## Product data sheet Characteristics

## RE9RA31MW7

off-delay timing relay - 0.3..30 s - 240 V AC - solid state



## Main

Ivialiti	
Range of product	Zelio Time
Product or component type	Industrial timing relay
Discrete output type	Solid state
Component name	RE9
Time delay type	С
Time delay range	0.330 s
[Us] rated supply voltage	24240 V AC 50/60 Hz

### Complementary

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Width pitch dimension	22.5 mm
Voltage range	0.851.1 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	0.61.1 N.m
Setting accuracy of time delay	< +/- 20 %
Repeat accuracy	< 1 %
Reset time	>= 100 ms after time delay period
Switching time	>= 40 ms
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	<= 1 mA open contact contact(s)
Power dissipation in W	<= 4 W
Electrical durability	> 10000000 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



### Environment

Immunity to microbreaks	<= 2 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	-4085 °C
Ambient air temperature for operation	-2060 °C
Relative humidity	1585 % (3K3) conforming to IEC 60721-3-3
Vibration resistance	0.35 mm (f = 1055 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	0624

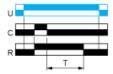
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#### Function C: Timing After Opening of Control Contact

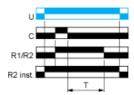
#### Description

After power-up and closing of the control contact C, the output R closes. When control contact C re-opens, timing T starts. At the end of the timing period, 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

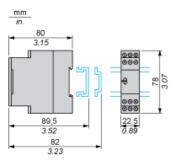
- Tr Adjustable Off-delay
- U Supply

## Product data sheet Dimensions Drawings

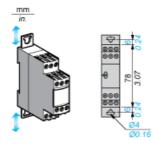
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## Width 22.5 mm

### Rail Mounting



## Screw Fixing



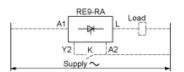


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## Internal Wiring Diagram



### Recommended Application Wiring Diagram



The timing relay is placed in series with the load whose de-energisation is to be delayed. Switch K is connected to terminals Y2 and A2 of the timing relay, and terminal A2 is connected to the main supply, as indicated in the diagram above. The device is operated from an a.c. mains supply whose voltage is between 24 V and 240 V.