

Product data sheet

Specifications



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

RM10TA00N

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	RM10TA
Relay monitored parameters	Phase sequence Phase failure detection Asymmetry
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 %
Adjustment of asymmetry threshold	5...15 % of Un selected
Measurement error	< 0.05 %/°C with temperature variation < 1 % over the whole range with voltage variation
Time delay type	Adjustable 0...15 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
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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

Standards	IEC 60255-1
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)
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	3606487344681
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	10.382 lb(US) (4.709 kg)

Contractual warranty

Warranty (in months)	18
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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

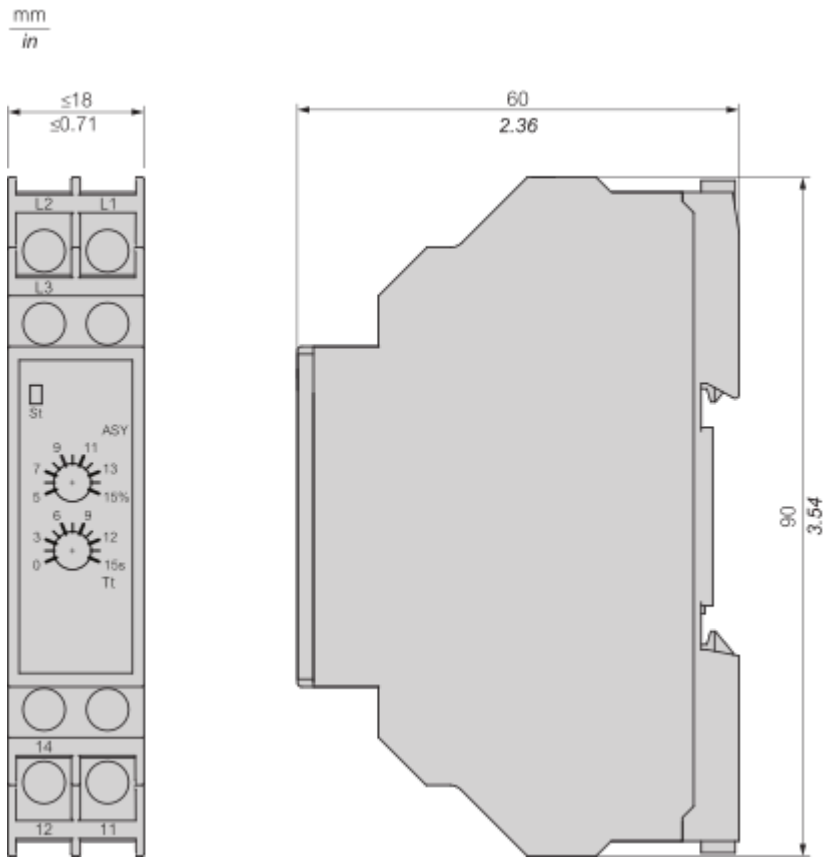
 Materials and Substances	
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California 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.

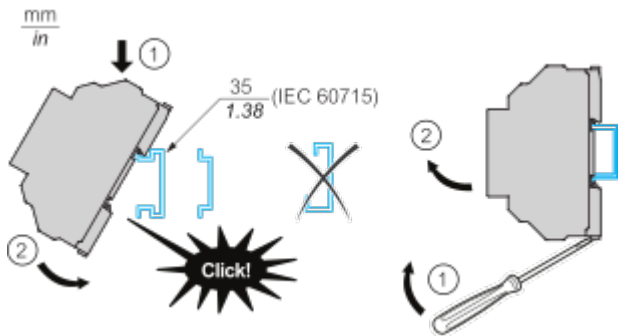
Dimensions Drawings

Dimensions



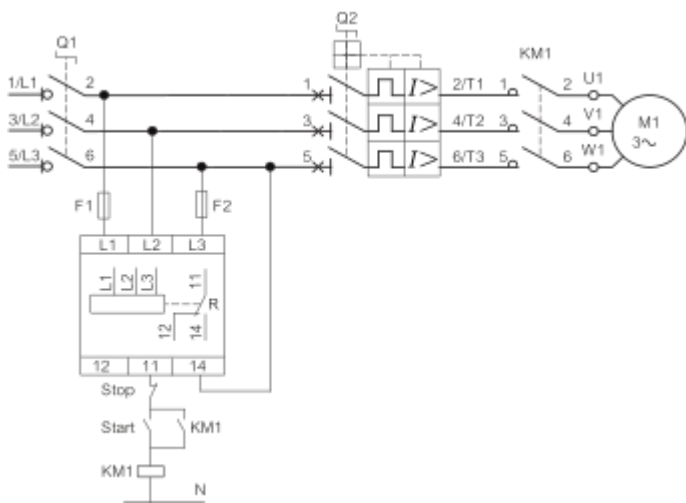
Mounting and Clearance

Mounting

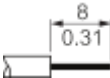


Connections and Schema

Wiring



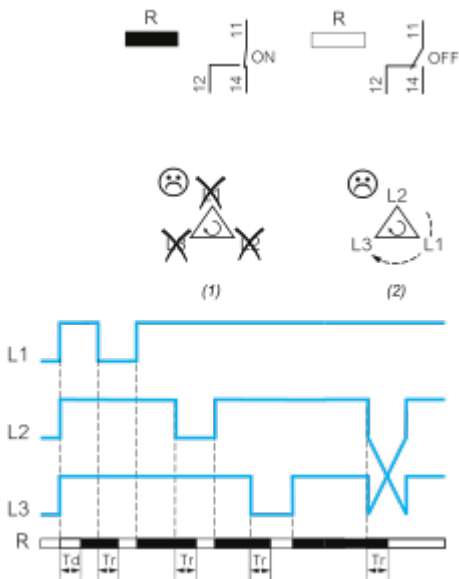
NOTE:

- 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

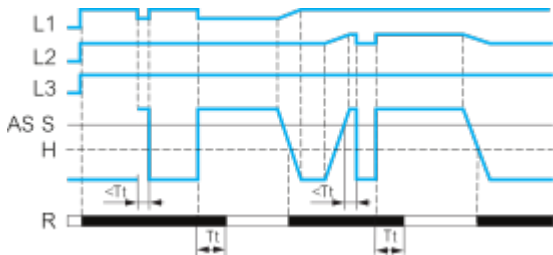
Function Diagram

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

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

Image of product / Alternate images

Alternative





