Specifications





# Modular timing relay, 8 A, 0.05 s... 300 h, 1 CO, on delay and off delay, 24...240 V AC/DC

RE22R1ACMR

### Main

Range of product	Harmony Timer Relays
product or component type	Modular timing 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	On-delay and off-delay
time delay range	330 min 110 s 30300 s 10100 s 330 s 30300 min 30300 h 0.33 s 0.051 s 330 h
Control type	Rotary knob Diagnostic button Potentiometer external
[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 mm <sup>2</sup> (AWG 20AWG 12) solid without cable end Screw terminals, 2 x 0.52 x 2.5 mm <sup>2</sup> (AWG 20AWG 14) solid without cable end Screw terminals, 1 x 0.21 x 2.5 mm <sup>2</sup> (AWG 24AWG 14) flexible with cable end Screw terminals, 2 x 0.22 x 1.5 mm <sup>2</sup> (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

Price is "List Price" and may be subject to a trade discount - check with your local distributor or retailer for actual price.

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	B10d = 190000 MTTFd = 205.4 years
Mounting position	Any position
Mounting support	35 mm DIN rail conforming to 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
Function available	Ac- On-delay and off-delay relay w/ control signal-1 C/O Act- On-delay and off-delay relay w/ control signal and pause/summation-1 C/O
Width	22.5 mm
net weight	0.1 kg
Control type	With test button
Number of functions	2

# 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	IEC 61812-1 UL 508
Directives	2006/95/EC - low voltage directive 2004/108/EC - electromagnetic compatibility
Product certifications	CE CCC GL UL CSA EAC RCM
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/s <sup>2</sup> (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**

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.6 cm
Package 1 Width	8.2 cm
Package 1 Length	9.5 cm
Package 1 Weight	100.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	4.405 kg
Unit Type of Package 3	P06
Number of Units in Package 3	640
Package 3 Height	50.0 cm
Package 3 Width	80.0 cm
Package 3 Length	60.0 cm
Package 3 Weight	79.78 kg

# Sustainability Screen Premium

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Yes

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

### Well-being performance



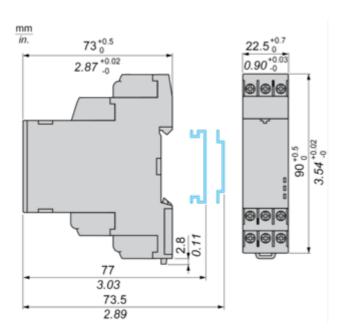
Rohs Exemption Information

### **Certifications & Standards**

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

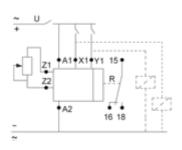
### **Dimensions Drawings**

### Dimensions



Connections and Schema

### Wiring Diagram



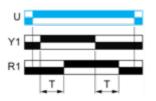
### **Technical Description**

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

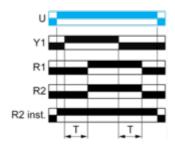
#### Description

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



#### **Function: 2 Outputs**

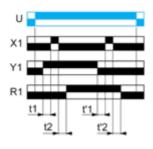


#### Function Act: On-Delay & Off-Delay with Control Signal & With Pause / Summation Control

#### Description

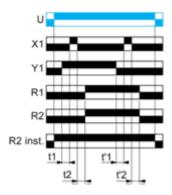
After energisation of power supply and energization of Y1 causes the timing period T to start and the timing can be interrupted / paused each time X1 energizes.When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R close(s).When deenergization of Y1, the timing 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





#### Function: 2 Outputs



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

#### Legend

Relay de-energised	
Relay energised	
Output open	
Output closed	
U -	Supply
т-	Timing period
R1/R2 -	2 timed outputs
R2 inst	The second output is instantaneous if the right position is selected
X1 -	Pause / Summation control
Y1 -	Retrigger / Restart control