Product datasheet

Specifications



Modular 3-phase voltage control relay, 5 A, 2 CO, 220…480 V AC

Local distributor code:

389835035 RM35UB330

EAN Code: 3389119405324

Main

Range of product	Harmony Control Relays
Relay type	Voltage control relay
Product or component type	3-phase control relay
Relay name	RM35UB3
Relay monitored parameters	Overvoltage and undervoltage between phases
Control type	Without test button
Contacts type and composition	2 C/O
Product specific application	For 3-phase supply

Complementary

[Us] rated supply voltage	, self-powered
Supply voltage limits	194…528 V AC
Power consumption in VA	0…22 VA at 400 V AC 50 Hz
Measurement range	208...480 V AC
Voltage detection threshold	194 V
Maximum measuring cycle	150 ms measurement cycle as true rms value
Threshold adjustment voltage	2...20 % of Un selected -12...-2 % in the range 220 V AC +2...+10 % in the range 480 V AC
Hysteresis	2 %
Repeat accuracy	+/- 0.5 % for input and measurement circuit +/- 1 % for time delay
Measurement error	< 1 % over the whole range with voltage variation 0.05 %/°C with temperature variation
Time delay type	Adjustable 0.3...30 s, 0 + 10 % Tt- time delay upon fault
Setting accuracy of time delay	10 %
Reset time	1500 ms time delay
Response time	< 200 ms (in the event of a fault)
Power on delay	650 ms
Output contacts	1 C/O + 1 C/O, 1 per threshold
nominal output current	5 A
Maximum switching voltage	250 V AC/DC
Switching capacity in VA	1250 VA

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

Minimum switching current	10 mA at 5 V DC
Maximum switching current	5 A AC/DC
Electrical durability	100000 cycles
Mechanical durability	30000000 cycles
Control circuit frequency	50...60 Hz +/- 15 %
Measurement accuracy	+/- 10 % of the full scale value
Quality labels	CE

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 NF EN/IEC 61000-6-2
Standards	IEC 60255-1
Product certifications	C-Tick GOST CSA GL UL
Directives	73/23/EEC - low voltage directive 89/336/EEC - electromagnetic compatibility
Ambient air temperature for storage	-40…70 °C -40…70 °C
Ambient air temperature for operation	-20…50 °C
Relative humidity	95 % at 55 °C conforming to IEC 60068-2-30
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
Insulation resistance	> 500 MOhm at 500 V DC conforming to IEC 60255-5
[Ui] rated insulation voltage	400 V conforming to 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...2 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
Tightening torque	0.6…1 N.m conforming to IEC 60947-1
Housing material	Polycarbonate
Local signalling	LED (green) for power ON LED (yellow) for relay ON
Mounting support	35 mm symmetrical DIN rail conforming to IEC 60715
Reliability data	B10d = 300000 MTTFd = 319.6 years
Height	90 mm 88.9 mm
Width	35 mm 35.6 mm

Depth	72 mm 71.1 mm
Net weight	0.13 kg 0.13 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.500 cm
Package 1 Width	7.800 cm
Package 1 Length	9.700 cm
Package 1 Weight	133.000 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	6.649 kg

Logistical informations

Country of origin	ID

Contractual warranty

Warranty (in months)	18

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 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**8 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]	**90 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.2 kg CO2 eq.**
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
EU RoHS Directive	Compliant By Exemption
REACh Regulation	Reference contains Substances of Very High Concern above the threshold

Use Again

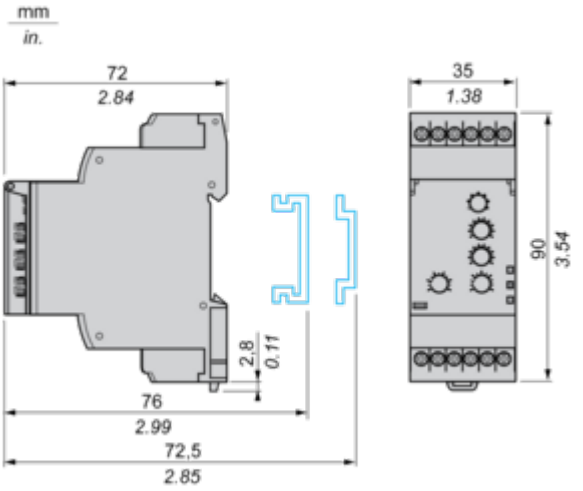
Repack and remanufacture

Recyclability potential, in %	**8**
End of life manual availability	End of Life Information
Take-back	**No**

Dimensions Drawings

3-Phase Voltage Control Relays

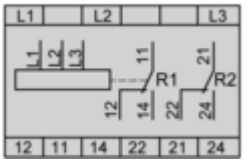
Dimensions and Mounting



Connections and Schema

3-Phase Voltage Control Relays

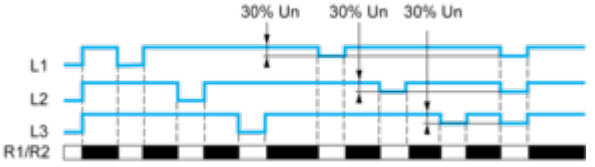
Wiring Diagram



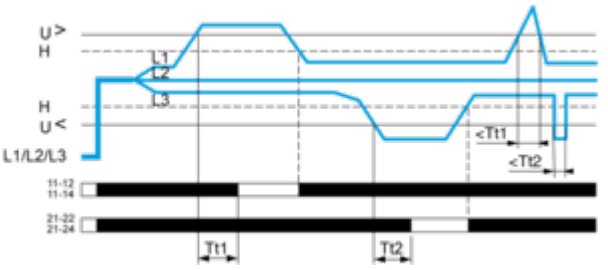
Technical Description

Function Diagrams

Phase Failure Detection (U measured < 0.7 x nominal supply voltage)



Control of Overvoltage and Undervoltage



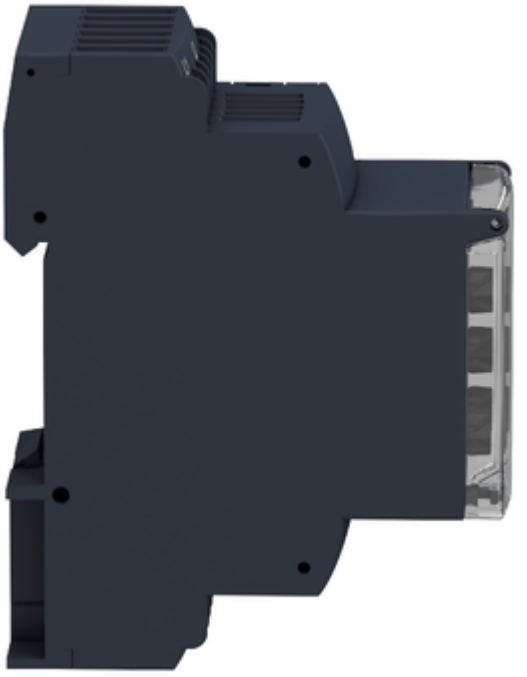
Legend

Un Nominal supply voltage
Tt1 Overvoltage threshold delay (adjustable on front panel from 0.3 s to 30 s)
Tt2 Undervoltage threshold delay (adjustable on front panel 0.3 s to 30 s)
H Hysteresis
U> Overvoltage threshold
U< Undervoltage threshold
L1, L2, L3 Phases of the supply voltage monitored
11-12, 11-14 R1 output relay connections (refer to Connections and Schema)
21-22, 21-24 R2 output relay connections (refer to Connections and Schema)
Relay status: black color = energized.

Image of product / Alternate images

Alternative










L1
L2
L3
> U
< U
Tt
Asym
Schneider
12 11 14 22 21 24


12 11 14 22 21 24