Product data sheet

Specifications

3-phase control relay, Harmony Control Relays, 5A, 1CO, phase failure detection, 208...480V AC

RM17TT00

Main

Range of product	Harmony Control Relays
Relay type	Multifunction control relay
Product or component type	3-phase control relay
Relay name	RM17TT
Relay monitored parameters	Phase failure detection Phase sequence
Measurement range	208...480 V AC
Time delay type	Without
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
Voltage range	208...480 V phase to phase

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
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	UL GL C-Tick GOST CSA
Marking	CE
Directives	73/23/EEC - low voltage directive 89/336/EEC - electromagnetic compatibility
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	2.800 cm
Package 1 Width	7.800 cm
Package 1 Length	9.600 cm
Package 1 Weight	90.000 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	4.585 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	**99**

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

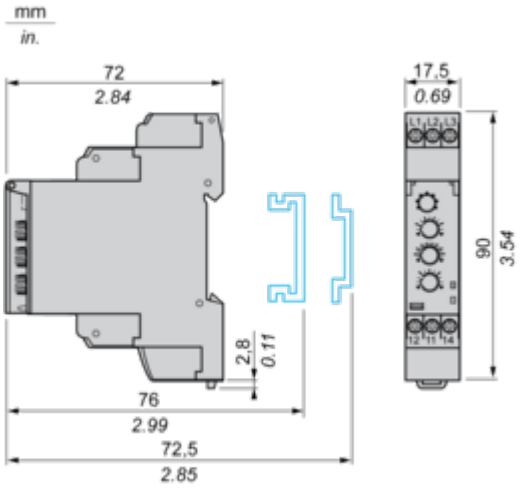
Repack and remanufacture

Take-back	**No**

Dimensions Drawings

Multifunction 3-Phase Supply Control Relays

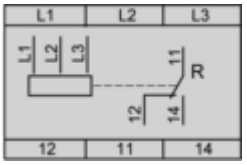
Dimensions and Mounting



Connections and Schema

Multifunction 3-Phase Supply Control Relays

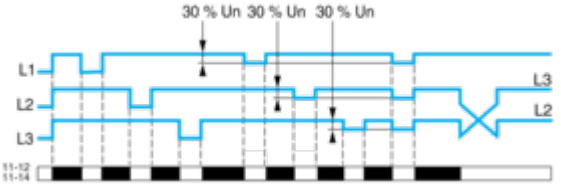
Wiring Diagram



Technical Description

Function Diagram

Phase Sequence Control and Partial Phase Failure Detection



Legend

Un Nominal 3-phase supply voltage
L1, L2, L3 Phases of the supply voltage monitored
11-12, 11-14 Output relay connections
Relay status: black color = energized.

Technical Illustration

Dimensions

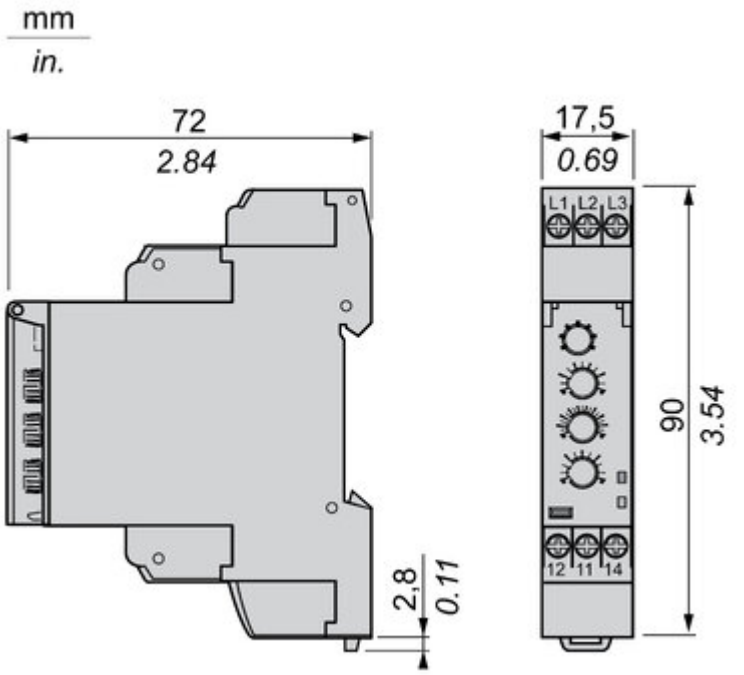
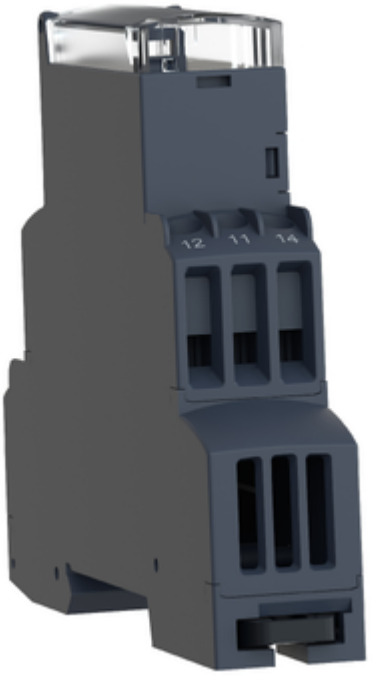
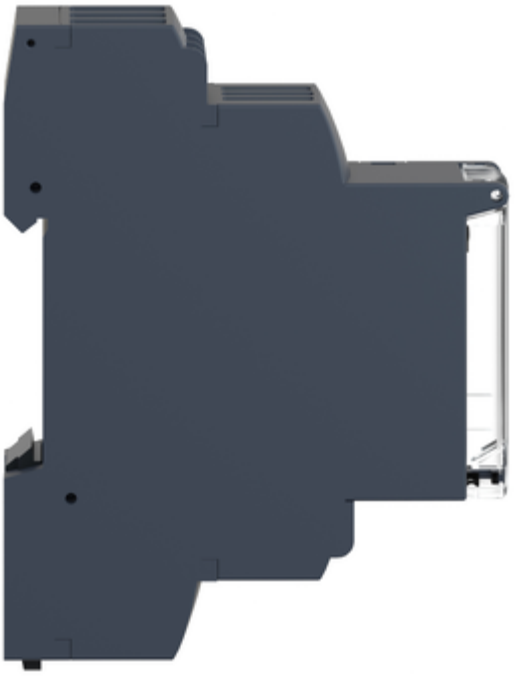


Image of product / Alternate images

Alternative




RM17TT00
L1
L2
L3
12
11
14
Use copper conductors only




L1
L2
L3
200
415
440
480V
12
11
14

Image of product in real life situation