RM17UB310

Harmony, Modular 3-phase voltage control relay, 5 A, 1 CO, 208...480 V AC





Main

Range of Product	Harmony Control Relays
Product or Component Type	Voltage control relay
Relay 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 0.330 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	022 VA 400 V AC 50 Hz
Measurement range	183528 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	208480 V AC 50/60 Hz +/- 10 %	
Supply voltage limits	183528 V AC	
Voltage detection threshold	183 V	
Control circuit frequency	5060 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	

400 V IEC 60664-1
Any position without derating
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
5.318.85 lbf.in (0.61 N.m) IEC 60947-1
Self-extinguishing plastic
For power ON LED (green) For relay ON LED (yellow)
35 mm symmetrical DIN rail conforming to EN/IEC 60715
100000 cycles
30000000 cycles
<= 360 operations/hour full load
B10d = 470000 MTTFd = 502.2 years
0.69 in (17.5 mm)
0.18 lb(US) (0.08 kg)
Overvoltage and undervoltage detection
RM17

Environment

Electromagnetic compatibility	Emission standard for industrial environments EN/IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments EN/IEC 61000-6-3 Immunity for industrial environments NF EN/IEC 61000-6-2
Standards	EN/IEC 60255-1
Product Certifications	GOST UL GL C-tick CSA
Directives	89/336/EEC - electromagnetic compatibility 73/23/EEC - low voltage directive
Ambient Air Temperature for Storage	-40158 °F (-4070 °C)
Ambient air temperature for operation	-4122 °F (-2050 °C)
Relative humidity	95 % 131 °F (55 °C) IEC 60068-2-30
Vibration resistance	0.35 mm 557.6 Hz)IEC 60068-2-6 1 gn 57.6150 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	
Nbr. of units in pkg.	1	
Package weight(Lbs)	3.14 oz (89 g)	
Returnability	Yes	
Country of origin	ID	

Packing Units

· coming of the	
Unit Type of Package 1	PCE
Package 1 Height	1.10 in (2.8 cm)
Package 1 width	3.07 in (7.8 cm)
Package 1 Length	3.78 in (9.6 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	48
Package 2 Weight	10.44 lb(US) (4.734 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)

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 www.P65Warnings.ca.gov
REACh Regulation	☑ REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
RoHS exemption information	₫Yes
China RoHS Regulation	☑ China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	☐ End Of Life Information

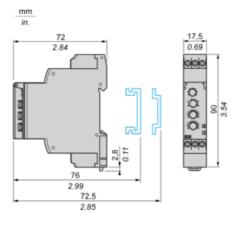
Contractual warranty

Contractical warranty		
Warranty	18 months	

RM17UB310

3-Phase Voltage Control Relays

Dimensions and Mounting



Product data sheet Connections and Schema

RM17UB310

3-Phase Voltage Control Relays

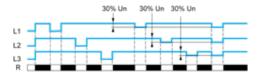
Wiring Diagram



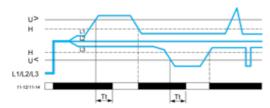
RM17UB310

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.