Product data sheet Characteristics

RM22TR31 three-Phase Voltage control relay 200...240Vac, 2 C/O





Main

Range of product	Zelio Control
Product or component type	Modular measurement and control relays
Relay type	Control relay
Network number of phases	3 phases
Relay name	RM22TR
Relay monitored parameters	Overvoltage and undervoltage detection Phase failure detection Phase sequence
Time delay type	Adjustable 0.130 s, +/- 10 % of the full scale value on crossing the threshold Tt
Switching capacity in VA	2000 VA
Measurement range	200240 V voltage AC

Complementary

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Main		
Range of product	Zelio Control	
Product or component type	Modular measurement and control relays	
Relay type	Control relay	
Network number of phases	3 phases	
Relay name	RM22TR	
Relay monitored parameters	Overvoltage and undervoltage detection	
	Phase failure detection Phase sequence	
Time delay type	Adjustable 0.130 s, +/- 10 % of the full scale value on crossing the threshold Tt	
Switching capacity in VA		
Measurement range	200240 V voltage AC	
Complementary		
	<= 1500 ms at maximum voltage	
Reset time	<= 1500 ms at maximum voltage 250 V AC	
Complementary Reset time Maximum switching voltage Minimum switching current	-	
Reset time Maximum switching voltage	250 V AC	
Reset time Maximum switching voltage Minimum switching current Maximum switching current	250 V AC 10 mA at 5 V DC	
Reset time Maximum switching voltage Minimum switching current Maximum switching current [Us] rated supply voltage	250 V AC 10 mA at 5 V DC 8 A AC	
Reset time Maximum switching voltage Minimum switching current Maximum switching current [Us] rated supply voltage Supply voltage limits	250 V AC 10 mA at 5 V DC 8 A AC 200240 V AC	
Reset time Maximum switching voltage Minimum switching current Maximum switching current [Us] rated supply voltage Supply voltage limits Operating limits	250 V AC 10 mA at 5 V DC 8 A AC 200240 V AC 160288 V AC	
Reset time Maximum switching voltage Minimum switching current	250 V AC 10 mA at 5 V DC 8 A AC 200240 V AC 160288 V AC - 20 % + 20 % Un	
Reset time Maximum switching voltage Minimum switching current Maximum switching current [Us] rated supply voltage Supply voltage limits Operating limits Power consumption in VA Voltage detection threshold	250 V AC 10 mA at 5 V DC 8 A AC 200240 V AC 160288 V AC - 20 % + 20 % Un 10 VA at 240 V AC 60 Hz	
Reset time Maximum switching voltage Minimum switching current Maximum switching current [Us] rated supply voltage Supply voltage limits Operating limits Power consumption in VA Voltage detection threshold Supply voltage frequency	250 V AC 10 mA at 5 V DC 8 A AC 200240 V AC 160288 V AC - 20 % + 20 % Un 10 VA at 240 V AC 60 Hz < 100 V AC	
Reset time Maximum switching voltage Minimum switching current Maximum switching current [Us] rated supply voltage Supply voltage limits Operating limits Power consumption in VA	250 V AC 10 mA at 5 V DC 8 A AC 200240 V AC 160288 V AC - 20 % + 20 % Un 10 VA at 240 V AC 60 Hz < 100 V AC 5060 Hz +/- 10 %	



Setting accuracy of time delay	10 P
Time delay drift	<= 0.05 % per degree centigrade depending permissible ambient air temperature <= 1 % within the supply voltage range
Hysteresis	2 % fixed of selectable
Run-up delay at power-up	<= 650 ms
Measuring cycle	150 ms measurement cycle as true rms value
Threshold adjustment voltage	220 % of Un selected
Voltage range	200240 V phase to phase
Repeat accuracy	+/- 0.5 % input and measurement circuit +/- 3 % time delay
Measurement error	< 0.05 %/°C with temperature variation < 1 % over the whole range with voltage variation
Response time	<= 300 ms
Overvoltage category	III conforming to UL 508 III conforming to IEC 60664-1
Insulation resistance	> 100 MOhm at 500 V DC conforming to IEC 60255-27
Mounting position	Any position
Connections - terminals	Screw terminals 2 x 0.52 x 2.5 mm ² - AWG 20AWG 14, solid cable without cable end Screw terminals 2 x 0.22 x 1.5 mm ² - AWG 24AWG 16, flexible cable with cable end Screw terminals 1 x 0.51 x 3.3 mm ² - AWG 20AWG 12, solid cable without cable end Screw terminals 1 x 0.21 x 2.5 mm ² - AWG 24AWG 14, flexible cable with cable end
Tightening torque	0.61 N.m conforming to IEC 60947-1
Housing material	Self-extinguishing plastic
Status LED	LED yellow for relay ON LED green for power ON
Mounting support	35 mm DIN rail conforming to EN/IEC 60715
Electrical durability	100000 cycles
Mechanical durability	1000000 cycles
Utilisation category	AC-1 conforming to IEC 60947-4-1 DC-1 conforming to IEC 60947-4-1 AC-15 conforming to IEC 60947-5-1 DC-13 conforming to IEC 60947-5-1
Safety reliability data	MTTFd = 388.1 years B10d = 350000
Contacts material	Cadmium free
Width	22.5 mm
Product weight	0.09 kg

Environment

Immunity to microbreaks	<= 10 ms
Electromagnetic compatibility	Conducted and radiated emissions class B conforming to CISPR 22 Immunity for residential, commercial and light-industrial environments conforming to EN/IEC 61000-6-1 Electrostatic discharge 6 kV level 3 contact discharge conforming to IEC 61000-4-2 Electrostatic discharge 8 kV level 3 air discharge conforming to IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test 10 V/m level 3 conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test 4 kV level 4 direct conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test 2 kV level 4 capacitive coupling conforming to IEC 61000-4-4 Surge immunity test 4 kV level 4 common mode conforming to IEC 61000-4-5 Surge immunity test 2 kV level 4 differential mode conforming to IEC 61000-4-5 Conducted and radiated emissions class B group 1 conforming to CISPR 11 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	CCC CE CSA GL

	UL
	RCM EAC
	China RoHS
Ambient air temperature for storage	-4070 °C
Ambient air temperature for operation	-2050 °C at 60 Hz -2060 °C at 50 Hz AC/DC
Relative humidity	9397 % at 2555 °C conforming to IEC 60068-2-30
Vibration resistance	0.075 mm (f = 1058.1 Hz) (not in operation) conforming to IEC 60068-2-6 1 gn (f = 1058.1 Hz) (not in operation) conforming to IEC 60068-2-6 0.035 mm (f = 58.1150 Hz) (in operation) conforming to IEC 60068-2-6 0.5 gn (f = 58.1150 Hz) (in operation) conforming to IEC 60068-2-6
Shock resistance	15 gn for 11 ms (not in operation) conforming to IEC 60068-2-27 5 gn for 11 ms (in operation) conforming to IEC 60068-2-27
IP degree of protection	IP20 on terminals conforming to IEC 60529 IP40 on housing conforming to IEC 60529 IP50 on front panel conforming to IEC 60529
Pollution degree	3 conforming to IEC 60664-1 3 conforming to UL 508
Dielectric test voltage	2.5 kV for 1 min AC 50 Hz conforming to IEC 60255-27

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Compliant - since 0701 - Schneider Electric declaration of conformity
Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold
Reference not containing SVHC above the threshold
Available
Product Environmental Profile
Available
Provide the Information