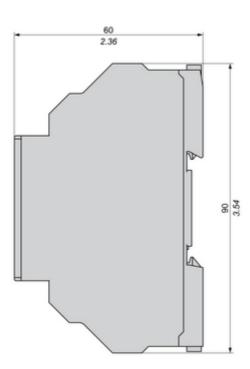
Tt: On delay

1.50	Status			
LED	Normal	Phase Seq. Fault	Phase Loss	ASY Fault
St	ON	BLINKING	OFF	OFF
R				

Technical Illustration

Dimensions





Offer Marketing Illustration

Product benefits / Features



Offer Marketing Illustration

Product benefits / Features

Technical Benefits

Harmony Control Relay

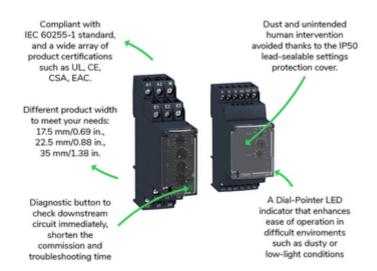


Image of product / Alternate images

Alternative



