

# Product data sheet

Specifications



## Modular timing relay, Harmony, 5A, 1 CO, 0.05s...10 min, delay on de energization, 24...240V AC DC

RE22R1KMR

### Main

Range of product	Harmony Timer Relays
Product or component type	Single function relay
Discrete output type	Relay
Device short name	RE22
Nominal output current	5 A

### Complementary

Contacts type and composition	1 C/O timed contact, cadmium free
Time delay type	Delay on de-energization
Time delay range	10...100 s 1...10 min 1...10 s 0.3...3 s 3...30 s 0.05...1 s 30...300 s
Control type	Rotary knob
[Us] rated supply voltage	24...240 V AC/DC 50/60 Hz
Release input voltage	$\leq 2.4$ V
Voltage range	0.85...1.1 Us
Supply frequency	50...60 Hz +/- 5 %
Connections - terminals	Screw terminals, 1 x 0.5...1 x 3.3 mm <sup>2</sup> (AWG 20...AWG 12) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm <sup>2</sup> (AWG 20...AWG 14) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm <sup>2</sup> (AWG 24...AWG 14) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm <sup>2</sup> (AWG 24...AWG 16) flexible with cable end
Tightening torque	0.6...1 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
Insulation resistance	100 MOhm at 500 V DC conforming to IEC 60664-1
Recovery time	100 ms on de-energisation
Immunity to microbreaks	10 ms

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

<b>Power consumption in VA</b>	3 VA at 240 V AC
<b>Power consumption in W</b>	2 W at 240 V DC
<b>Switching capacity in VA</b>	1250 VA
<b>Minimum switching current</b>	10 mA at 5 V DC
<b>Maximum switching current</b>	5 A
<b>Maximum switching voltage</b>	250 V AC
<b>Electrical durability</b>	100000 cycles, 2 A at 24 V, DC-1 100000 cycles, 5 A at 250 V, AC-1
<b>Mechanical durability</b>	10000000 cycles
<b>Rated impulse withstand voltage</b>	5 kV for 1.2...50 µs conforming to IEC 60664-1
<b>Power on delay</b>	200 ms
<b>Creepage distance</b>	4 kV/3 conforming to IEC 60664-1
<b>Overvoltage category</b>	III conforming to IEC 60664-1
<b>Safety reliability data</b>	MTTFd = 194 years B10d = 180000
<b>Mounting position</b>	Any position
<b>Mounting support</b>	35 mm DIN rail conforming to EN/IEC 60715
<b>Status LED</b>	LED backlight green (steady) for dial pointer indication LED yellow (steady) for output relay energised LED yellow (steady) for power ON
<b>Width</b>	22.5 mm
<b>Net weight</b>	0.1 kg

## Environment

<b>Dielectric strength</b>	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
<b>Standards</b>	IEC 61812-1 UL 508
<b>Directives</b>	2006/95/EC - low voltage directive 2004/108/EC - electromagnetic compatibility
<b>Product certifications</b>	CCC CSA GL RCM CE EAC UL
<b>Ambient air temperature for operation</b>	-20...60 °C
<b>Ambient air temperature for storage</b>	-40...70 °C
<b>IP degree of protection</b>	IP40 housing: conforming to IEC 60529 IP50 front face: conforming to IEC 60529 IP20 terminals: conforming to IEC 60529
<b>Pollution degree</b>	3 conforming to IEC 60664-1
<b>Vibration resistance</b>	20 m/s <sup>2</sup> (f= 10...150 Hz) conforming to IEC 60068-2-6
<b>Shock resistance</b>	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
<b>Relative humidity</b>	95 % at 25...55 °C
<b>Electromagnetic compatibility</b>	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 MHz...1 GHz) conforming to IEC 61000-4-3  
 Conducted RF disturbances - test level: 10 V level 3 (0.15...80 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

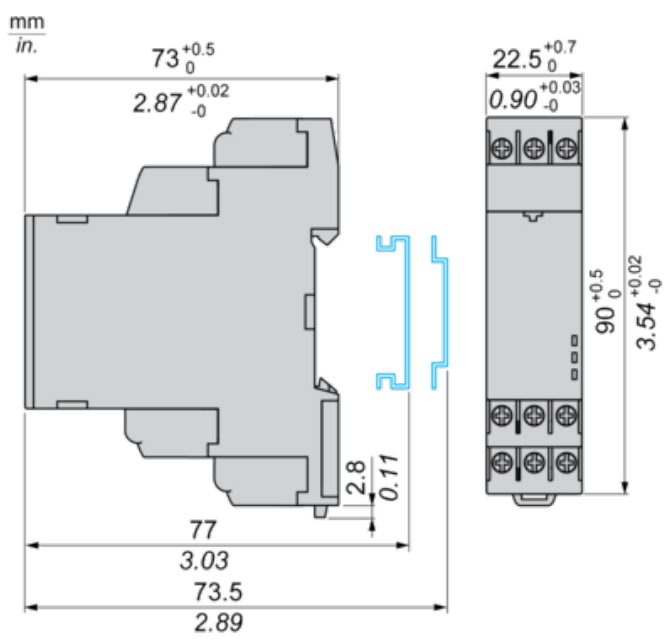
## Packing Units

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	93 g

## Offer Sustainability

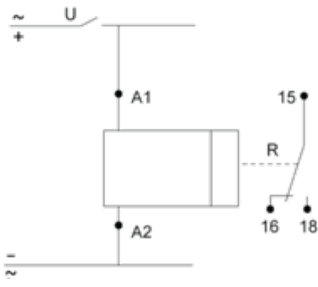
Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a>
RoHS exemption information	Yes
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## Dimensions



## Wiring Diagram

---

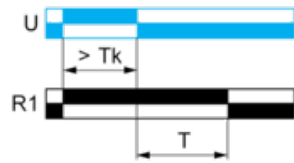


**Function K: Delay On De-energization without Auxillary Supply**

**Description**

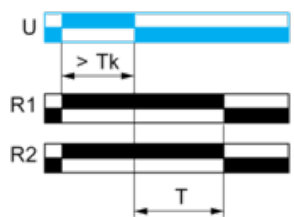
On energisation of power supply, the output(s) R close(s). On de-energisation of power supply, timing period T starts and at the end of this period, the output(s) R revert(s) to its/their initial state. The energization of power supply > Tk is necessary to sustain the timing period T.

**Function: 1 Output**



Tk > 1s

**Function: 2 Outputs**



Tk > 80ms

**Legend**

- Relay de-energised
- Relay energised
- Output open
- Output closed

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

**Recommended replacement(s)**