



### Main

Range of product	Zelio Time
Product or component type	Industrial timing relay
Discrete output type	Solid state
Component name	RE9
Time delay type	A D Di H
Time delay range	0.1...10 s 3...300 s
[Us] rated supply voltage	24...240 V AC 50/60 Hz H, D, Di 24...240 V AC/DC 50/60 Hz A

### Complementary

Width pitch dimension	22.5 mm
Voltage range	0.85...1.1 Us
Connections - terminals	Screw terminals, clamping capacity: 2 x 1.5 mm <sup>2</sup> flexible with cable end Screw terminals, clamping capacity: 2 x 2.5 mm <sup>2</sup> flexible without cable end
Tightening torque	0.6...1.1 N.m
Setting accuracy of time delay	< +/- 20 %
Repeat accuracy	< 1 %
Reset time	>= 100 ms after time delay period
Temperature drift	<= 0.1 %/°C
Continuous output current	<= 0.7 A at 20 °C
Minimum output current	10 mA at 20 °C
Overload current	<= 15 A during 10 ms conforming to VDE 0435 (part 303), 4.8.3/class II
Voltage drop	<= 3 V closed contact(s) 0.7 A
Leakage current	<= 6 mA open contact contact(s)
Power dissipation in W	<= 2.5 W
Electrical durability	> 100000000 cycles
Marking	CE
Overvoltage category	III conforming to IEC 60664-1
[Ui] rated insulation voltage	250 V IEC certified 300 V CSA certified
Supply disconnection value	> 0.1 Uc
Operating position	Any position without derating
Surge withstand	2 kV conforming to IEC 61000-4-5 level 3
CAD overall width	22.5 mm
CAD overall height	78 mm
CAD overall depth	80 mm
Product weight	0.11 kg

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## Environment

Immunity to microbreaks	<= 2 ms after time delay period <= 70 ms during time delay period
Derating factor	None for > 20 °C
Standards	EN/IEC 61812-1
Product certifications	CSA GL UL
Ambient air temperature for storage	-40...85 °C
Ambient air temperature for operation	-20...60 °C
Relative humidity	15...85 % (3K3) conforming to IEC 60721-3-3
Vibration resistance	0.35 mm (f = 10...55 Hz) conforming to IEC 60068-2-6
Shock resistance	15 gn for 11 ms conforming to IEC 60068-2-27
IP degree of protection	IP20 (terminals) IP50 (housing)
Pollution degree	3 conforming to IEC 60664-1
Dielectric strength	2.5 kV
Non-dissipating shock wave	4.8 kV
Resistance to electrostatic discharge	6 kV (in contact) conforming to IEC 61000-4-2 level 3 8 kV (in air) conforming to IEC 61000-4-2 level 3
Resistance to electromagnetic fields	10 V/m conforming to IEC 61000-4-3 level 3
Resistance to fast transients	2 kV conforming to IEC 61000-4-4 level 3
Disturbance radiated/conducted	CISPR11 group 1- class A CISPR22 - class A
RoHS EUR status	Compliant
RoHS EUR conformity date	0626

Function A: Delay on Energisation

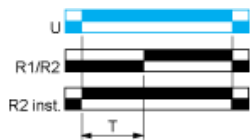
Description

The timing period T begins on energisation. After timing, the output(s) R close(s). The second output can be either timed or instantaneous.

Function: 1 Output



Function: 2 Outputs



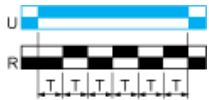
2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

Function D: Symmetrical Flashing, Start with Output in Rest Position

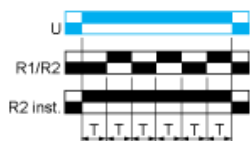
Description

Repetitive cycle with two timing periods T of equal duration, with output(s) R changing state at the end of each timing period T. The second output can be either timed or instantaneous.

Function: 1 Output



Function: 2 Outputs



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

Function Di: Symmetrical Flashing, Start with Output in Operating Position

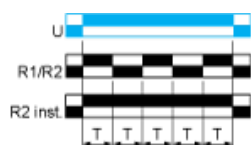
Description

Repetitive cycle with two timing periods T of equal duration, with output(s) R changing state at the end of each timing period T. The second output can be either timed or instantaneous.

Function: 1 Output



## Function: 2 Outputs



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

## Function H: Timing on Energisation

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### Description

On energisation of the relay, timing period T starts and the output(s) R close(s). At the end of the timing period T, the output(s) R revert(s) to its/their initial state. The second output can be either timed or instantaneous.

### Function: 1 Output




### Function: 2 Outputs



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

## Legend

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 Relay de-energised

 Relay energised

 Output open

 Output closed

C Control contact

G Gate

R Relay or solid state output

R1/ 2 timed outputs

R2

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

T Timing period

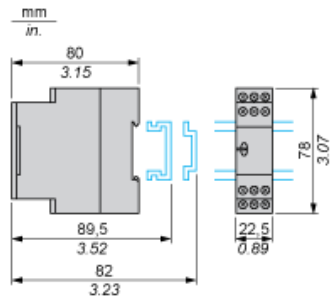
Ta Adjustable On-delay

Tr Adjustable Off-delay

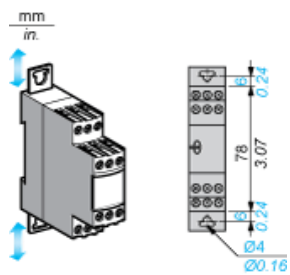
U Supply

Width 22.5 mm

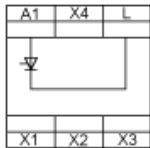
Rail Mounting



Screw Fixing

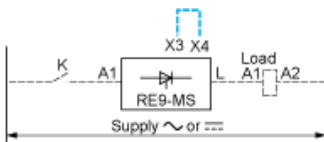


Internal Wiring Diagram

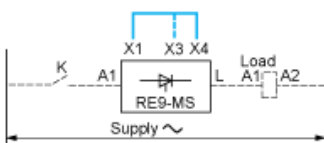


Recommended Application Wiring Diagram

Delay on Energisation: Function A



Timing on Energisation: Function H

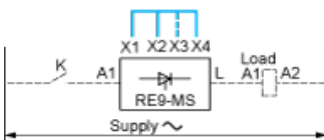


Link to be made between terminals X1 and X4.

Selection of the timing range

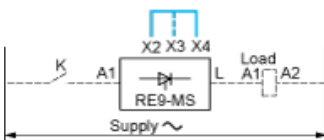
- X3-X4 not linked: range 3 s...300 s (factory configuration)
- X3-X4 linked: range 0.1 s...10 s

Symmetrical Flasher: Function D



Link to be made between terminal X2 and X4 on one side and between X1 and X2 on the other side.

Symmetrical Flasher: Function DI



Link to be made between terminals X2 and X4.

NOTE: For supply voltages greater than 30 V, the rated voltage of the load is equal to the supply voltage. For a supply voltage of 24 V, the voltage drop within the relay must be taken into account (about 3 V); a coil with a nominal voltage of 21 V must therefore be selected for the load.