# **Product datasheet**

Specification





# voltage control relay RM35-U - range 194..528 V 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 0.330 s, 0 + 10 % Tt- time delay upon fault
Switching Capacity In Va	1250 VA
Measurement Range	208480 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	194528 V AC
Power Consumption In Va	022 VA at 400 V AC 50 Hz
Control Circuit Frequency	5060 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	220 % of Un selected -122 % 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

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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 0.51 x 4 mm² (AWG 20AWG 11) solid without cable end Screw terminals, 2 x 0.52 x 2.5 mm² (AWG 20AWG 14) solid without cable end Screw terminals, 1 x 0.22 x 2.5 mm² (AWG 24AWG 12) flexible with cable end Screw terminals, 2 x 0.22 x 1.5 mm² (AWG 24AWG 16) flexible with cable end
Tightening Torque	0.61 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	-2050 °C
Vibration Resistance	0.35 mm (f= 557.6 Hz) conforming to IEC 60068-2-6 1 gn (f= 57.6150 Hz) conforming to IEC 60255-21-1
Shock Resistance	5 gn conforming to IEC 60068-2-27
Standards	IEC 60255-1

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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	-4070 °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™

**Green Premium**<sup>TM</sup> **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

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

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Transparency RoHS/REACh

#### Well-being performance



Mercury Free



Rohs Exemption Information

Yes

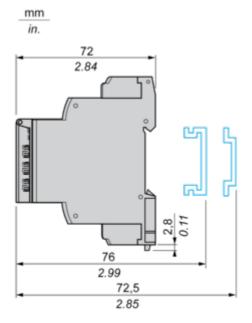
#### **Certifications & Standards**

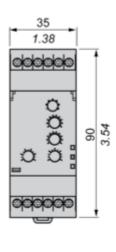
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

#### **Dimensions Drawings**

## 3-Phase Voltage Control Relays

#### **Dimensions and Mounting**





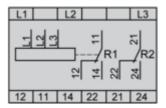
## **Product datasheet**

## RM35UB330

Connections and Schema

#### 3-Phase Voltage Control Relays

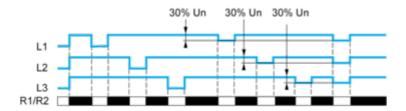
#### Wiring Diagram



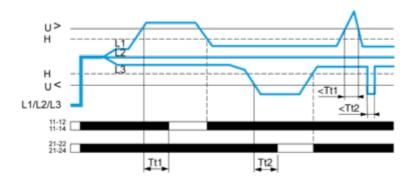
#### **Technical Description**

#### **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.