



## Main

Range of Product	Harmony Control Relays
Relay Type	Voltage control relay
Product or Component Type	Voltage 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 % on crossing the threshold
Switching capacity in VA	1250 VA
Minimum switching current	10 mA 5 V DC
Maximum switching current	5 A AC/DC
Power consumption in VA	0...22 VA 400 V AC 50 Hz
Measurement range	183...528 V voltage AC
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
Contacts type and composition	1 C/O

## Complementary

Reset time	1500 ms time delay
Maximum switching voltage	250 V AC/DC
[Us] Rated Supply Voltage	208...480 V AC 50/60 Hz +/- 10 %
Supply voltage limits	183...528 V AC
Voltage detection threshold	183 V
Control circuit frequency	50...60 Hz +/- 10 %
Output contacts	1 C/O
Nominal output current	5 A
Maximum measuring cycle	150 ms measurement cycle as true rms value
Hysteresis	2 %
Delay at power up	650 ms
Measurement accuracy	+/- 10 % of the full scale value
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
Response time	< 200 ms (in the event of a fault)
Quality labels	CE
Overvoltage category	III IEC 60664-1
Insulation resistance	> 500 MOhm 500 V DC IEC 60255-5 > 500 MOhm 500 V DC IEC 60664-1

[Ui] rated insulation voltage	400 V IEC 60664-1
Operating position	Any position without derating
Connections - terminals	Screw terminals, 1 x 0.5...1 x 4 mm <sup>2</sup> AWG 20...AWG 11) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm <sup>2</sup> AWG 20...AWG 14) solid without cable end Screw terminals, 1 x 0.2...2 x 2.5 mm <sup>2</sup> AWG 24...AWG 12) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm <sup>2</sup> AWG 24...AWG 16) flexible with cable end
Tightening torque	5.31...8.85 lbf.in (0.6...1 N.m) IEC 60947-1
Housing material	Self-extinguishing plastic
Local signalling	For power ON LED (green) For relay ON LED (yellow)
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
Safety reliability data	B10d = 470000 MTTFd = 502.2 years
Width	0.69 in (17.5 mm)
Net Weight	0.18 lb(US) (0.08 kg)
Functionality	Overvoltage and undervoltage detection
Compatibility code	RM17

## 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
Standards	IEC 60255-1
Product Certifications	GOST[RETURN]UL[RETURN]GL[RETURN]C-tick[RETURN]CSA
Directives	89/336/EEC - electromagnetic compatibility 73/23/EEC - low voltage directive
Ambient Air Temperature for Storage	-40...158 °F (-40...70 °C)
Ambient air temperature for operation	-4...122 °F (-20...50 °C)
Relative humidity	95 % 131 °F (55 °C) IEC 60068-2-30
Vibration resistance	0.35 mm 5...57.6 Hz)IEC 60068-2-6 1 gn 57.6...150 Hz)IEC 60255-21-1
Shock resistance	5 gn IEC 60068-2-27
IP degree of protection	IP20 IEC 60529 terminals) IP30 IEC 60529 casing)
Pollution degree	3 IEC 60664-1
Dielectric test voltage	2 kV AC 50 Hz, 1 min
Non-dissipating shock wave	4 kV

## Ordering and shipping details

Category	22380-RELAYS-MEASUREMENT (RM17-RM35)
Discount Schedule	CP2
GTIN	3389119405133
Returnability	Yes
Country of origin	ID

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.10 in (2.800 cm)
Package 1 Width	3.07 in (7.800 cm)
Package 1 Length	3.78 in (9.600 cm)
Package 1 Weight	3.32 oz (94.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	48

Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	11.05 lb(US) (5.010 kg)

### Offer Sustainability

Sustainable offer status	Green Premium product
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>

### Contractual warranty

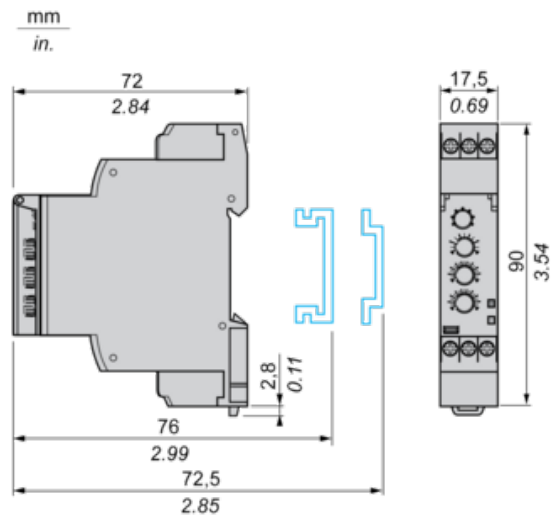
Warranty	18 months
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3-Phase Voltage Control Relays

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Dimensions and Mounting

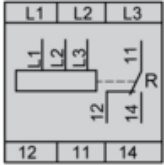


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3-Phase Voltage Control Relays

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Wiring Diagram

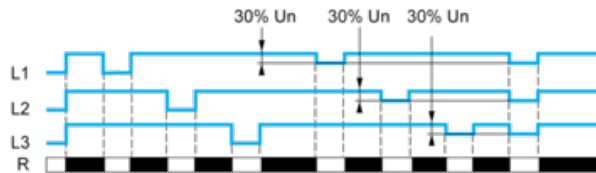


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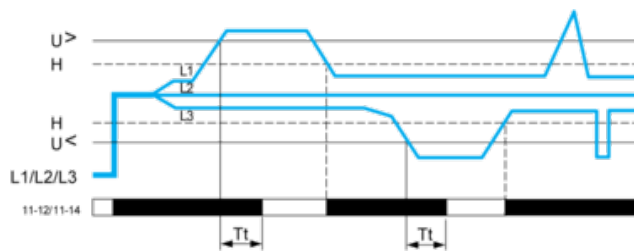
## Function Diagrams

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



### Control of Overvoltage and Undervoltage



### Legend

$U_n$  Nominal supply voltage

R Output relay

$T_t$  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.