Product data sheet

Specifications

Industrial timing relay, Harmony Time, off delay 0.3...30 s, 240 V AC, solid state

RE9RA31MW7

Discontinued on: Jun 1, 2016

Discontinued

Main

Range of product	Zelio Time
Product or component type	Industrial timing relay
Discrete output type	Solid state
Component name	RE9
Time delay type	C
Time delay range	0.3...30 s

Complementary

Width pitch dimension	0.9 in (22.5 mm)
[Us] rated supply voltage	24...240 V AC 50/60 Hz
Voltage range	0.85...1.1 Us
Connections - terminals	Screw terminals, 2 x 1.5 mm² flexible with cable end Screw terminals, 2 x 2.5 mm² flexible without cable end
tightening torque	5.3…9.7 lbf.in (0.6…1.1 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
Maximum [Ie] rated operational current	0.7 A 68 °F (20 °C)
Minimum output current	10 mA 68 °F (20 °C)
Overload current	<= 15 A during 10 ms VDE 0435 (part 303), 4.8.3/class II
Maximum voltage drop	<3 V closed 0.7 A
Maximum leakage current	1 mA open contact
Maximum power dissipation in W	4 W
Electrical durability	100000000 cycles
Marking	CE
Overvoltage category	III conforming to IEC 60664-1
[Ui] rated insulation voltage	250 V IEC 300 V CSA
Supply disconnection value	> 0.1 Uc

Operating position	Any position without derating
Surge withstand	2 kV IEC 61000-4-5 level 3
CAD overall width	0.9 in (22.5 mm)
CAD overall height	3.07 in (78 mm)
CAD overall depth	3.1 in (80 mm)
Net weight	0.24 lb(US) (0.11 kg)

Environment

Immunity to microbreaks	2 ms during time delay period
Derating factor	None >68 °F (20 °C)
Standards	EN/IEC 61812-1
Product certifications	GL UL CSA
Ambient air temperature for storage	-40…185 °F (-40…85 °C)
Ambient air temperature for operation	-4…140 °F (-20…60 °C)
Relative humidity	15…85 % 3K3 IEC 60721-3-3
Vibration resistance	0.35 mm (f= 10…55 Hz) conforming to IEC 60068-2-6
Shock resistance	15 gn 11 ms IEC 60068-2-27
IP degree of protection	IP20 terminals) IP50 housing)
Pollution degree	3 IEC 60664-1
Dielectric strength	2.5 kV
Non-dissipating shock wave	4.8 kV
Resistance to electrostatic discharge	6 kV in contact)IEC 61000-4-2 level 3 8 kV in air)IEC 61000-4-2 level 3
Resistance to electromagnetic fields	9.1 V/yd (10 V/m) IEC 61000-4-3 level 3
Resistance to fast transients	2 kV IEC 61000-4-4 level 3
Disturbance radiated/conducted	CISPR 22 - class A CISPR 11 group 1 - class A

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.06 in (2.7 cm)
Package 1 Width	3.2 in (8.2 cm)
Package 1 Length	3.3 in (8.5 cm)
Package 1 Weight	3.03 oz (86 g)

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 >

Use Longer

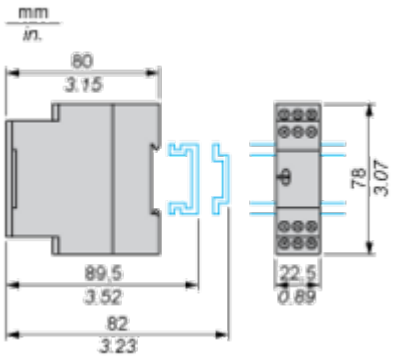
Lifetime extension

Repair	No

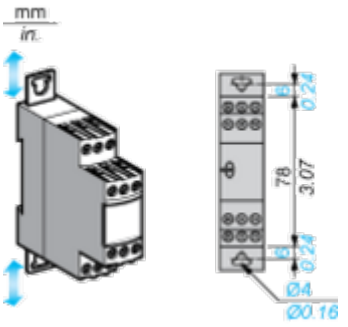
Dimensions Drawings

Width 22.5 mm

Rail Mounting

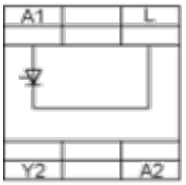


Screw Fixing

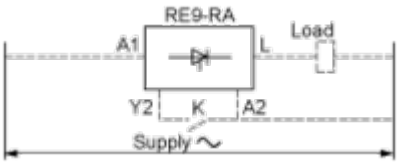


Connections and Schema

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.

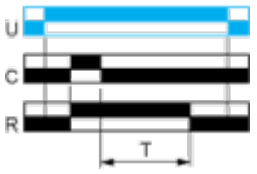
Technical Description

Function C : Off-Delay Relay with Control Signal

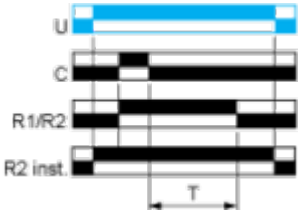
Description

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/R2	2 timed outputs
R2 inst.	The second output is instantaneous if the right position is selected
T	Timing period
Ta -	Adjustable On-delay
Tr -	Adjustable Off-delay
U	Supply