RE22R1AMR

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





Main

Range of product	Harmony Timer Relays
Product or component type	Power on-delay relay
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	A
	Aw
Time delay range	330 s
	30300 s 10100 s
	0.051 s
	110 s
	30300 h
	30300 min
	0.33 s
	330 h
	330 min
Control type	Rotary knob
	Diagnostic button
[Us] rated supply voltage	24240 V AC/DC 50/60 Hz
Release 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 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 14) 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
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
Control signal pulse width	100 Ms with load in parallel
	30 ms
Insulation resistance	100 MOhm at 500 V DC conforming to IEC 60664-1
Recovery 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 at 5 V DC	
Maximum switching current	8 A	
Maximum switching voltage	250 V AC	
Electrical durability	100000 Cycles, 8 A at 250 V, AC-1 100000 cycles, 2 A at 24 V, DC-1	
Mechanical durability	10000000 cycles	
Rated impulse withstand voltage	5 kV for 1.250 μs conforming to IEC 60664-1	
Power on delay	100 ms	
Creepage distance	4 kV/3 conforming to IEC 60664-1	
Overvoltage category	III conforming to IEC 60664-1	
Safety reliability data	MTTFd = 308.2 years B10d = 280000	
Mounting position	Any position	
Mounting support	35 mm DIN rail conforming to EN/IEC 60715	
Status LED	LED backlight green (steady) for dial pointer indication LED yellow (steady) for output relay energised LED yellow (fast flashing) for timing in progress and output relay de-energised LED yellow (slow flashing) for timing in progress and output relay energised	
Width	22.5 mm	
Net weight	0.1 kg	

Environment

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	2006/95/EC - low voltage directive 2004/108/EC - electromagnetic compatibility	
Product certifications	CE UL GL CCC EAC RCM CSA	
Ambient air temperature for operation	-2060 °C	
Ambient air temperature for storage	-4070 °C	
IP degree of protection	IP40 housing: conforming to IEC 60529 IP50 front face: conforming to IEC 60529 IP20 terminals: conforming to IEC 60529	
Pollution degree	3 conforming to IEC 60664-1	
Vibration resistance	20 m/s² (f= 10150 Hz) conforming to IEC 60068-2-6	
Shock resistance	15 gn not operating for 11 ms conforming to IEC 60068-2-27 5 gn in operation for 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	

Packing Units

Package 1 Weight	0.092 kg	
Package 1 Height	0.260 dm	
Package 1 width	0.820 dm	
Package 1 Length	0.950 dm	

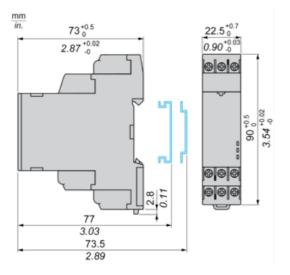
Offer Sustainability

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	☑ China RoHS Declaration	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End Of Life Information	

Product data sheet Dimensions Drawings

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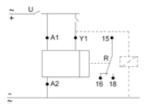
Dimensions



Product data sheet Connections and Schema

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Wiring Diagram



Product data sheet Technical Description

RE22R1AMR

Function A: Power On-Delay

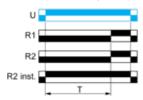
Description

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: 2 Outputs

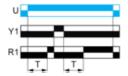


Function Aw: Power On-Delay With Retrigger / Restart Control

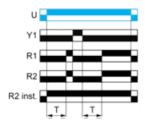
Description

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: 2 Outputs



Legend

Relay de-energised

Relay energised

Output open

_	Output	alaaad
	Output	closed

U -	Supply
T -	Timing period
R1/R2 -	2 timed outputs

R2 inst	The second output is instantaneous if the right position is selected
Y1 -	Retrigger / Restart control