Product data sheet Characteristics

RM17TU00

multifunction control relay RM17-TU - range 183..528 V AC





Main

Range of product	Harmony Control Relays
Product or component type	3-phase control relay
Relay type	Multifunction control relay
Product specific application	For 3-phase supply
Relay name	RM17TU
Relay monitored parameters	Undervoltage detection Phase sequence Phase failure detection
Time delay	Adjustable 0.110 s, +/- 10 % of the full scale value
Switching capacity in VA	1250 VA
Measurement range	208480 V voltage AC
Contacts type and composition	1 C/O
[Uc] control circuit voltage	208480 V

Complementary

Reset time	1500 ms time delay
Maximum switching voltage	250 V AC 250 V DC
Minimum switching current	10 mA at 5 V DC
Maximum switching current	5 A AC 5 A DC
Supply voltage limits	183528 V AC
Control circuit voltage limits	- 12 % + 10 % Un
Power consumption in VA	022 VA at 400 V AC 50 Hz
Control circuit frequency	5060 Hz +/- 10 %
Output contacts	1 C/O
Nominal output current	5 A
Measurement voltage limits	183528 V AC
Hysteresis	2 %
Delay at power up	650 ms
Maximum measuring cycle	150 ms measurement cycle as true rms value
Threshold adjustment voltage	-212 % in the range 208 V AC -217 % in the range 220 V AC 220 % of Un selected +2+17 % in the range 480 V AC
Voltage range	208480 V phase to phase
Adjustment of asymmetry threshold	515 % of Un selected
Repeat accuracy	0.5 % for input and measurement circuit 3 % for time delay
Measurement error	< 0.05 %/°C with temperature variation < 1 % over the whole range with voltage variation
Phase failure sensitivity	0.7 Un
Response time	< 200 ms (in the event of a fault)
Marking	CE
Overvoltage category	III conforming to IEC 60664-1

Insulation resistance	> 500 MOhm at 500 V DC conforming to IEC 60255-5> 500 MOhm at 500 V DC conforming to IEC 60664-1
[Ui] rated insulation voltage	400 V conforming to IEC 60664-1
Supply frequency	50/60 Hz +/- 10 %
Operating position	Any position without derating
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 0.21 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
Local signalling	LED (green) for power ON LED (yellow) for relay ON
Mounting support	35 mm symmetrical DIN rail conforming to EN/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
Safety reliability data	MTTFd = 502.2 years B10d = 470000
Width	17.5 mm
Net weight	0.13 kg
Environment Electromagnetic compatibility	Emission standard for industrial environments conforming to EN/IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments conforming to EN/IEC 61000-6-3 Immunity for industrial environments conforming to EN/IEC 61000-6-2
Standards	EN/IEC 60255-1
Product certifications	GL GOST UL C-Tick CSA
Directives	73/23/EEC - low voltage directive 89/336/EEC - electromagnetic compatibility
Ambient air temperature for storage	-4070 °C
Ambient air temperature for operation	-2050 °C
Relative humidity	95 % at 55 °C conforming to IEC 60068-2-30
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	15 gn for 11 ms conforming to IEC 60255-21-1
IP degree of protection	IP20 (terminals) conforming to IEC 60529 IP30 (casing) conforming to IEC 60529
Pollution degree	3 conforming to IEC 60664-1
Dielectric test voltage	2 KV, 1 min AC 50 Hz conforming to IEC 60255-5 2 kV, 1 min AC 50 Hz conforming to IEC 60664-1
Non-dissipating shock wave	4 KV conforming to IEC 60255-5 4 KV conforming to IEC 60664-1 4 kV conforming to IEC 61000-4-5

Packing Units

0	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	87 g
Package 1 Height	2.8 cm
Package 1 width	9.7 cm
Package 1 Length	7.7 cm
Unit Type of Package 2	S02
Number of Units in Package 2	48
Package 2 Weight	4.631 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

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
RoHS exemption information	€Yes
China RoHS Regulation	Ğ China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	⊡ End Of Life Information

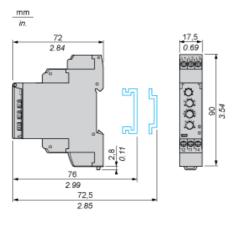
Contractual warranty

on actual varianty		
Warranty	18 months	

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Multifunction 3-Phase Supply Control Relays

Dimensions and Mounting

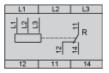


Product data sheet Connections and Schema

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Multifunction 3-Phase Supply Control Relays

Wiring Diagram

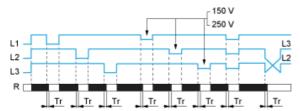


Product data sheet Technical Description

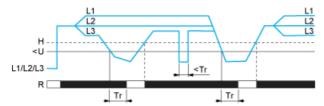
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Function Diagrams

Phase Sequence Control and Phase failure Detection



Undervoltage Control



Legend

Tr: Response time after cross the threshold

U<: Undervoltage threshold

L1, L2, L3: Phases of the supply voltage monitored

R: Relay output 11-12/11-14, 21-22/21-24

H: Hysteresis

Relay status: black color = energized.