

Product data sheet

Specifications



voltage control relay, Harmony Control Relays, 5A, 2CO, 220...480V AC

RM35UB330

Main

Range of product	Harmony Control Relays
Relay type	Voltage control relay
Product or component type	3-phase control relay
Product specific application	For 3-phase supply
Relay name	RM35UB3
Relay monitored parameters	Overvoltage and undervoltage between phases
time delay	Adjustable 0.3...30 s, 0 + 10 % Tt- time delay upon fault
Switching capacity in VA	1250 VA
Measurement range	208...480 V AC
Contacts type and composition	2 C/O

Complementary

Reset time	1500 ms time delay
Maximum switching voltage	250 V AC/DC
Minimum switching current	10 mA at 5 V DC
Maximum switching current	5 A AC/DC
Supply voltage limits	194...528 V AC
Power consumption in VA	0...22 VA at 400 V AC 50 Hz
Control circuit frequency	50...60 Hz +/- 15 %
Voltage detection threshold	194 V
Output contacts	1 C/O + 1 C/O, 1 per threshold
nominal output current	5 A
Hysteresis	2 %
Measurement accuracy	+/- 10 % of the full scale value
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 -12...-2 % in the range 220 V AC +2...+10 % in the range 480 V AC
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

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

Response time	< 200 ms (in the event of a fault)
Quality labels	CE
Insulation resistance	> 500 MOhm at 500 V DC conforming to IEC 60255-5 > 500 MOhm at 500 V DC conforming to IEC 60664-1
Operating position	Any position without derating
Local signalling	LED (green) for power ON LED (yellow) for relay ON
Overvoltage category	III conforming to IEC 60664-1
[UI] rated insulation voltage	400 V conforming to IEC 60664-1
Connections - terminals	Screw terminals, 1 x 0.5...1 x 4 mm ² (AWG 20...AWG 11) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm ² (AWG 20...AWG 14) solid without cable end Screw terminals, 1 x 0.2...2 x 2.5 mm ² (AWG 24...AWG 12) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm ² (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
Mounting support	35 mm symmetrical DIN rail conforming to IEC 60715
Electrical durability	10000 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 DC-14 conforming to IEC 60947-5-1
[Un] rated nominal voltage	, self-powered
Safety reliability data	B10d = 300000 MTTFd = 319.6 years
Control type	Without test button
Width	35 mm
Net weight	0.08 kg

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
Ambient air temperature for operation	-20...50 °C
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	5 gn conforming to IEC 60068-2-27
Standards	IEC 60255-1
Product certifications	C-Tick GOST CSA GL UL
Ambient air temperature for storage	-40...70 °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
Directives	73/23/EEC - low voltage directive 89/336/EEC - electromagnetic compatibility
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	4.500 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

Contractual warranty

Warranty	18 months
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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	99
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	Pro-active compliance (Product out of EU RoHS legal scope)
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

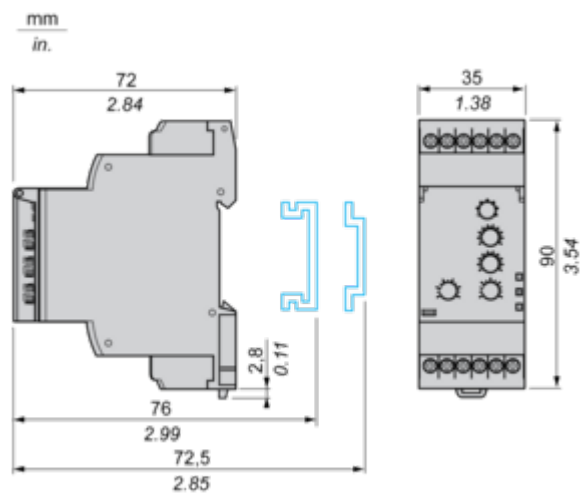
Use Again

Repack and remanufacture	
End of life manual availability	End of Life Information
Take-back	No

Dimensions Drawings

3-Phase Voltage Control Relays

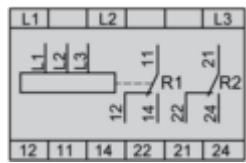
Dimensions and Mounting



Connections and Schema

3-Phase Voltage Control Relays

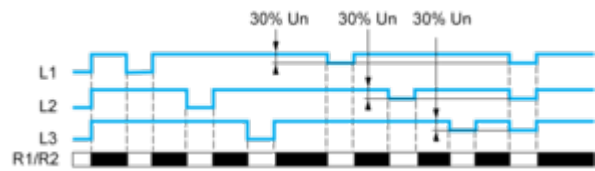
Wiring Diagram



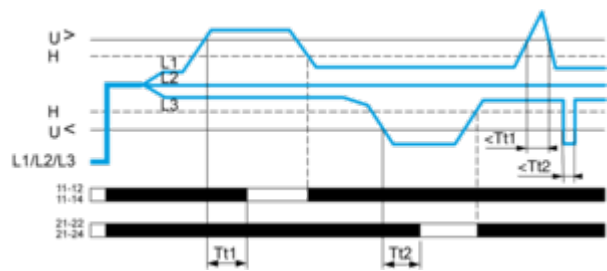
Technical Description

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.

Technical Illustration

Dimensions

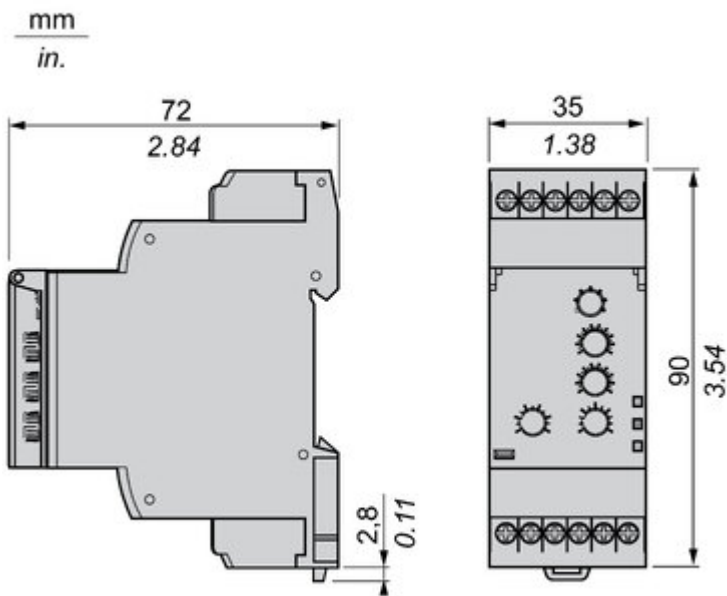


Image of product / Alternate images

Alternative

