

Product data sheet

Specifications



voltage control relay, Harmony Control Relays, 5A, 2CO, 120...277V AC

RM35UB3N30

Product availability: Non-Stock - Not normally stocked in distribution facility

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	Absence of neutral Overvoltage and undervoltage between phases Overvoltage and undervoltage between neutral
time delay	Adjustable 0.3...30 s, 0 + 10 % Tt- time delay upon fault
Switching capacity in VA	1250 VA
Measurement range	120...277 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 5 V DC
Maximum switching current	5 A AC/DC
Supply voltage limits	114...329 V AC
Power consumption in VA	0...3.9 VA AC
Control circuit frequency	50...60 Hz +/- 15 %
Voltage detection threshold	114 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
Repeat accuracy	+/- 0.5 % input and measurement circuit +/- 1 % 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 500 V DC IEC 60255-5 > 500 MOhm 500 V DC 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 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	5.3...8.9 lbf.in (0.6...1 N.m) 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 IEC 60947-5-1 AC-13 IEC 60947-5-1 AC-14 IEC 60947-5-1 AC-15 IEC 60947-5-1 DC-12 IEC 60947-5-1 DC-13 IEC 60947-5-1 DC-14 IEC 60947-5-1
[Un] rated nominal voltage	, self-powered
Safety reliability data	B10d = 470000 MTTFd = 502.2 years
Control Type	Without test button
Width	1.4 in (35 mm)
Product Weight	0.18 lb(US) (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	-4...122 °F (-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 IEC 60068-2-27
Standards	IEC 60255-1
Product Certifications	UL C-tick GL CSA GOST
Ambient Air Temperature for Storage	-40...158 °F (-40...70 °C)
Relative humidity	95 % 131 °F (55 °C) IEC 60068-2-30

IP degree of protection	IP20 IEC 60529 terminals) IP30 IEC 60529 casing)
Pollution degree	3 IEC 60664-1
Directives	73/23/EEC - low voltage directive 89/336/EEC - electromagnetic compatibility
Dielectric test voltage	2 kV AC 50 Hz, 1 min
Non-dissipating shock wave	4 kV

Ordering and shipping details

Category	US10CP222380
Discount Schedule	0CP2
GTIN	3389119405331
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.85 in (4.700 cm)
Package 1 Width	3.07 in (7.800 cm)
Package 1 Length	3.82 in (9.700 cm)
Package weight(Lbs)	4.339 oz (123.000 g)
Unit Type of Package 2	S03
Number of Units in Package 2	48
Package 2 Height	11.81 in (30.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	14.749 lb(US) (6.690 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

Carbon footprint (kg CO2 eq, Total Life cycle)

36

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

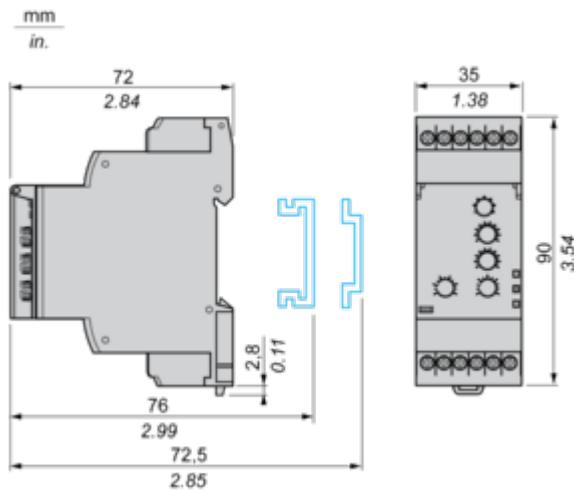
Take-back

No

Dimensions Drawings

3-Phase Voltage Control Relays

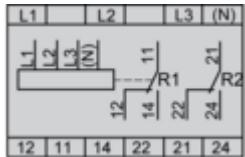
Dimensions and Mounting



Connections and Schema

3-Phase Voltage Control Relays

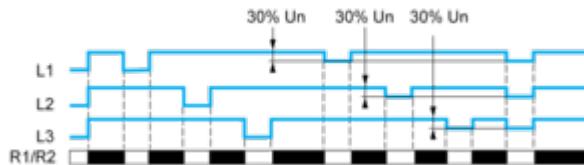
Wiring Diagram



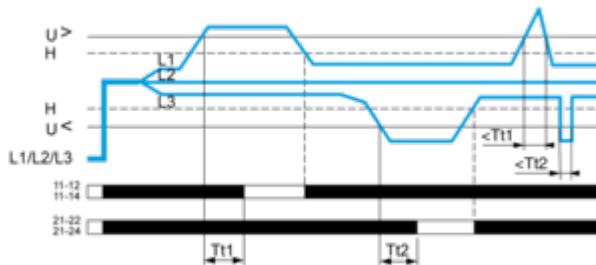
Technical Description

Function Diagrams

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



Control of Overvoltage and Undervoltage

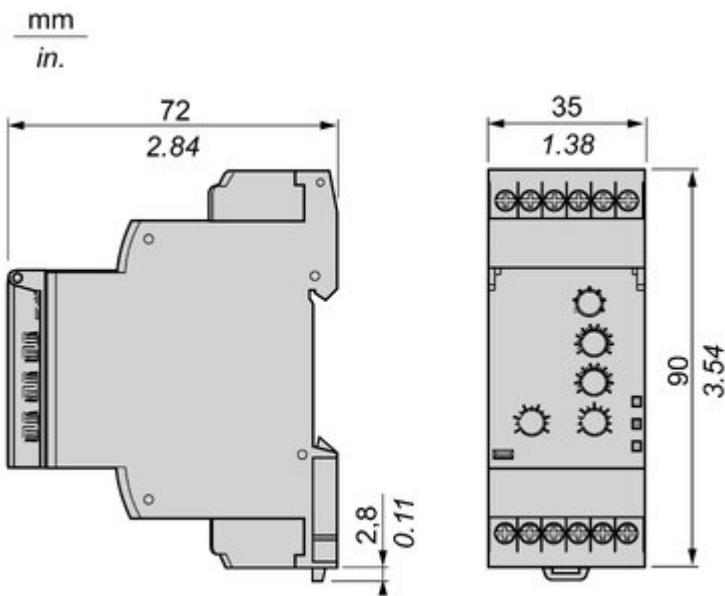


Legend

- U_n Nominal supply voltage
- T_{t1} Overvoltage threshold delay
- T_{t2} Undervoltage threshold delay
- 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
- 21-22, 21-24 R2 output relay connections
- Relay status: black color = energized.

Technical Illustration

Dimensions



Offer Marketing Illustration

Product benefits / Features

Features

Harmony Control Relay



Wide monitoring parameters (phase, current, voltage, liquid level, frequency, speed, temperature, and pump control) to meet your application needs.

True RMS measurement that minimizes the possibility of unexpected trips from highly polluted networks (except RM17TG and RM22TG)

Experience unprecedented accuracy, predictive maintenance, and superior security.

Green Premium labelled products, promising compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ product

Compatible with a wide range of applications, such as hoisting, packaging, lifts, textile, pumping, and water.

Offer Marketing Illustration

Product benefits / Features

Technical Benefits

Harmony Control Relay

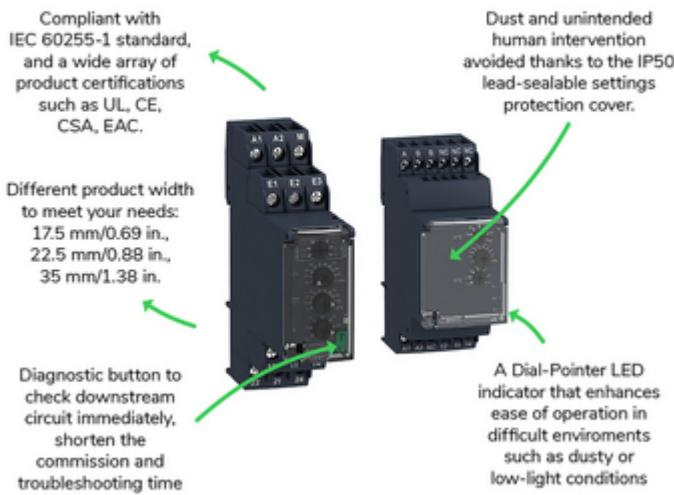


Image of product / Alternate images

Alternative

