

multifunction phase control relay RM35-T - range 194..528 V AC

RM35TF30

Main

Range of product	Harmony Control Relays	
Relay type	Multifunction control relay	
Product or component type	3-phase control relay	
Relay name	RM35TF	
Relay monitored parameters	Undervoltage and overvoltage in window mode Phase sequence Phase failure detection Asymmetry	
Measurement range	220480 V AC	
time delay	Adjustable 0.110 s, +/- 10 % of the full scale value Tt- time delay upon fault	
Output contacts	2 C/O	
Nominal output current	5 A	
Contacts type and composition	2 C/O	
[Uc] control circuit voltage	220480 V	
Product specific application	For 3-phase supply	

Complementary

[Un] rated nominal voltage	, self-powered	
Supply voltage limits	194528 V AC, 3 phases	
Reset time	1500 ms at 480 V	
Maximum switching voltage	250 V AC 250 V DC	
Switching capacity in VA	1250 VA	
Minimum switching current	10 mA at 5 V DC	
Maximum switching current	5 A AC 5 A DC	
Control circuit voltage limits	- 12 % + 10 % Un	
Power consumption in VA	022 VA at 400 V AC 50 Hz	
Voltage detection threshold	< 194 V	
Control circuit frequency	5060 Hz +/- 10 %	
Measurement voltage limits	176528 V AC	
Hysteresis	2 %	
delay at power up	650 ms	
Maximum measuring cycle	140 ms measurement cycle as true rms value	

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

Threshold adjustment voltage	220 % of Un selected -122 % in the range 220 V AC +2+10 % in the range 480 V AC	
Voltage range	220480 V phase to phase	
Adjustment of asymmetry threshold	515 % of Un selected	
Repeat accuracy	0.3 % for time delay 0.5 % for input and measurement circuit	
Measurement error	< 1 % over the whole range with voltage variation 0.05 %/°C with temperature variation	
Response time	< 200 ms (in the event of a fault)	
Insulation resistance	> 500 MOhm at 500 V DC conforming to IEC 60255-5 > 500 MOhm at 500 V DC conforming to IEC 60664-1	
[Ui] rated insulation voltage	400 V conforming to IEC 60664-1	
Supply frequency	50/60 Hz +/- 10 %	
Operating position	Any position without derating	
Connections - terminals	Screw terminals, 1 x 0.51 x 4 mm² (AWG 20AWG 11) solid without cable end Screw terminals, 2 x 0.52 x 2.5 mm² (AWG 20AWG 14) solid without cable end Screw terminals, 1 x 0.21 x 2.5 mm² (AWG 24AWG 12) flexible with cable end Screw terminals, 2 x 0.22 x 1.5 mm² (AWG 24AWG 16) flexible with cable end	
Tightening torque	0.61 N.m conforming to IEC 60947-1	
Housing material	Self-extinguishing plastic	
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	
Electrical durability	100000 cycles	
Mechanical durability	30000000 cycles	
Operating rate	<= 360 operations/hour full load	
Utilisation category	AC-12 conforming to IEC 60947-5-1 AC-13 conforming to IEC 60947-5-1 AC-14 conforming to IEC 60947-5-1 AC-15 conforming to IEC 60947-5-1 DC-12 conforming to IEC 60947-5-1 DC-13 conforming to IEC 60947-5-1	
Safety reliability data	MTTFd = 399.5 years B10d = 360000	
Width	35 mm	
Net weight	0.13 kg	
Control type	Without test button	
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	IEC 60255-1	
Product certifications	GL UL CSA GOST C-Tick	

CE

Marking

Directives	89/336/EEC - electromagnetic compatibility 73/23/EEC - low voltage directive	
Ambient air temperature for storage	-4070 °C	
Ambient air temperature for operation	-2050 °C	
Relative humidity	95 % at 55 °C conforming to IEC 60068-2-30	
Vibration resistance	0.35 mm (f= 557.6 Hz) conforming to IEC 60068-2-6 1 gn (f= 57.6150 Hz) conforming to IEC 60255-21-1	
Shock resistance	15 gn for 11 ms conforming to IEC 60255-21-1	
IP degree of protection	IP20 (terminals) conforming to IEC 60529 IP30 (casing) conforming to IEC 60529	
Pollution degree	3 conforming to IEC 60664-1	
Overvoltage category	III conforming to IEC 60664-1	
Dielectric test voltage	2 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	4.800 cm
Package 1 Width	7.800 cm
Package 1 Length	9.700 cm
Package 1 Weight	129.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	48
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	7.070 kg
Unit Type of Package 3	P06
Number of Units in Package 3	384
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	64.124 kg

Contractual warranty

Warranty 18 months



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	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	95
Environmental Disclosure	Product Environmental Profile

Use Better

Packaging made with recycled cardboard	Yes	
Packaging without single use plastic	Yes	

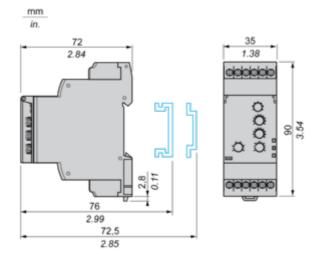
Use Again

○ Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No

Dimensions Drawings

Multifunction 3-Phase Supply Control Relays

Dimensions and Mounting



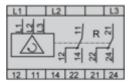
Product datasheet

RM35TF30

Connections and Schema

Multifunction 3-Phase Supply Control Relays

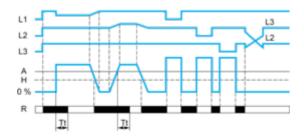
Wiring Diagram



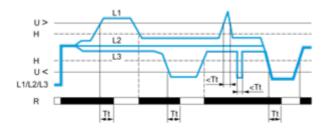
Technical Description

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 thershold

Tt Time delay after crossing of threshold

H Hysteresis

U> Overvoltage threshold

U< Undervoltage threshold

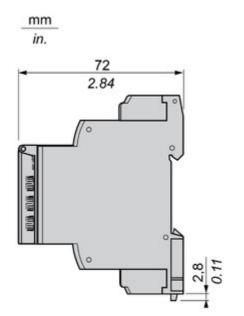
L1, L2, L3 Phases of the supply voltage monitored

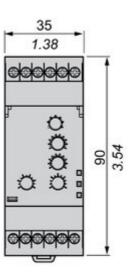
R Output relay

Relay status: black color = energized.

Technical Illustration

Dimensions





Apr 3, 2025

Offer Marketing Illustration

Product benefits / Features



Offer Marketing Illustration

Product benefits / Features

Technical Benefits

Harmony Control Relay

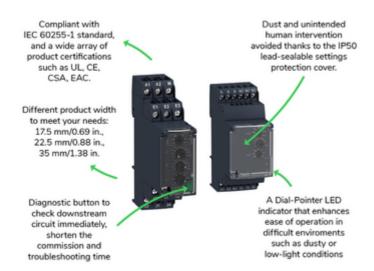


Image of product / Alternate images

Alternative







