



Main

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| Range of product | Zelio Time |
| Product or component type | Optimum industrial timing relay |
| Component name | RE8 |
| Time delay type | A |
| Time delay range | 0.1...10 s |
| [Us] rated supply voltage | 110...240 V AC, 50/60 Hz 24 V AC/DC, 50/60 Hz |
| Sale per indivisible quantity | 10 |

Complementary

| | |
|---|--|
| Discrete output type | Relay |
| Contacts material | 90/10 silver nickel contacts |
| Width pitch dimension | 22.5 mm |
| Voltage range | 0.9...1.1 Us |
| Connections - terminals | Screw terminals 2 x 1.5 mm ² , flexible cablewith cable end Screw terminals 2 x 2.5 mm ² , flexible cablewithout cable end |
| Tightening torque | 0.6...1.1 N.m |
| Setting accuracy of time delay | +/- 20 % of full scale |
| Repeat accuracy | < 1 % |
| Voltage drift | < 2.5 %/V |
| Temperature drift | < 0.2 %/°C |
| Minimum pulse duration | 26 ms |
| Reset time | 50 ms |
| Maximum switching voltage | 250 V |
| Mechanical durability | 20000000 cycles |
| [Ith] conventional free air thermal current | 8 A |
| [Ie] rated operational current | <= 2 A at 24 V, DC-13 for 70 °C conforming to IEC 60947-5-1/1991 <= 2 A at 24 V, DC-13 for 70 °C conforming to VDE 0660 <= 3 A at 24 V, AC-15 for 70 °C conforming to IEC 60947-5-1/1991 <= 3 A at 24 V, AC-15 for 70 °C conforming to VDE 0660 <= 0.1 A at 250 V, DC-13 for 70 °C conforming to IEC 60947-5-1/1991 <= 0.1 A at 250 V, DC-13 for 70 °C conforming to VDE 0660 <= 0.2 A at 115 V, DC-13 for 70 °C conforming to IEC 60947-5-1/1991 <= 0.2 A at 115 V, DC-13 for 70 °C conforming to VDE 0660 |
| Minimum switching capacity | 10 mA at 12 V |
| Marking | CE |
| Overvoltage category | III conforming to IEC 60664-1 |
| [Ui] rated insulation voltage | 250 V conforming to IEC 300 V conforming to CSA |
| Supply disconnection value | > 0.1 Uc |
| Operating position | Any position without derating factor |
| Surge withstand | 2 kV conforming to IEC 61000-4-5 level 3 |
| Power consumption in VA | 0.7 VA at 24 V 1.8 VA at 110 V 8.5 VA at 240 V |
| Power consumption in W | 0.5 W at 24 V |
| Terminal description | (15-16-18)OC_OFF (A1-B1)CO ALT |

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.

| | |
|----------------|---------|
| Height | 78 mm |
| Width | 22.5 mm |
| Depth | 80 mm |
| Product weight | 0.11 kg |

Environment

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|---------------------------------------|--|
| Immunity to microbreaks | 3 ms |
| 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 10...55 Hz conforming to IEC 60068-2-6 |
| Shock resistance | 15 gn (duration = 11 ms conforming to IEC 60068-2-27) |
| IP degree of protection | IP20 (terminals) IP50 (casing) |
| Pollution degree | 3 conforming to IEC 60664-1 |
| Dielectric test voltage | 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 | 0623 |

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.)

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

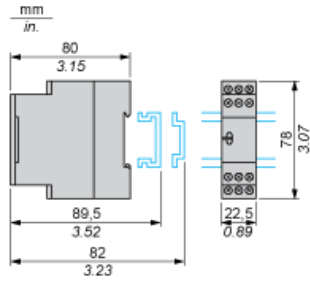
Ta Adjustable On-delay

Tr Adjustable Off-delay

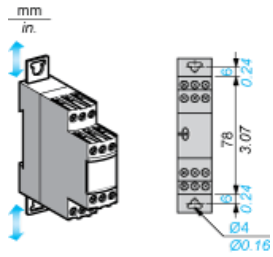
U Supply

Width 22.5 mm

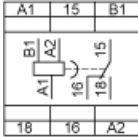
Rail Mounting



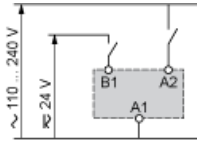
Screw Fixing



Internal Wiring Diagram



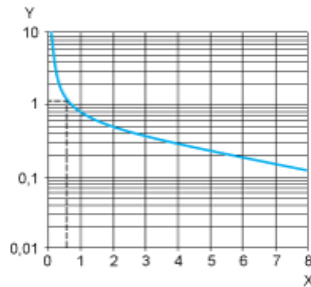
Recommended Application Wiring Diagram



Performance Curves

A.C. Load Curve 1

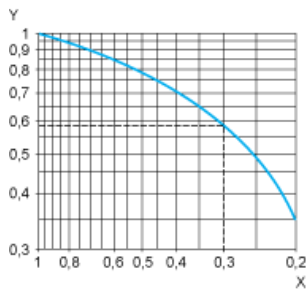
Electrical durability of contacts on resistive loading millions of operating cycles



X Current broken in A
Y Millions of operating cycles

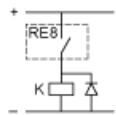
A.C. Load Curve 2

Reduction factor k for inductive loads (applies to values taken from durability curve 1).

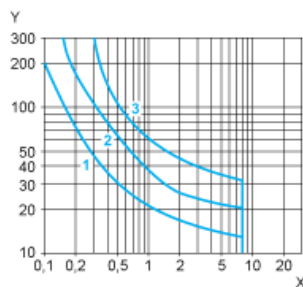


X Power factor on breaking (cos φ)
Y Reduction factor k

Example: An LC1-F185 contactor supplied with 115 V/50 Hz for a consumption of 55 VA or a current consumption equal to 0.1 A and cos φ = 0.3. For 0.1 A, curve 1 indicates a durability of approximately 1.5 million operating cycles. As the load is inductive, it is necessary to apply a reduction coefficient k to this number of cycles as indicated by curve 2. For cos φ = 0.3: k = 0.6 The electrical durability therefore becomes: 1.5 10⁶ operating cycles x 0.6 = 900 000 operating cycles.



D. C. Load Limit Curve



X Current in A
Y Voltage in V
1 L/R = 20 ms
2 L/R with load protection diode
3 Resistive load