Product data sheet

Specifications



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

RM10TE00N

Product availability: Stock - Normally stocked in distribution facility

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
Product Specific Application	For 3-phase supply

Complementary

Supply voltage limits	183…528 V AC, 3 phase
Supply frequency	47...63 Hz
Power consumption in VA	0…4.5 VA
Measurement range	208...480 V AC
Voltage detection threshold	< 175 V AC
Hysteresis	2 %
Measurement error	< 0.05 %/°C with temperature variation < 1 % over the whole range with voltage variation
Time delay type	Adjustable 0...100 s, +/- 10 % of the full scale value
Setting accuracy of time delay	10 %
Reset time	1.5 s time delay
Response time	< 550 ms (in the event of a fault)
Output contacts	1 C/O
nominal output current	5 A
Switching capacity in VA	1250 VA
Electrical durability	100000 cycles
Mechanical durability	10000000 cycles

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

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Product Certifications	cULus CE UKCA CCC
Marking	CULus CE UKCA CCC
Ambient Air Temperature for Storage	-40…158 °F (-40…70 °C) -40…158 °F (-40…70 °C)
Ambient air temperature for operation	5…140 °F (-15…60 °C)
Relative humidity	10…95 %
IP degree of protection	IP20 terminals) IP40 casing)
Pollution degree	2
Overvoltage category	II
Dielectric test voltage	1.89 kV AC 50 Hz, 1 min
Insulation resistance	> 100 MOhm 500 V DC
[Ui] rated insulation voltage	400 V
Connections - terminals	Screw terminals, 2 x 0.5...2 x 1.5 mm² 20 AWG...16 AWG) solid with or without cable end
Tightening torque	4.4…6.2 lbf.in (0.5…0.7 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
Reliability data	MTTFd = 158 years
Height	3.5 in (90 mm) 3.5 in (88.9 mm)
Width	0.7 in (17.5 mm) 0.7 in (17.8 mm)
Depth	2.3 in (58.5 mm) 2.3 in (58.4 mm)
Net Weight	0.165 lb(US) (0.075 kg) 0.17 lb(US) (0.08 kg)

Ordering and shipping details

Category	US10CP222370
Discount Schedule	0CP2
GTIN	3606487344698
Returnability	Yes
Country of origin	IN

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	0.984 in (2.500 cm)

Package 1 Width	2.756 in (7.000 cm)
Package 1 Length	4.331 in (11.000 cm)
Package weight(Lbs)	2.998 oz (85.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	48
Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	10.421 lb(US) (4.727 kg)

Contractual warranty

Warranty (in months)	18

Environmental Data

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 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**0 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**0 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**
California proposition 65	**WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov**

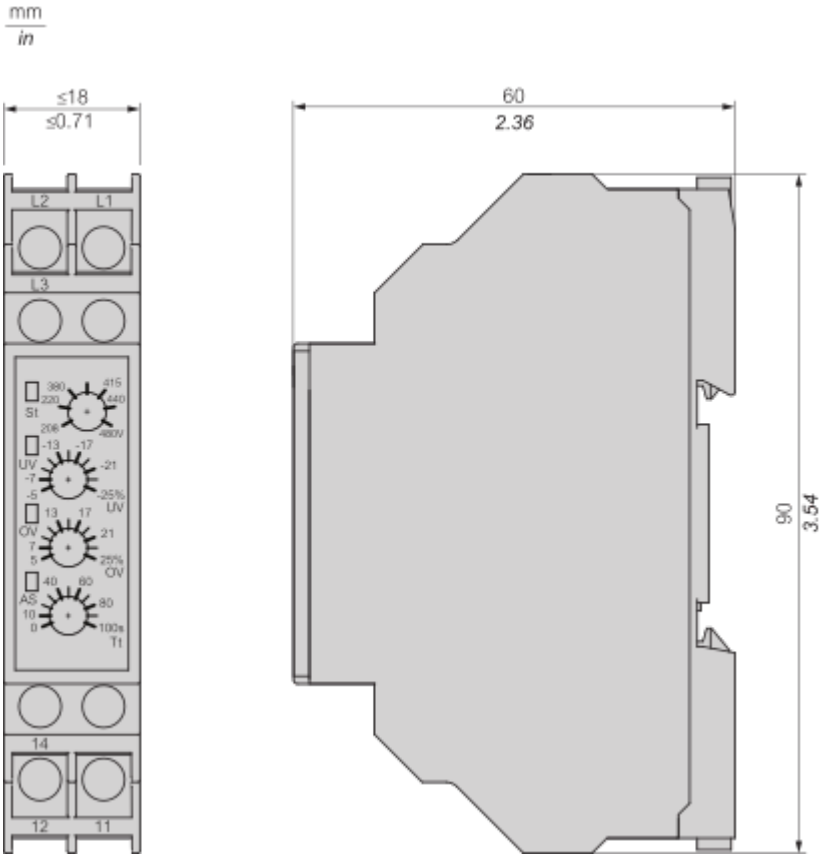
Use Again

Repack and remanufacture

Recyclability potential, in %	**70**
Circularity Profile	**End of Life Information**
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.**

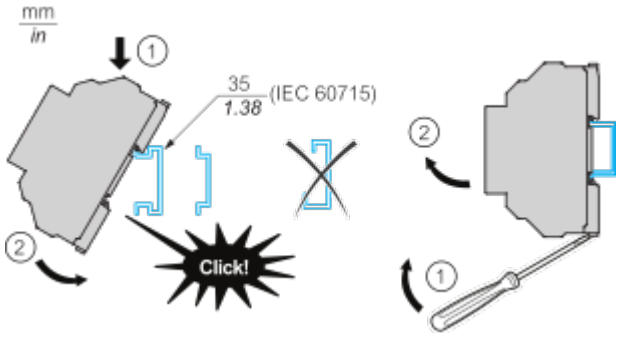
Dimensions Drawings

Dimensions



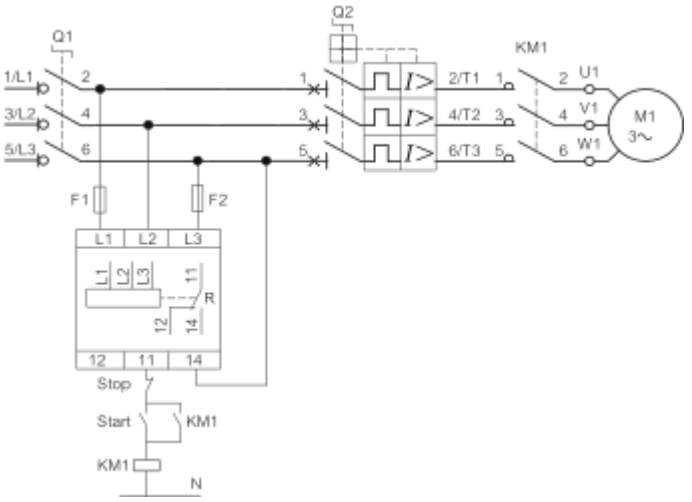
Mounting and Clearance

Mounting

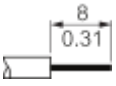


Connections and Schema

Wiring



NOTE:

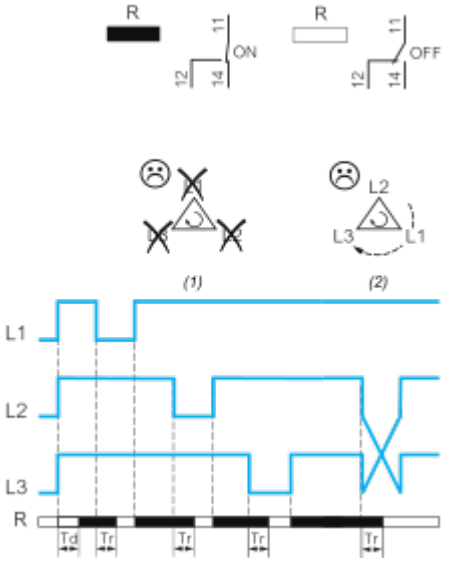
- Use copper conductors only
- TORQUE : 0.5…0.7 N.m (4.4…6.2 lbf.in)
- 

2x (0.5...1.5mm² / 20...16AWG)

Technical Description

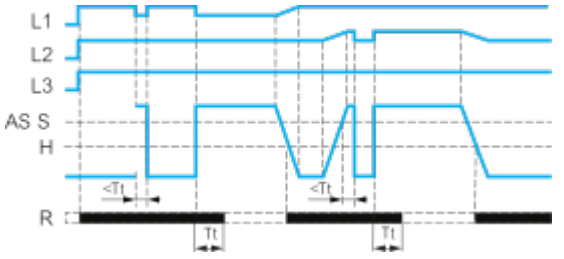
Function Diagram

Phase Loss & Phase Sequence



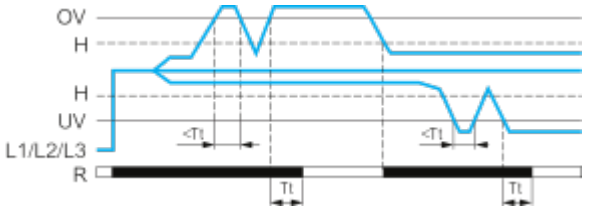
Td : Delay at power up
Tr : Response time
R : Relay
(1) : Phase Loss
(2) : Phase Sequence Fault

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

LED	Status

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

Image of product / Alternate images

Alternative

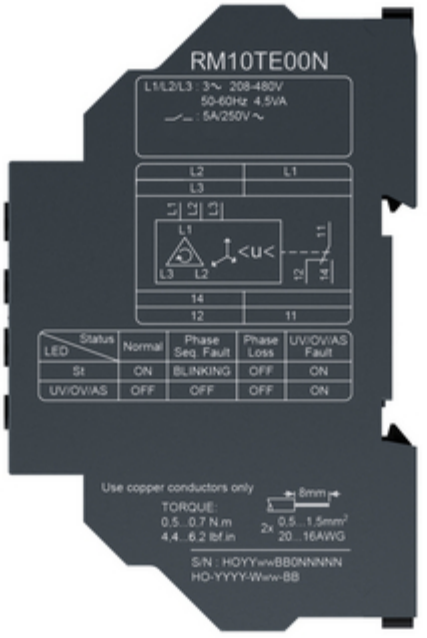





14
12
11


L2
L1
L3
RM10TE00N
St
UV
OV
AS
Schneider
Electric
14
12
11




RM10TE00N
L1/L2/L3 : 3~ 208-480V
50-60Hz 4.5VA
: 5A/250V ~
L2
L1
L3
L1
L3
L2
<u<
11
12
14
14
12
11
Status
LED
Normal
Phase Seq. Fault
Phase Loss
UV/OV/AS Fault
St
ON
BLINKING
OFF
ON
UV/OV/AS
OFF
OFF
OFF
ON
Use copper conductors only
TORQUE:
0.5...0.7 N.m
4.4...6.2 lbf.in
8mm
2x
0.5...1.5mm²
20...16AWG
S/N : HOYYwwBB0NNNNN
HO-YYYY-Www-BB