Product data sheet Characteristics

RM22TR33 three-Phase Voltage control relay 380... 480Vac, 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 para- meters	Overvoltage and undervoltage detection Phase failure detection Phase sequence
Time delay type	Adjustable 0.130 s, +/- 10 % of the full scale val- ue on crossing the threshold Tt
Switching capacity in- VA	2000 VA
Measurement range	380480 V voltage AC

Complementary

Complementary	
Reset time	<= 1500 ms at maximum voltage
Maximum switching voltage	250 V AC
Minimum switching current	10 mA at 5 V DC
Maximum switching current	8 A AC
[Us] rated supply voltage	380480 V AC
Supply voltage limits	304576 V AC
Control circuit voltage limits	- 20 % + 20 % Un
Power consumption in VA	15 VA at 480 V AC 60 Hz
Voltage detection threshold	< 100 V AC
Supply frequency	5060 Hz +/- 10 %
Output contacts	2 C/O
Nominal output current	8 A
Setting accuracy of the switching threshold	+/- 10 % of the full scale
Switching threshold drift	<= 0.05 % per degree centigrade depending permissible ambient air temperature <= 1 % within the supply voltage range
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	380480 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 ca-
	ble end Screw terminals 2 x 0.22 x 1.5 mm ² - AWG 24AWG 16, flexible cable with ca- ble 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
Functionality	Overvoltage and undervoltage detection
Compatibility code	RM22

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 conform- ing 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 con- forming 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 con- forming 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 Gonducted 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 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	

Offer Sustainability

Sustainable offer status	Green Premium product	
RoHS (date code: YYWW)	Compliant - since 1524 - Schneider Electric declaration of conformity	
REACh	Reference not containing SVHC above the threshold	
Product environmental profile	Available	
Product end of life instructions	Available	

Product Life Status : Commercialised