Product data sheet
Characteristics

RM17UB310
voltage control relay, Harmony Control Relays, 5A, 1CO, 208...480V AC

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	RM17UB3
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	220...480 V AC
Contacts type and composition	1 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	183…528 V AC
Power consumption in VA	0…22 VA at 400 V AC 50 Hz
Control circuit frequency	50...60 Hz +/- 10 %
Voltage detection threshold	183 V
Output contacts	1 C/O
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 -2...-17 % in the range 220 V AC +2...+10 % in the range 480 V AC -2...-12 % in the range 208 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
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	100000 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 = 470000 MTTFd = 502.2 years
Control type	Without test button
Width	17.5 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	GOST[RETURN]UL[RETURN]GL[RETURN]C-Tick[RETURN]CSA
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	89/336/EEC - electromagnetic compatibility 73/23/EEC - low voltage directive
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	2.400 cm
Package 1 Width	7.800 cm
Package 1 Length	9.900 cm
Package 1 Weight	87.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	48
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	4.675 kg

Offer Sustainability

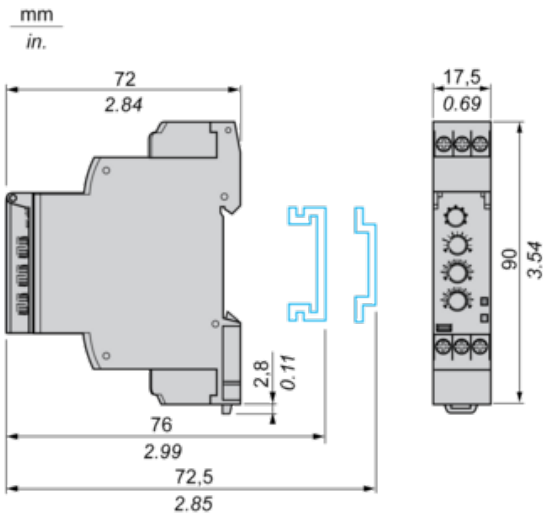
Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

Contractual warranty

Warranty	18 months

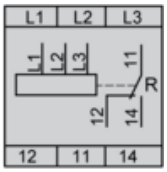
3-Phase Voltage Control Relays

Dimensions and Mounting



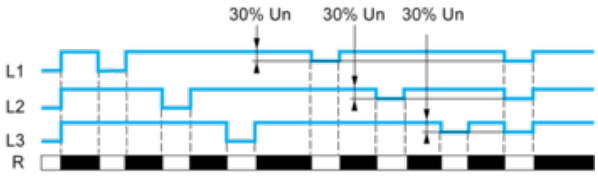
3-Phase Voltage Control Relays

Wiring Diagram

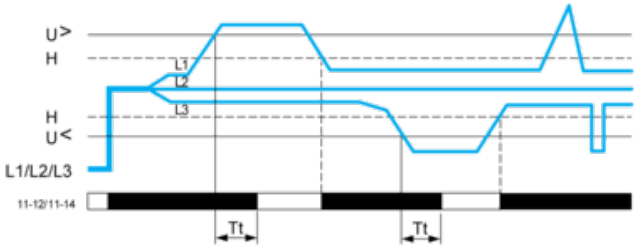


Function Diagrams

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



Control of Overvoltage and Undervoltage



Legend

Un Nominal supply voltage
R Output relay
Tt Overvoltage and undervoltage threshold delay (adjustable on front panel from 0.3 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
Relay status: black color = energized.