Product data sheet Characteristics

RE22R1MYMR

Multi-function Timing Relay - 0.05s...300h - 24... 240V AC/DC - 1C/O





Main

THE STATE OF THE S		
Range of product	Zelio Time	
Product or component type	Modular timing relay	in the state of th
Discrete output type	Relay	
Device short name	RE22	
Nominal output current	8 A	

Complementary

Contacts type and composition	1 C/O timed contact, cadmium free
Time delay type	W
	Dit
	Ct
	Dw
	Dt
	Aw
	Di
	D
	At
	A
	Wt
	Ac
	Н
	Hw
	Ht
	Act
	C
	W Dit Ct Dw Dt Aw Di D At A Wt Ac H H H H H Act C Di D Di O D D D D D D D D D D D D D D D
Time delay range	30300 min
	0.33 s
	330 h
	110 s
	10100 s
	0.051 s
	330 min
	330 s
	0.33 s 330 h 110 s 10100 s 0.051 s 330 min 330 s 30300 h

30...300 s

	30300 \$
Control type	Rotary knob Diagnostic button External potentiometer
[Us] rated supply voltage	24240 V AC/DC at 50/60 Hz
Input voltage	<= 2.4 V
Voltage range	0.851.1 Us
Supply frequency	5060 Hz (+/- 5 %)
Connections - terminals	Screw terminals: 1 x 0.51 x 3.3 mm², AWG 20AWG 12 solid cable without cable end Screw terminals: 2 x 0.52 x 2.5 mm², AWG 20AWG 14 solid cable without cable end Screw terminals: 1 x 0.21 x 2.5 mm², AWG 24AWG 14 flexible cable with cable end Screw terminals: 2 x 0.22 x 1.5 mm², AWG 24AWG 16 flexible cable with cable end
Tightening torque	0.61 N.m conforming to IEC 60947-1
Housing material	Self-extinguishing
Repeat accuracy	+/- 0.5 % conforming to IEC 61812-1
Temperature drift	+/- 0.05 %/°C
Voltage drift	+/- 0.2 %/V
Setting accuracy of time delay	+/- 10 % of full scale at 25 °C conforming to IEC 61812-1
Minimum pulse duration	100 ms (with load in parallel) 30 ms
Insulation resistance	100 MOhm at 500 V DC conforming to IEC 60664-1
Reset time	120 ms (on de-energisation)
Immunity to microbreaks	<= 10 ms
Power consumption in VA	3 VA at 240 V AC
Power consumption in W	1.5 W at 240 V DC
Switching capacity in VA	2000 VA
Minimum switching current	10 mA 5 V DC
Maximum switching current	8 A
Maximum switching voltage	250 V AC
Electrical durability	100000 cycles for 8 A at 250 V AC-1 100000 cycles for 2 A at 24 V DC-1
Mechanical durability	10000000 cycles
[Uimp] rated impulse withstand voltage	5 kV for 1.250 μs conforming to IEC 60664-1
Delay response	< 100 ms
Creepage distance	4 kV/3 conforming to IEC 60664-1
Overvoltage category	III conforming to IEC 60664-1
Safety reliability data	MTTFd = 205.4 years B10d = 190000
Mounting position	Any position
Mounting support	35 mm DIN rail conforming to EN/IEC 60715
Status LED	Green LED backlight (steady) for dial pointer indication Yellow LED (steady) for output relay energised Yellow LED (fast flashing) for timing in progress and output relay de-energised Yellow LED (slow flashing) for timing in progress and output relay energised
Width	22.5 mm
Product weight	0.1 kg
Time delay type	A, Ac, Act, At, Aw, C, Ct, D, Di, Dit, Diw, Dt, Dw, H, Ht, Hw, W, Wt
Contacts type and composition	1 C/O
Functionality	Multifunction

Environment

Dielectric strength	2.5 kV for 1 mA/1 minute at 50 Hz between relay output and power supply with basic insulation conforming to IEC 61812-1
Standards	UL 508 IEC 61812-1
Directives	2004/108/EC - electromagnetic compatibility 2006/95/EC - low voltage directive

Product certifications	EAC
	CCC
	China RoHS GL
	GL CSA
	CE CE
	CE RCM
	UL
Ambient air temperature for operation	-2060 °C
Ambient air temperature for storage	-4070 °C
IP degree of protection	IP20 (terminals) conforming to IEC 60529
	IP40 (housing) conforming to IEC 60529
	IP50 (front face) conforming to IEC 60529
Pollution degree	3 conforming to IEC 60664-1
Vibration resistance	20 m/s ² (f = 10150 Hz) conforming to IEC 60068-2-6
Shock resistance	15 gn (not operating) (duration = 11 ms) conforming to IEC 60068-2-27
	5 gn (in operation) (duration = 11 ms) conforming to IEC 60068-2-27
Relative humidity	95 % at 2555 °C
Electromagnetic compatibility	Fast transients immunity test (test level: 1 kV, level 3 - capacitive connecting clip) conforming to IEC 61000-4-4
	Surge immunity test (test level: 1 kV, level 3 - differential mode) conforming to IEC 61000-4-5
	Surge immunity test (test level: 2 kV, level 3 - common mode) conforming to IEC 61000-4-5
	Electrostatic discharge (test level: 6 kV, level 3 - contact discharge) conforming to IEC 61000-4-2
	Electrostatic discharge (test level: 8 kV, level 3 - air discharge) conforming to IEC 61000-4-2
	Radiated radio-frequency electromagnetic field immunity test (test level: 10 V/m, level 3 - 80 MHz1 GHz) conforming to IEC 61000-4-3
	Conducted RF disturbances (test level: 10 V, level 3 - 0.1580 MHz) conforming to IEC 61000-4-6
	Fast transient bursts (test level: 2 kV, level 3 - direct contact) conforming to IEC 61000-4-4
	Immunity to microbreaks and voltage drops (test level: 30 % - 500 ms) conforming to IEC 61000-4-11
	Immunity to microbreaks and voltage drops (test level: 100 % - 20 ms) conforming to IEC 61000-4-11

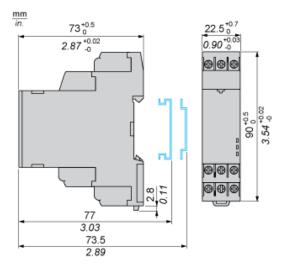
Offer Sustainability

Offer Sustainability		
Sustainable offer status	Green Premium product	
RoHS (date code: YYWW)	Compliant - since 1520 - Schneider Electric declaration of conformity	
	Schneider Electric declaration of conformity	
REACh	Reference not containing SVHC above the threshold	
	Reference not containing SVHC above the threshold	
Product environmental profile	Available	
Product end of life instructions	Available	

Product data sheet Dimensions Drawings

RE22R1MYMR

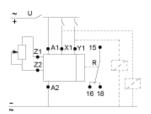
Dimensions



Product data sheet Connections and Schema

RE22R1MYMR

Wiring Diagram



RE22R1MYMR

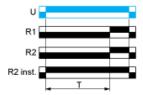
Function A: Power On-Delay

Description

On energisation of power supply, the timing period T starts. After timing, the output(s) R close(s). The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output





Function Ac: On-Delay & Off-Delay with Control Signal

Description

After energisation of power supply and energization of Y1 causes the timing period T to start.

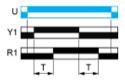
At the end of this timing period, the output(s) R close(s).

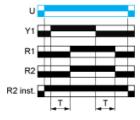
When deenergization of Y1, the timing T starts.

At the end of this timing period T,the output(s) R revert(s) to its/their initial position.

The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output





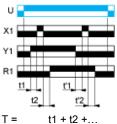
RE22R1MYMR

Function Act: On-Delay & Off-Delay with Control Signal & With Pause / Summation Control

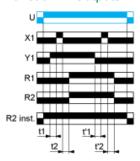
Description

After energisation of power supply and energization of Y1 causes the timing period T to start and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R close(s). When deenergization of Y1, the timing T starts and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their initial position. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



T = t1 + t2 + ...T = t'1 + t'2 + ...



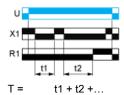
T = t1 + t2 + ...T = t'1 + t'2 + ...

Function At: Power On-Delay with Pause / Summation Control

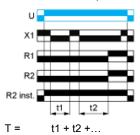
Description

On energisation of power supply, the timing period T starts. Timing can be interrupted / paused each time X1 energizes. Except for RE17*, RE22R2AMU, RE22R2MMU, RE22R2MMU, RE22R2MJU, timing can be interrupted / paused each time Y1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R close(s). The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

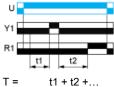
Function: 1 Output with Pause / Summation Control



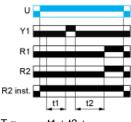
Function: 2 Outputs with Pause / Summation Control







Function: 2 Outputs with Retrigger / Restart Control



T = t1 + t2 +...

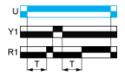
RE22R1MYMR

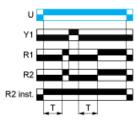
Function Aw: Power On-Delay With Retrigger / Restart Control

Description

On energisation of power supply, the timing period T starts. At the end of the timing period T, the output(s) R close(s). Energization of Y1 makes the output(s) R open(s). Deenergization of Y1 restarts timing period T. At the end of timing period T, the output(s) R close(s). The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST")

Function: 1 Output



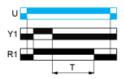


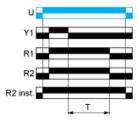
Function C: Off-Delay Relay with Control Signal

Description

After energisation of power supply and energization of Y1 causes output(s) R close(s). When Y1 deenergizes, timing T starts. At the end of this timing period T, the output(s) R revert(s) to its/their initial position. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output





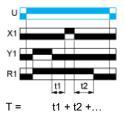
RE22R1MYMR

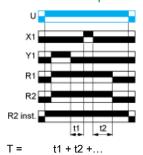
Function Ct: Off-Delay Relay with Control Signal & With Pause / Summation Control

Description

After energisation of power supply and energization of Y1 cause output(s) R close(s). When Y1 deenergizes, timing starts and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsedreaches the pre-set value T, the output(s) R revert(s) to its/their initial state. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



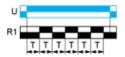


Function D: Symmetrical Flashing Relay (Starting Pulse Off)

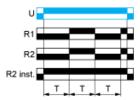
Description

On energisation of power supply, output(s) R starts at its/their initial state for timing duration T then change(s) to output(s) R close(s) for the same timing duration T.This cycle is repeated indefintely until power supply removal. Specially for RE17*, RE22R2MMU, RE22R2MMU, RE22R2MMU, RE22R2MJU, this D function can only be initiated by energizing Y1 permanently. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



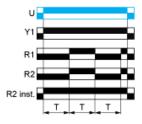
Function: 2 Outputs



Function: 1 Output with Retrigger / Restart Control



Function: 2 Output with Retrigger / Restart Control



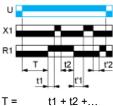
RE22R1MYMR

Function Dt: Symmetrical Flashing Relay (Starting Pulse Off) & With Pause / Summation Control

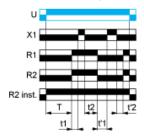
Description

On energisation of power supply, output(s) R starts at its/their initial state for timing duration T and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, then changes to output(s) R close(s). The output(s) R close state will remain for the same timing duration T and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their initial state. This cycle is repeated indefintely until power supply removal. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



T = t1 + t2 +... T = t'1 + t'2 +...



$$T = t1 + t2 + ...$$

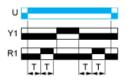
 $T = t'1 + t'2 + ...$

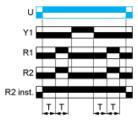
Function DW: Symmetrical Flashing Relay (Starting Pulse Off) & With Retrigger / Restart Control

Description

On energisation of power supply, output(s) R starts at its/their initial state for timing duration T then change(s) to output(s) R close(s) for the same timing duration T.This cycle is repeated indefintely until power supply removal. Specially for RE17*, RE22R2MMU, RE22R2MMW, RE22R2MMU, RE22R2MJU, this D function can only be initiated by energizing Y1 permanently. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output





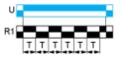
RE22R1MYMR

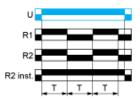
Function Di: Symmetrical Flashing Relay (Starting Pulse On)

Description

On energisation of power supply, output(s) R starts at output(s) R close(s) for timing duration T then revert(s) to its/their initial state for the same timing duration T. This cycle is repeated indefintely until power supply removal. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



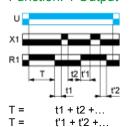


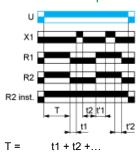
Function Dit: Symmetrical Flashing Relay (Starting Pulse On) & With Pause / Summation Control

Description

On energisation of power supply, output(s) R starts at output(s) R close(s) for timing duration T and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, then revert(s) to its/their initial state. The output(s) R at initial state will remain for the same timing duration T and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R change(s) to close state. This cycle is repeated indefintely until power supply removal. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output





T = t1 + t2 + ...T = t'1 + t'2 + ...

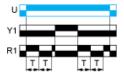
RE22R1MYMR

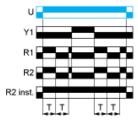
Function Diw: Symmetrical Flashing Relay (Starting Pulse On) & With Retrigger / Restart Control

Description

On energisation of power supply, output(s) R starts at output(s) R close(s) for timing duration T then revert(s) to its/their initial state for the same timing duration T.This cycle is repeated indefintely until power supply removal. At any state of the output(s) R when Y1 energizes, the output(s) R will revert to its/their initial state and followed by Y1 deenergizes then restarts the same operation as described at the beginning. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output





RE22R1MYMR

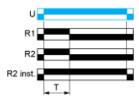
Function H: Interval Relay

Description

On energisation of power supply, output(s) R close(s) and timing period T starts. At the end of the timing period T, the output(s) R revert(s) to its/their initial state. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



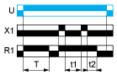


Function Ht: Interval Relay & With Pause / Summation Control

Description

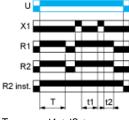
On energisation of power supply, output(s) R close(s) and timing period T starts. The timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their initial stateReenergization of X1 will also cause output(s) R close(s) if the time has elapsed and restart the same operation as described at the beginning. Except for RE17*, RE22R2MMU, RE22R2MMU, RE22R2MMU, RE22R2MJU, timing can be interrupted / paused each time Y1 energizes. The second output (R2) can be either timed (when set to "TIMED" or instantaneous (when set to "INST").

Function: 1 Output



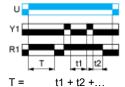
T = t1 + t2 + ...

Function: 2 Outputs

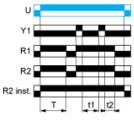


T = t1 + t2 +...

Function: 1 Output with Retrigger / Restart Control



Function: 2 Output with Retrigger / Restart Control



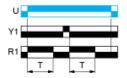
T = t1 + t2 +...

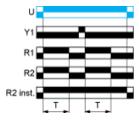
Function Hw: Interval Relay & with Retrigger / Restart Control

Description

On energisation of power supply, output(s) R close(s) and timing period T starts. At the end of the timing period T, the output(s) R revert(s) to its/their initial state. At any state of the output(s) R when Y1 energizes followed by deenergizes, the output(s) R close(s) then restarts the same operation as described at the beginning. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output





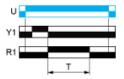
RE22R1MYMR

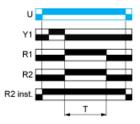
Function W: Interval Relay with Control Signal Off

Description

After energisation of power supply and on energization of Y1 following by denergization of Y1, the output(s) R close(s) and starts the timing T.At the end of the timing period, the output(s) R revert(s) to its/their initial state. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



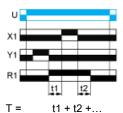


Function Wt: Interval Relay with Control Signal Off & with Pause / Summation Control

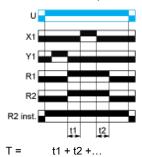
Description

After energisation of power supply and on energization of Y1 following by denergization of Y1, the output(s) R close(s) and starts the timing T.Timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their initial state. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



Function: 2 Outputs



Legend

Relay de-energised

Relay energised

Output open

Output closed

U - Supply

R1/R2 -2 timed outputs

X1 - Pause / Summation control

Y1 - Retrigger / Restart control

R2 inst. The second output is instantaneous if the right position is selected

T - Timing period