



### 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	RM22TA
Relay monitored parameters	Asymmetry Phase sequence Phase failure detection
Time delay type	Adjustable 0.1...30 s, +/- 10 % of the full scale value on crossing the threshold Tt
Switching capacity in VA	2000 VA
Measurement range	200...240 V voltage AC

### 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	200...240 V AC
Supply voltage limits	160...288 V AC
Control circuit voltage limits	- 20 % + 20 % Un
Power consumption in VA	10 VA at 240 V AC 60 Hz
Voltage detection threshold	< 100 V AC
Supply frequency	50...60 Hz +/- 10 %
Output contacts	2 C/O
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	2...20 % of Un selected
Voltage range	200...240 V phase to phase
Adjustment of asymmetry threshold	5...15 % of Un selected
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

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Connections - terminals	Screw terminals 2 x 0.5...2 x 2.5 mm <sup>2</sup> - AWG 20...AWG 14, solid cable without cable end Screw terminals 2 x 0.2...2 x 1.5 mm <sup>2</sup> - AWG 24...AWG 16, flexible cable with cable end Screw terminals 1 x 0.5...1 x 3.3 mm <sup>2</sup> - AWG 20...AWG 12, solid cable without cable end Screw terminals 1 x 0.2...1 x 2.5 mm <sup>2</sup> - AWG 24...AWG 14, flexible cable with cable end
Tightening torque	0.6...1 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	10000000 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	B10d = 350000 MTTFd = 388.1 years
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	EAC CE GL China RoHS CSA UL CCC RCM
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-20...50 °C at 60 Hz -20...60 °C at 50 Hz AC/DC
Relative humidity	93...97 % at 25...55 °C conforming to IEC 60068-2-30
Vibration resistance	0.075 mm (f = 10...58.1 Hz) (not in operation) conforming to IEC 60068-2-6 1 gn (f = 10...58.1 Hz) (not in operation) conforming to IEC 60068-2-6 0.035 mm (f = 58.1...150 Hz) (in operation) conforming to IEC 60068-2-6 0.5 gn (f = 58.1...150 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 kVfor 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 <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available <a href="#">Utjecaj Proizvoda Na Okoliš</a>
Product end of life instructions	Available <a href="#">Katalog O Trajnosti</a>



### 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	RM22TA
Relay monitored parameters	Asymmetry Phase sequence Phase failure detection
Time delay type	Adjustable 0.1...30 s, +/- 10 % of the full scale value on crossing the threshold Tt
Switching capacity in VA	2000 VA
Measurement range	380...480 V voltage AC

### 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	380...480 V AC
Supply voltage limits	304...576 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	50...60 Hz +/- 10 %
Output contacts	2 C/O
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	2...20 % of Un selected
Voltage range	380...480 V phase to phase
Adjustment of asymmetry threshold	5...15 % of Un selected
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

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Tightening torque	0.6...1 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	10000000 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	B10d = 350000 MTTFd = 388.1 years
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	CE China RoHS CCC CSA RCM EAC UL GL
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-20...50 °C at 60 Hz -20...60 °C at 50 Hz AC/DC
Relative humidity	93...97 % at 25...55 °C conforming to IEC 60068-2-30
Vibration resistance	0.075 mm (f = 10...58.1 Hz) (not in operation) conforming to IEC 60068-2-6 1 gn (f = 10...58.1 Hz) (not in operation) conforming to IEC 60068-2-6 0.035 mm (f = 58.1...150 Hz) (in operation) conforming to IEC 60068-2-6 0.5 gn (f = 58.1...150 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 kVfor 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 <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available <a href="#">Utjecaj Proizvoda Na Okoliš</a>
Product end of life instructions	Available <a href="#">Katalog O Trajnosti</a>



### 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	RM22TG
Relay monitored parameters	Phase sequence Phase failure detection
Time delay type	Without
Switching capacity in VA	2000 VA
Measurement range	183...528 V voltage AC

### 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	208...480 V AC
Supply voltage limits	183...528 V AC
Control circuit voltage limits	183...528 V AC
Power consumption in VA	15 VA at 480 V AC 60 Hz
Voltage detection threshold	< 100 V AC
Supply frequency	50...60 Hz +/- 10 %
Output contacts	2 C/O
Run-up delay at power-up	<= 650 ms
Response time	<= 200 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 0.5...2 x 2.5 mm <sup>2</sup> - AWG 20...AWG 14, solid cable without cable end Screw terminals 2 x 0.2...2 x 1.5 mm <sup>2</sup> - AWG 24...AWG 16, flexible cable with cable end Screw terminals 1 x 0.5...1 x 3.3 mm <sup>2</sup> - AWG 20...AWG 12, solid cable without cable end Screw terminals 1 x 0.2...1 x 2.5 mm <sup>2</sup> - AWG 24...AWG 14, flexible cable with cable end
Tightening torque	0.6...1 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	10000000 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 = 924.6 years B10d = 850000
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	RCM EAC China RoHS CSA CE CCC GL UL
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-20...50 °C at 60 Hz -20...60 °C at 50 Hz AC/DC
Relative humidity	93...97 % at 25...55 °C conforming to IEC 60068-2-30
Vibration resistance	0.075 mm (f = 10...58.1 Hz) (not in operation) conforming to IEC 60068-2-6 1 gn (f = 10...58.1 Hz) (not in operation) conforming to IEC 60068-2-6 0.035 mm (f = 58.1...150 Hz) (in operation) conforming to IEC 60068-2-6 0.5 gn (f = 58.1...150 Hz) (in operation) conforming to IEC 60068-2-6
Shock resistance	15 gnfor 11 ms (not in operation) conforming to IEC 60068-2-27 5 gnfor 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 kVfor 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 <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available <a href="#">Učjecaj Proizvoda Na Okoliš</a>
Product end of life instructions	Available <a href="#">Katalog O Trajnosti</a>





### 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	Phase sequence Overvoltage and undervoltage detection Phase failure detection
Time delay type	Adjustable 0.1...30 s, +/- 10 % of the full scale value on crossing the threshold Tt
Switching capacity in VA	2000 VA
Measurement range	200...240 V voltage AC

### 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	200...240 V AC
Supply voltage limits	160...288 V AC
Control circuit voltage limits	- 20 % + 20 % Un
Power consumption in VA	10 VA at 240 V AC 60 Hz
Voltage detection threshold	< 100 V AC
Supply frequency	50...60 Hz +/- 10 %
Output contacts	2 C/O
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	2...20 % of Un selected
Voltage range	200...240 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

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Tightening torque	0.6...1 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	10000000 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	B10d = 350000 MTTFd = 388.1 years
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	China RoHS RCM EAC CE UL CSA GL CCC
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-20...50 °C at 60 Hz -20...60 °C at 50 Hz AC/DC
Relative humidity	93...97 % at 25...55 °C conforming to IEC 60068-2-30
Vibration resistance	0.075 mm (f = 10...58.1 Hz) (not in operation) conforming to IEC 60068-2-6 1 gn (f = 10...58.1 Hz) (not in operation) conforming to IEC 60068-2-6 0.035 mm (f = 58.1...150 Hz) (in operation) conforming to IEC 60068-2-6 0.5 gn (f = 58.1...150 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 kVfor 1 min AC 50 Hz conforming to IEC 60255-27

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Time delay type	Adjustable 0.1...30 s, +/- 10 % of the full scale value on crossing the threshold Tt
Switching capacity in VA	2000 VA
Measurement range	380...480 V voltage AC

### 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	380...480 V AC
Supply voltage limits	304...576 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	50...60 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	2...20 % of Un selected
Voltage range	380...480 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

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Tightening torque	0.6...1 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	10000000 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	B10d = 350000 MTTFd = 388.1 years
Contacts material	Cadmium free
Width	22.5 mm
Product weight	0.09 kg

## Environment

Immunity to microbreaks	<= 10 ms
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Standards	EN/IEC 60255-1
Product certifications	EAC UL CSA China RoHS CE RCM CCC GL
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-20...50 °C at 60 Hz -20...60 °C at 50 Hz AC/DC
Relative humidity	93...97 % at 25...55 °C conforming to IEC 60068-2-30
Vibration resistance	0.075 mm (f = 10...58.1 Hz) (not in operation) conforming to IEC 60068-2-6 1 gn (f = 10...58.1 Hz) (not in operation) conforming to IEC 60068-2-6 0.035 mm (f = 58.1...150 Hz) (in operation) conforming to IEC 60068-2-6 0.5 gn (f = 58.1...150 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 kVfor 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 <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available <a href="#">Utjecaj Proizvoda Na Okoliš</a>
Product end of life instructions	Available <a href="#">Katalog O Trajnosti</a>



### 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	Phase failure detection Phase sequence Undervoltage detection
Time delay type	Without
Switching capacity in VA	2000 VA
Measurement range	200...240 V voltage AC

### Complementary

Reset time	$\leq 1500$ 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	200...240 V AC
Supply voltage limits	160...288 V AC
Control circuit voltage limits	- 20 % + 20 % $U_n$
Power consumption in VA	10 VA at 240 V AC 60 Hz
Voltage detection threshold	$< 100$ V AC
Supply frequency	50...60 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	$\leq 0.05$ % per degree centigrade depending permissible ambient air temperature $\leq 1$ % within the supply voltage range
Setting accuracy of time delay	10 P
Time delay drift	$\leq 0.05$ % per degree centigrade depending permissible ambient air temperature $\leq 1$ % within the supply voltage range
Hysteresis	2 % fixed of selectable
Run-up delay at power-up	$\leq 650$ ms
Measuring cycle	150 ms measurement cycle as true rms value
Threshold adjustment voltage	2...20 % of $U_n$ selected
Voltage range	200...240 V phase to phase
Repeat accuracy	+/- 0.5 % input and measurement circuit
Measurement error	$< 0.05$ %/°C with temperature variation $< 1$ % over the whole range with voltage variation
Response time	$\leq 300$ 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 0.5...2 x 2.5 mm <sup>2</sup> - AWG 20...AWG 14, solid cable without cable end Screw terminals 2 x 0.2...2 x 1.5 mm <sup>2</sup> - AWG 24...AWG 16, flexible cable with cable end Screw terminals 1 x 0.5...1 x 3.3 mm <sup>2</sup> - AWG 20...AWG 12, solid cable without cable end Screw terminals 1 x 0.2...1 x 2.5 mm <sup>2</sup> - AWG 24...AWG 14, flexible cable with cable end
Tightening torque	0.6...1 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	10000000 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	B10d = 350000 MTTFd = 388.1 years
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	China RoHS EAC RCM GL CCC UL CE CSA
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-20...50 °C at 60 Hz -20...60 °C at 50 Hz AC/DC
Relative humidity	93...97 % at 25...55 °C conforming to IEC 60068-2-30
Vibration resistance	0.075 mm (f = 10...58.1 Hz) (not in operation) conforming to IEC 60068-2-6 1 gn (f = 10...58.1 Hz) (not in operation) conforming to IEC 60068-2-6 0.035 mm (f = 58.1...150 Hz) (in operation) conforming to IEC 60068-2-6 0.5 gn (f = 58.1...150 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 kVfor 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 <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available <a href="#">Utjecaj Proizvoda Na Okoliš</a>
Product end of life instructions	Available <a href="#">Katalog O Trajnosti</a>



### 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	Undervoltage detection Phase failure detection Phase sequence
Time delay type	Without
Switching capacity in VA	2000 VA
Measurement range	380...480 V voltage AC

### Complementary

Reset time	$\leq 1500$ 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	380...480 V AC
Supply voltage limits	304...576 V AC
Control circuit voltage limits	- 20 % + 20 % $U_n$
Power consumption in VA	15 VA at 480 V AC 60 Hz
Voltage detection threshold	$< 100$ V AC
Supply frequency	50...60 Hz +/- 10 %
Output contacts	2 C/O
Setting accuracy of the switching threshold	+/- 10 % of the full scale
Switching threshold drift	$\leq 0.05$ % per degree centigrade depending permissible ambient air temperature $\leq 1$ % within the supply voltage range
Setting accuracy of time delay	10 P
Time delay drift	$\leq 0.05$ % per degree centigrade depending permissible ambient air temperature $\leq 1$ % within the supply voltage range
Hysteresis	2 % fixed of selectable
Run-up delay at power-up	$\leq 650$ ms
Measuring cycle	150 ms measurement cycle as true rms value
Threshold adjustment voltage	2...20 % of $U_n$ selected
Voltage range	380...480 V phase to phase
Repeat accuracy	+/- 0.5 % input and measurement circuit
Measurement error	$< 0.05$ %/°C with temperature variation $< 1$ % over the whole range with voltage variation
Response time	$\leq 300$ 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 0.5...2 x 2.5 mm <sup>2</sup> - AWG 20...AWG 14, solid cable without cable end Screw terminals 2 x 0.2...2 x 1.5 mm <sup>2</sup> - AWG 24...AWG 16, flexible cable with cable end Screw terminals 1 x 0.5...1 x 3.3 mm <sup>2</sup> - AWG 20...AWG 12, solid cable without cable end Screw terminals 1 x 0.2...1 x 2.5 mm <sup>2</sup> - AWG 24...AWG 14, flexible cable with cable end
Tightening torque	0.6...1 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	10000000 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	CE GL CCC EAC China RoHS CSA RCM UL
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-20...50 °C at 60 Hz -20...60 °C at 50 Hz AC/DC
Relative humidity	93...97 % at 25...55 °C conforming to IEC 60068-2-30
Vibration resistance	0.075 mm (f = 10...58.1 Hz) (not in operation) conforming to IEC 60068-2-6 1 gn (f = 10...58.1 Hz) (not in operation) conforming to IEC 60068-2-6 0.035 mm (f = 58.1...150 Hz) (in operation) conforming to IEC 60068-2-6 0.5 gn (f = 58.1...150 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 kVfor 1 min AC 50 Hz conforming to IEC 60255-27

### Offer Sustainability

Sustainable offer status	Green Premium product
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