Product data sheet

Specifications

multifunction relay, Harmony Timer Relays, 8A, 2CO, 0.1s…100h, bistable, 24V DC or 24...240V AC DC

RE22R2MXMU

Product availability: Non-Stock - Not normally stocked in distribution facility

Main

Range of Product	Harmony Timer Relays
Discrete output type	Relay
Product or Component Type	Modular timing relay
Device short name	RE22
nominal output current	8 A

Complementary

Contacts type and composition	1 C/O timed contact 1 C/O timed or instantaneous contact
Time delay type	Pulse delay Safe-guard Bistable Interval
Time delay range	0.1...1 s 1...10 h 1...10 s 6...60 min 10...100 h 6...60 s 1...10 min
Control type	Rotary knob front panel
[Us] rated supply voltage	24...240 V AC 24 V DC
Voltage range	0.85...1.1 Us
Supply frequency	50...60 Hz +/- 5 %
Connections - terminals	Screw terminals, 2 x 1.5 mm² with cable end Screw terminals, 2 x 2.5 mm² without cable end
Tightening torque	5.3…8.9 lbf.in (0.6…1 N.m) IEC 60947-1
Housing material	Polycarbonate
Repeat accuracy	+/- 0.5 % IEC 61812-1
Temperature Drift	+/- 0.05 %/°C
Voltage drift	+/- 0.2 %/V
Setting accuracy of time delay	+/- 10 % of full scale 25 °C IEC 61812-1

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

Time delay type	Pulse delay - Ad- Pulse delayed relay w/ control signal Pulse delay - Ah- Pulse delayed relay (single cycle) w/ control signal Safe-guard - N- Safe-guard relay Safe-guard - O- Delayed Safe-guard relay Pulse delay - P- Pulse delayed relay w/ fixed pulse length Pulse delay - Pt- Pulse delayed relay w/ fixed pulse length and pause/summation Bistable - TI- Bistable relay w/ control signal on Bistable - Tt- Retriggerable bistable relay w/ control signal on Interval - W- Interval relay w/ control signal off
Control signal pulse width	30 ms 100 ms under load
Insulation resistance	100 MOhm 500 V DC IEC 60664-1
Recovery time	120 ms on de-energisation
Immunity to microbreaks	10 ms
Power consumption in VA	50 VA 240 V AC
Power consumption in W	0.7 W 24 V DC
breaking capacity	2000 VA
Minimum switching current	10 mA 5 V
Maximum switching current	8 mA
Maximum switching voltage	250 V
Electrical durability	100000 cycles for resistive load, 8 A at 250 V, AC
Mechanical durability	10000000 cycles
Rated impulse withstand voltage	5 kV 1.2…50 µs IEC 60664-1 5 kV IEC 61812-1
Power on delay	100 ms
Safety reliability data	B10d = 170000 MTTFd = 182.6 years
Mounting position	Any position in relation to normal vertical mounting plane
Mounting support	35 mm DIN rail conforming to IEC 60715
Status LED	Green LED flashing)timing in progress Green LED steady)power ON Yellow LEDrelay energised
Function available	Ad- Pulse delayed relay w/ control signal-2 C/O Ah- Pulse delayed relay (single cycle) w/ control signal-2 C/O N- Safe-guard relay-2 C/O O- Delayed Safe-guard relay-2 C/O P- Pulse delayed relay w/ fixed pulse length-2 C/O Pt- Pulse delayed relay w/ fixed pulse length and pause/summation-2 C/O TI- Bistable relay w/ control signal on-2 C/O Tt- Retriggerable bistable relay w/ control signal on-2 C/O W- Interval relay w/ control signal off-2 C/O
Width	0.9 in (22.5 mm)
Net Weight	0.20 lb(US) (0.09 kg)
Control Type	With test button
Number of functions	9

Environment

Dielectric strength	2.5 kV 1 mA/1 minute 50 Hz IEC 61812-1
Standards	IEC 61812-1 IEC 61000-6-1 IEC 61000-6-3 IEC 61000-6-4 IEC 61000-6-2

Directives	2006/95/EC - low voltage directive 2004/108/EC - electromagnetic compatibility
Product Certifications	CSA CCC GL cULus EAC CE RCM
Ambient Air Temperature for Operation	-4…140 °F (-20…60 °C)
Ambient Air Temperature for Storage	-22…140 °F (-30…60 °C)
IP degree of protection	IP40 housing: conforming to IEC 60529 IP50 front face: conforming to IEC 60529 IP20 terminal block: conforming to IEC 60529
Vibration resistance	20 m/s² (f= 10…150 Hz) conforming to IEC 60068-2-6
Shock resistance	15 gn 11 ms IEC 60068-2-27
Relative humidity	93 %, without condensation IEC 60068-2-30
Electromagnetic compatibility	Electrostatic discharge immunity test - test level: 6 kV level 3 (contact discharge) conforming to IEC 61000-4-2 Electrostatic discharge immunity test - test level: 8 kV level 3 (air discharge) conforming to IEC 61000-4-2 Fast transients immunity test - test level: 1 kV level 3 (capacitive connecting clip) conforming to IEC 61000-4-4 Fast transients immunity test - test level: 2 kV level 3 (direct contact) 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 Radiated radio-frequency electromagnetic field immunity test - test level: 10 V level 3 (0.15...80 MHz) conforming to IEC 61000-4-6 Electromagnetic field immunity test - test level: 10 V/m level 3 (80 MHz...1 GHz) conforming to IEC 61000-4-3 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

Ordering and shipping details

Category	US10CP222376
Discount Schedule	0CP2
GTIN	3606480676604
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.220 in (3.100 cm)
Package 1 Width	3.504 in (8.900 cm)
Package 1 Length	3.937 in (10.000 cm)
Package weight(Lbs)	3.739 oz (106.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Height	5.906 in (15.000 cm)

Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	10.190 lb(US) (4.622 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	640
Package 3 Height	27.559 in (70.000 cm)
Package 3 Width	23.622 in (60.000 cm)
Package 3 Length	31.496 in (80.000 cm)
Package 3 Weight	199.979 lb(US) (90.709 kg)

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Total lifecycle Carbon footprint	**54 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**2 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**52 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.1 kg CO2 eq.**
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
SCIP Number	**7bdc2711-0ad2-427c-8ece-532c5e9f09d7**
EU RoHS Directive	Compliant By Exemption
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
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 www.P65Warnings.ca.gov**

Use Longer

Lifetime extension

Repair	**No**

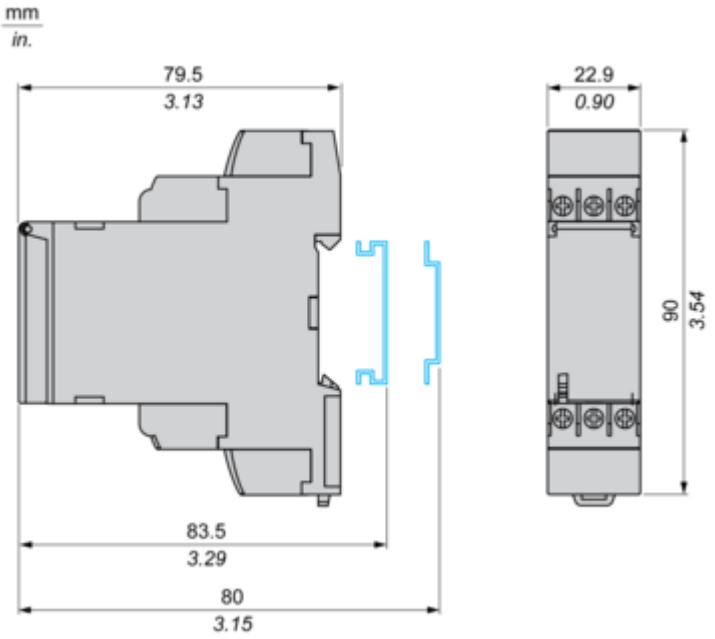
Use Again

Repack and remanufacture

Circularity Profile	End of Life Information
Take-back	**Nej**

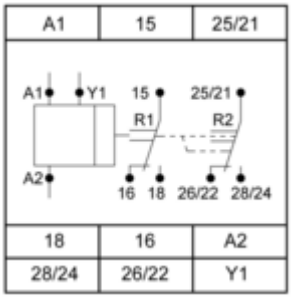
Dimensions Drawings

Dimensions

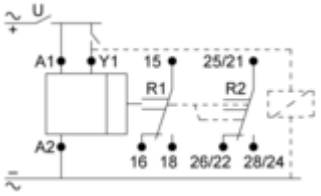


Connections and Schema

Internal Wiring Diagram



Wiring Diagram

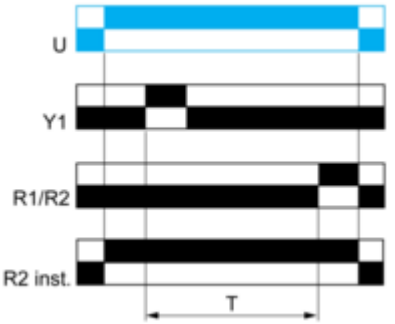


Technical Description

Function Ad : Pulse Delayed Relay with Control Signal

Description

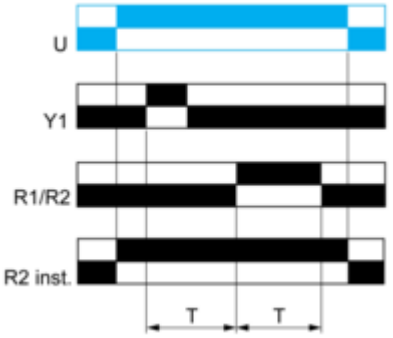
After power-up, pulsing or maintaining of control contact Y1 starts the timing T.
At the end of this timing period T, the output R closes.
The output relay will be reset the next time control contact Y1 is pulsed or maintained.



Function Ah : Pulse Delayed Relay (Single Cycle) with Control Signal

Description

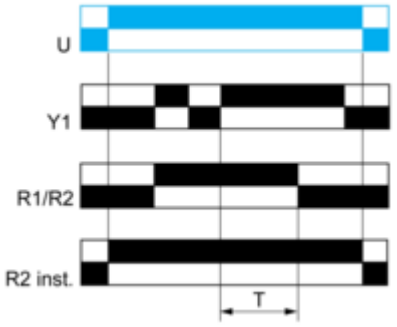
After power-up, pulsing or maintaining of control contact Y1 starts the timing T. A single cycle then starts with 2 timing periods T of equal duration (start with output in rest position).
Output relay closes at the end of the first timing period T and reverts to its initial position at the end of the second timing period T.
Control contact Y1 must be reset in order to re-start the single flashing cycle.



Function N : Retriggerable Interval Relay with Control Signal On

Description

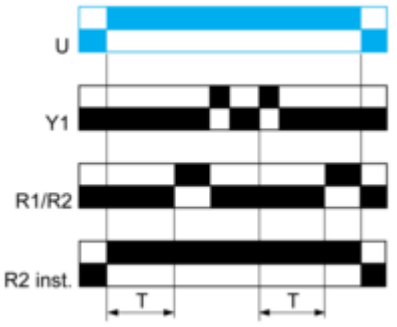
After power-up and an initial control pulse C, the output relay closes.
If the interval between two control pulses C is greater than the set timing period T, timing elapses normally and the output relay closes at the end of the timing period. If the interval is not greater than the set timing period, the output relay remains closed until this condition is met.



Function O : Retriggerable Interval Delayed Relay with Control Signal On

Description

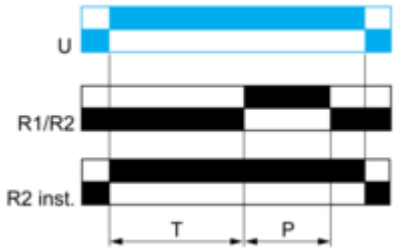
An initial timing period T begins on energization. At the end of this timing period, the output relay closes.
As soon as there is a control pulse C, the output relay reverts to its initial state until the interval between two control pulses is less than the value of the set timing period T. Otherwise, the output relay closes at the end of the timing period T.



Function P : Pulse Delayed Relay with Fixed Pulse Length

Description

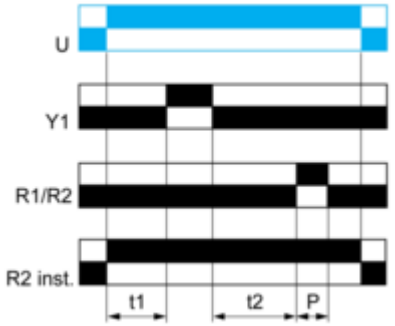
The timing period T begins on energization.
At the end of this period, the output relay closes for a fixed time P.



Function Pt : Pulse Delayed Relay (Summation and Fixed Pulse Length) with Control Signal Off

Description

On energization, timing period T starts (it can be interrupted by operating the Gate control contact G).
At the end of this period, the output relay closes for a fixed time P.

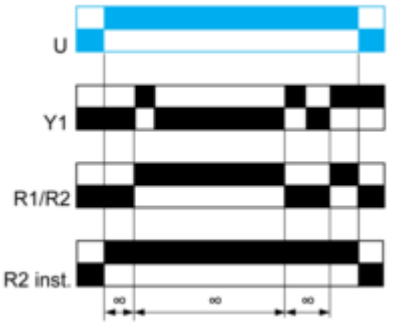


T = t1+t2 P = 500ms

Function TL : Bistable Relay with Control Signal On

Description

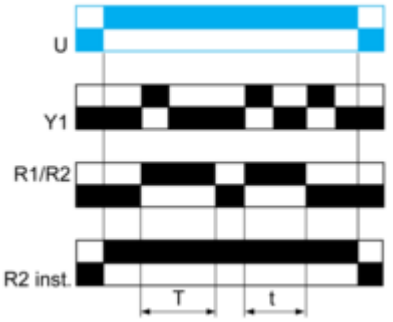
After power-up, pulsing or maintaining of control contact Y1 switches the output on.
A second pulse on the control contact Y1 switches the output relay off.



Function Tt :Retriggerable Bistable Relay with Control Signal On

Description

After power-up, pulsing or maintaining of control contact Y1 switches output relay on and starts timing T.
The output switches off at the end of the timing period T or following a second pulse on the control contact Y1.

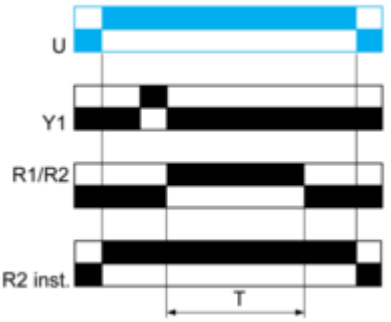


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.).

Function W :Interval Relay with Control Signal Off

Description

After power-up and opening of the control contact, the output(s) close(s) for a timing period T.
At the end of this timing period the output(s) revert(s) to its/their initial state.



2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.).

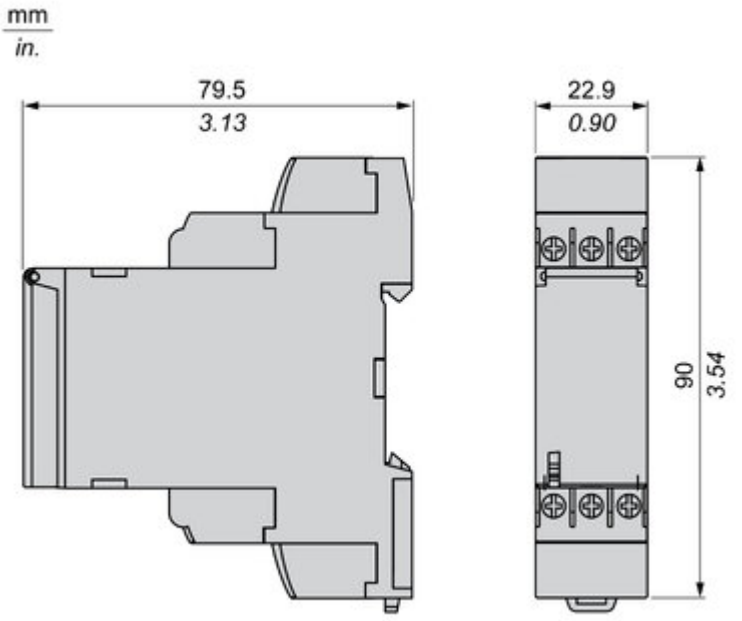
Legend

Relay de-energised
Relay energised
Output open
Output closed

Y1 :	Control contact
R1/R2 :	2 timed outputs
R2 inst. :	The second output is instantaneous if the right position is selected
T :	Timing period
U :	Supply

Technical Illustration

Dimensions



Offer Marketing Illustration

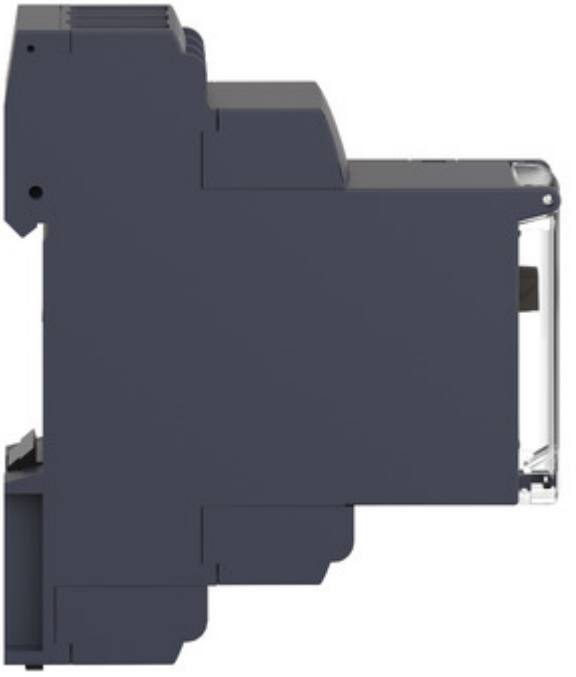
Product benefits / Features

Offer Marketing Illustration

Product benefits / Features

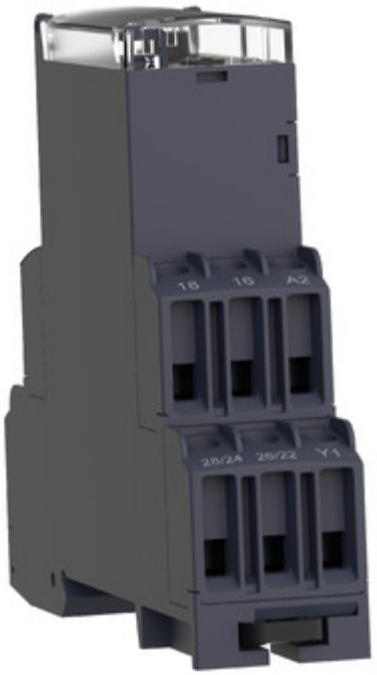
Image of product / Alternate images

Alternative




RE22R2MXMU
For more timing options, please refer to product reference datasheet
Use copper conductors only


A1
15
25/21
18
16
A2
28/24
26/22
Y1
R2
R1
TIMED


18
16
A2
25/24
25/22
Y1