

Product data sheet

Specifications



3 phase control relay, Harmony Control Relays, 480 to 690V AC, phase sequence, phase failure, phase imbalance, UV and OV

RM35TF36

Product availability: Stock - Normally stocked in distribution facility

Main

Range of Product	Harmony Control Relays
Relay Type	Multifunction control relay
Relay name	RM35TF
Product or Component Type	3-phase control relay
Relay monitored parameters	Undervoltage and overvoltage in window mode Phase sequence Phase failure detection Asymmetry
Control Type	Without test button
Contacts type and composition	2 C/O
[Uc] control circuit voltage	480...690 V
Product Specific Application	For 3-phase supply

Complementary

[Us] rated supply voltage	480...690 V AC, self-powered
Supply voltage limits	384...828 V AC, 3 phase
Supply frequency	50/60 Hz +/- 5 %
Power consumption in VA	0...22 VA 690 V AC 50 Hz 0...26 VA 690 V AC 60 Hz
Measurement range	480...690 V AC
Measurement voltage limits	384...828 V AC
Voltage detection threshold	< 300 V
Maximum measuring cycle	140 ms measurement cycle as true rms value
Threshold adjustment voltage	-20...+20 % in the range 480...690 V AC
Hysteresis	2 % fixed
Adjustment of asymmetry threshold	5...15 % of Un selected
Measurement error	< 1 % over the whole range with voltage variation 0.05 %/°C with temperature variation
Time delay type	Adjustable 0.1...10 s, +/- 10 % of the full scale value Tt- time delay upon fault
Reset time	1500 ms at 480 V
Response time	< 300 ms (in the event of a fault)
Output contacts	2 C/O
nominal output current	5 A

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

Maximum switching voltage	250 V AC
Switching capacity in VA	1250 VA
Minimum switching current	10 mA 12 V DC
Maximum switching current	5 A AC 5 A DC
Electrical durability	100000 cycles
Mechanical durability	30000000 cycles
Control circuit voltage limits	- 20 % + 20 % Un
Control circuit frequency	50...60 Hz +/- 5 %
Tightening torque	5.3...8.8 lb.in 0.6...1 N.m

Environment

Electromagnetic compatibility	Emission standard for industrial environments conforming to IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments conforming to IEC 61000-6-3 Immunity for industrial environments conforming to IEC 61000-6-2
Standards	EN/IEC 60255-1
Product Certifications	DNV-GL UL CSA RCM CCC CE UKCA
Marking	WEEE China RoHS ROHS
Ambient Air Temperature for Storage	-40...158 °F (-40...70 °C)
Ambient air temperature for operation	-4...140 °F (-20...60 °C)
Relative humidity	93...97 % 77...131 °F (25...55 °C) IEC 60068-2-30
Vibration resistance	0.075 mm (f= 5...57.6 Hz) conforming to IEC 60068-2-6 1 gn (f= 57.6...150 Hz)
IP degree of protection	IP20 IEC 60529 terminals) IP30 IEC 60529 casing) IP50 IEC 60529 front panel)
Pollution degree	3 IEC 60664-1
Overvoltage category	III conforming to IEC 60664-1
Dielectric test voltage	2.3 kV AC 50/60 Hz, 1 min IEC 60255-27
[Uimp] rated impulse withstand voltage	6 kV IEC 60664-1
Insulation resistance	> 100 MOhm 500 V DC IEC 60255-27
[Ui] rated insulation voltage	600 V IEC 60664-1
Operating position	Any position without derating
Connections - terminals	Screw terminals, 1 x 0.5...1 x 4 mm² 20 AWG...11 AWG) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm² 20 AWG...14 AWG) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm² 24 AWG...12 AWG) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm² 24 AWG...16 AWG) flexible with cable end
Housing material	Polycarbonate
Local signalling	LED (green) for power ON LED (yellow) for relay ON LED (yellow) for fault

Mounting support	35 mm symmetrical DIN rail conforming to IEC 60715
Height	3.5 in (90 mm)
Width	1.4 in (35 mm)
Depth	2.8 in (72 mm)
Product Weight	0.26 lb(US) (0.12 kg)
Resistance to electrostatic discharge	6 kV contact IEC 61000-4-2 8 kV air
Resistance to fast transients	2 kV IEC 61000-4-4

Ordering and shipping details

Category	US10CP221122
Discount Schedule	0CP2
GTIN	3606487344667
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.850 in (4.700 cm)
Package 1 Width	3.150 in (8.000 cm)
Package 1 Length	3.819 in (9.700 cm)
Package weight(Lbs)	4.938 oz (140.000 g)
Unit Type of Package 2	S03
Number of Units in Package 2	48
Package 2 Height	11.811 in (30.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	16.458 lb(US) (7.465 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	69 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	10 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]	59 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.3 kg CO2 eq.

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 Longer

 Lifetime extension	
Repair	No

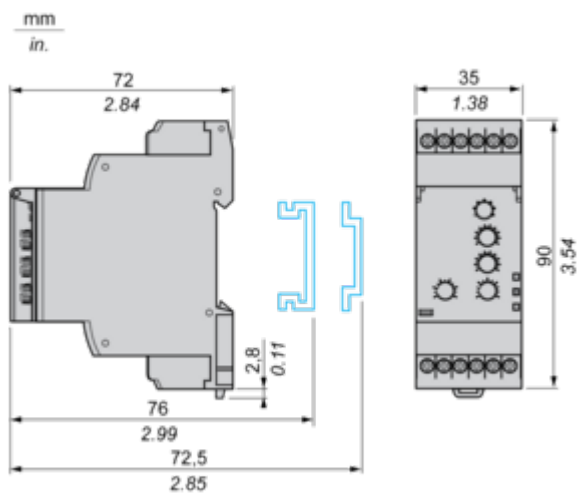
Use Again

 Repack and remanufacture	
Recyclability potential, in %	8
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

Multifunction 3-Phase Supply Control Relays

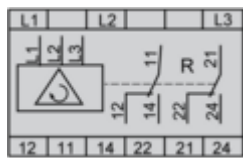
Dimensions and Mounting



Connections and Schema

Multifunction 3-Phase Supply Control Relays

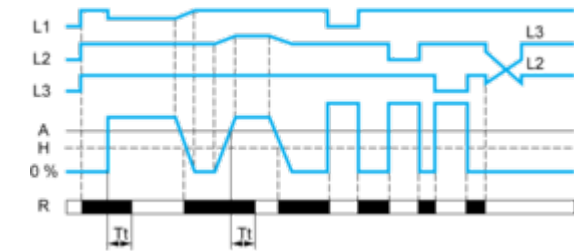
Wiring Diagram



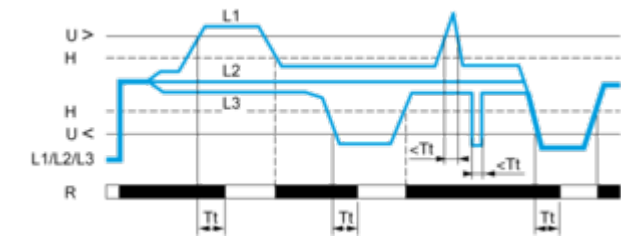
Technical Description

Function Diagrams

Phase Sequence Control, Phase Failure Detection (U measured < 0.7 x nominal supply voltage) and Asymmetry Detection



Control of Overvoltage and Undervoltage in Window Mode



Legend

- A Asymmetry threshold
- Tt Time delay after crossing of threshold
- H Hysteresis
- U> Overvoltage threshold
- U< Undervoltage threshold
- L1, L2, L3 Phases of the supply voltage monitored
- R Output relay
- Relay status: black color = energized.

Image of product / Alternate images

Alternative





