Product data sheet

Specifications

Harmony, 3 phase supply control relay, range 208 to 480 VAC, sequence, phase failure, phase imbalance, voltage

RM17TE00

Main

Range of product	Harmony Control Relays
Relay type	Multifunction control relay
Product or component type	3-phase control relay
Relay name	RM17TE
Relay monitored parameters	Undervoltage and overvoltage in window mode Asymmetry Phase sequence Phase failure detection
Measurement range	208...480 V AC
Time delay type	Adjustable 0.1...10 s, +/- 10 % of the full scale value Tt- time delay upon fault
Output contacts	1 C/O
nominal output current	5 A
Contacts type and composition	1 C/O
[Uc] control circuit voltage	208...480 V
Product specific application	For 3-phase supply

Complementary

[Us] rated supply voltage	, self-powered
Supply voltage limits	183…528 V AC
Reset time	1500 ms time delay
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	0…22 VA at 400 V AC 50 Hz
Control circuit frequency	50...60 Hz +/- 10 %
Measurement voltage limits	183…528 V AC
Hysteresis	2 %
delay at power up	650 ms
Maximum measuring cycle	150 ms measurement cycle as true rms value

Threshold adjustment voltage	2...20 % of Un selected -2...-17 % in the range 220 V AC +2...+10 % in the range 480 V AC -2...-12 % in the range 208 V AC
Voltage range	208...480 V phase to phase
Adjustment of asymmetry threshold	5...15 % 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
Phase failure sensitivity	0.7 Un
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 0.5...1 x 4 mm² (AWG 20...AWG 11) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm² (AWG 20...AWG 14) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm² (AWG 24...AWG 12) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm² (AWG 24...AWG 16) flexible with cable end
Tightening torque	0.6…1 N.m conforming to IEC 60947-1
Housing material	Self-extinguishing plastic
Local signalling	LED (green) for power ON LED (yellow) for relay ON
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 = 502.2 years B10d = 470000
Width	17.5 mm
Product 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	GOST C-Tick CSA UL GL

Marking	CE
Directives	89/336/EEC - electromagnetic compatibility 73/23/EEC - low voltage directive
Ambient air temperature for storage	-40…70 °C
Ambient air temperature for operation	-20…50 °C
Relative humidity	95 % at 55 °C conforming to IEC 60068-2-30
Vibration resistance	0.35 mm (f= 5…57.6 Hz) conforming to IEC 60068-2-6 1 gn (f= 57.6…150 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 conforming to IEC 60255-5 2 kV, 1 min AC 50 Hz conforming to IEC 60664-1
Non-dissipating shock wave	4 kV conforming to IEC 60255-5 4 kV conforming to IEC 60664-1 4 kV conforming to IEC 61000-4-5

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.700 cm
Package 1 Width	7.700 cm
Package 1 Length	9.600 cm
Package 1 Weight	92.000 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	4.700 kg

Contractual warranty

Warranty	18 months

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	98

Use Better

Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	Ba9cbb5b-722a-41d2-b7d0-f60d5f3f104d
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

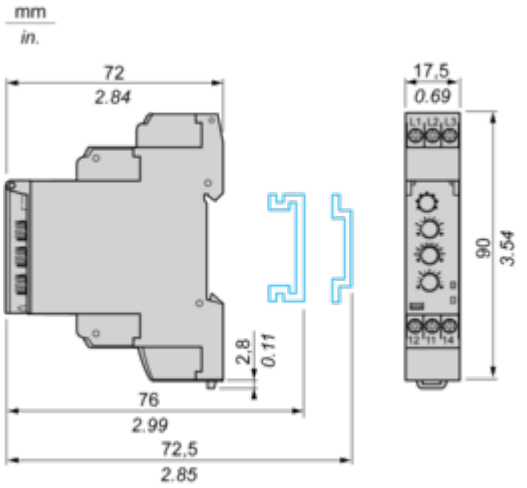
Repack and remanufacture

Take-back	No

Dimensions Drawings

Multifunction 3-Phase Supply Control Relays

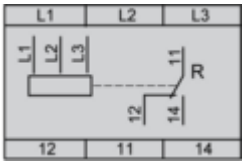
Dimensions and Mounting



Connections and Schema

Multifunction 3-Phase Supply Control Relays

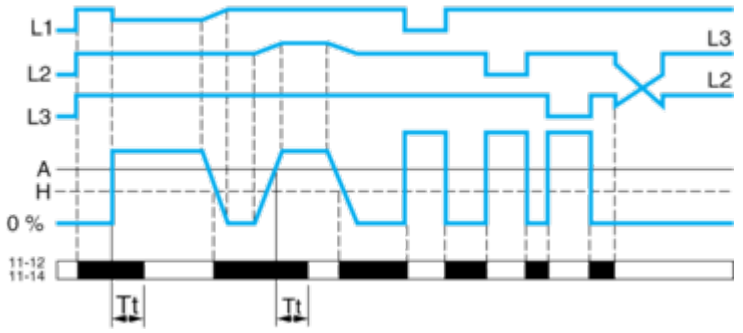
Wiring Diagram



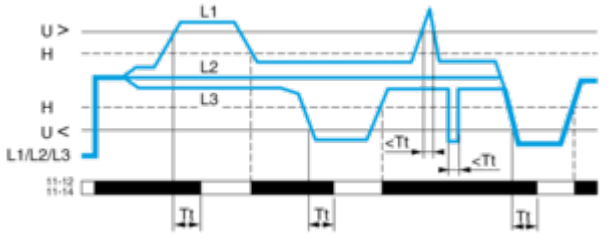
Technical Description

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 thershold (adjustble from 5...15% of the nominal supply voltage)
Tt Time delay after crossing of threshold (adjustable on front panel)
H Hysteresis
U> Overvoltage threshold
U< Undervoltage threshold
L1, L2, L3 Phases of the supply voltage monitored
11-12, 11-14 Output relay connections (refer to Connections and Schema)
Relay status: black color = energized.

Technical Illustration

Dimensions

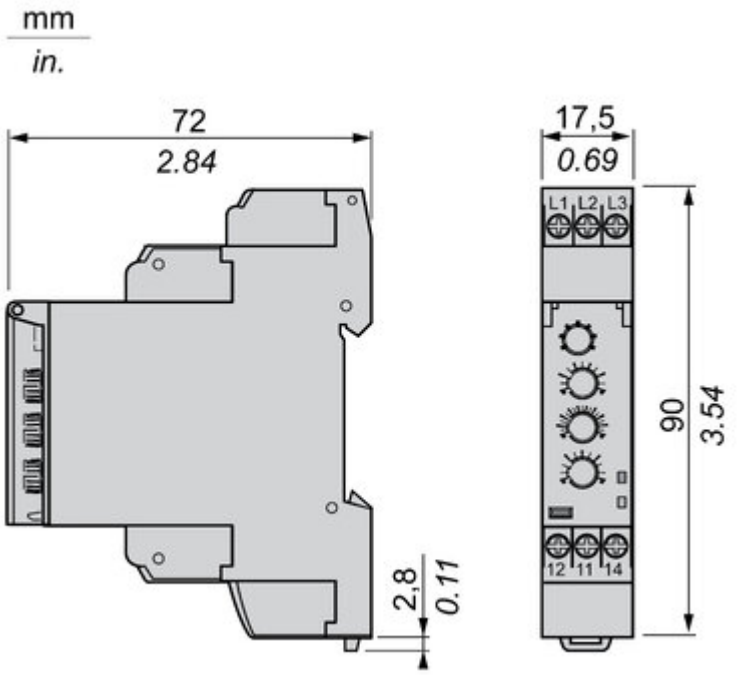
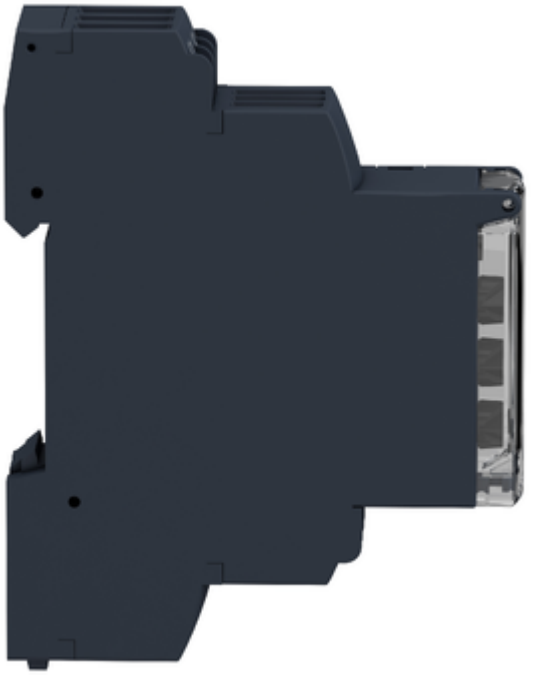


Image of product / Alternate images

Alternative




12
11
14

Image of product in real life situation