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
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 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...2 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
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

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency RoHS/REACh

Well-being performance

Mercury Free

Rohs Exemption Information	Yes

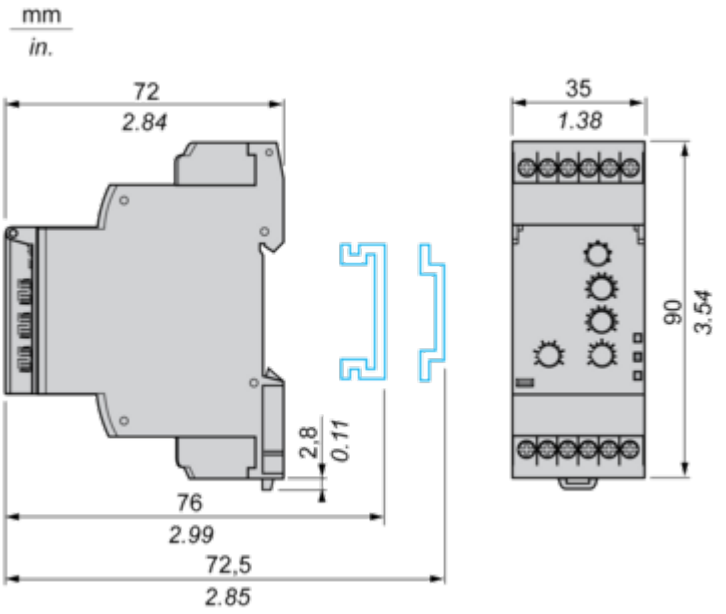
Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

Dimensions Drawings

3-Phase Voltage Control Relays

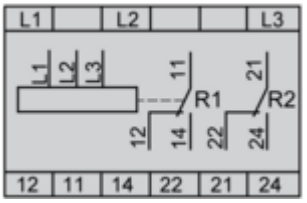
Dimensions and Mounting



Connections and Schema

3-Phase Voltage Control Relays

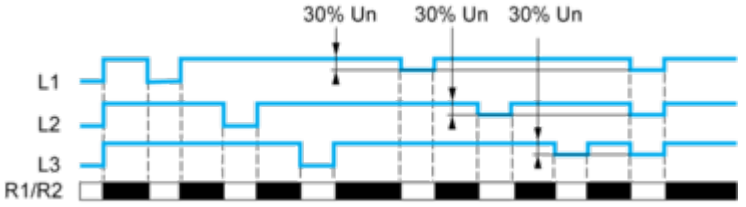
Wiring Diagram



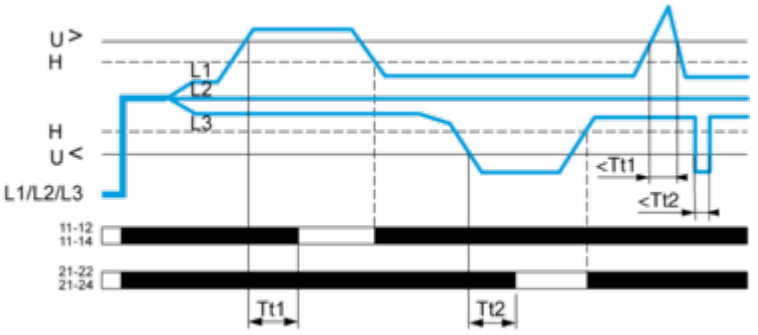
Technical Description

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.