



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

Complementary

Width pitch dimension	22.5 mm
[Us] rated supply voltage	24...240 V AC/DC at 50/60 Hz 24...240 V AC at 50/60 Hz
Voltage range	0.85...1.1 Us
Connections - terminals	Screw terminals, clamping capacity: 2 x 2.5 mm ² flexible without cable end Screw terminals, clamping capacity: 2 x 1.5 mm ² flexible with 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	300 V CSA certified 250 V IEC 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

Environment

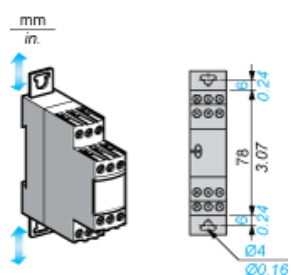
Immunity to microbreaks	<= 70 ms during time delay period <= 2 ms after time delay period
Derating factor	None for > 20 °C
Standards	EN/IEC 61812-1
Product certifications	CSA GL UL
Ambient air temperature for storage	-40...85 °C
Ambient air temperature for operation	-20...60 °C
Relative humidity	15...85 % (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	IP50 (housing) IP20 (terminals)
Pollution degree	3 conforming to IEC 60664-1
Dielectric strength	2.5 kV
Non-dissipating shock wave	4.8 kV
Resistance to electrostatic discharge	8 kV (in air) conforming to IEC 61000-4-2 level 3 6 kV (in contact) 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	CISPR 11 group 1 - class A CISPR 22 - class A

Width 22.5 mm

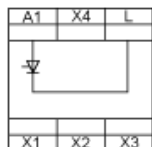
Rail Mounting



Screw Fixing

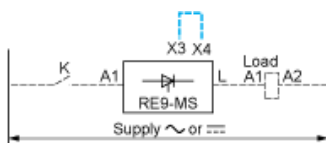


Internal Wiring Diagram

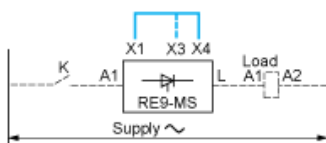


Recommended Application Wiring Diagram

Delay on Energisation: Function A



Timing on Energisation: Function H

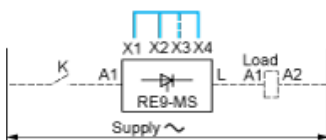


Link to be made between terminals X1 and X4.

Selection of the timing range

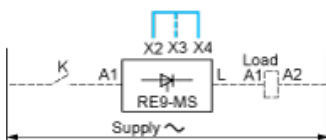
- X3-X4 not linked: range 3 s...300 s (factory configuration)
- X3-X4 linked: range 0.1 s...10 s

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.

Function A : Power on Delay Relay

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 Flasher Relay (Starting Pulse Off)

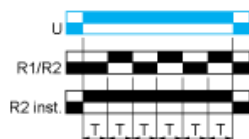
Description

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 Flasher Relay (Starting Pulse On)

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 : Interval Relay

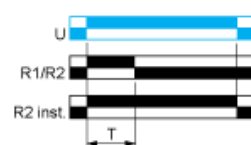
Description

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

 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