

# RE17LCBM

off-delay timing relay - control - 1 s..100 h -  
24..240 V - solid state output



## Main

|                           |   |
|---------------------------|---|
| Range of product          | Zelio Time  |
| Product or component type | Modular timing relay  |
| Discrete output type      | Solid state   |
| Width                     | 17.5 mm   |
| Component name            | RE17L   |
| Time delay type           | C   |
| Time delay range          | 0.1...1 s<br>1...10 h<br>1...10 min<br>1...10 s<br>10...100 h<br>6...60 min<br>6...60 s |
| [Us] rated supply voltage | 24...240 V AC 50/60 Hz  |
| Nominal output current    | 0.7 A   |

## Complementary

|  |  |
|--|--|
| Control type                           | Selector switch on front panel   |
| Voltage range                          | 0.85...1.1 Us  |
| Supply frequency                       | 50...60 Hz (+/- 5 %)   |
| Release of input voltage               | 7 V  |
| Control signal pulse width             | 0.05 s typical   |
| Insulation resistance                  | 100 MOhm at 500 V DC conforming to IEC 60664-1   |
| [Uimp] rated impulse withstand voltage | 5 kV (1.2/50 µs)   |
| Power on delay                         | < 100 ms   |
| Connections - terminals                | Screw terminals, clamping capacity: 2 x 0.2...2 x 1.5 mm² AWG24...AWG16 (flexible) with cable end<br>Screw terminals, clamping capacity: 1 x 0.2...1 x 2.5 mm² AWG24...AWG14 (flexible) with cable end<br>Screw terminals, clamping capacity: 2 x 0.5...2 x 2.5 mm² AWG20...AWG14 (solid) without cable end<br>Screw terminals, clamping capacity: 1 x 0.5...1 x 3.3 mm² AWG20...AWG12 (solid) without cable end |
| Tightening torque                      | 0.6...1 N.m conforming to IEC 60947-1  |
| Dielectric strength                    | 2.5 kV 1 mA/1 minute 50 Hz conforming to IEC 61812-1   |
| Housing material                       | Self-extinguishing   |
| Repeat accuracy                        | +/- 0.5 % conforming to IEC 61812-1  |
| Temperature drift                      | +/- 0.05 %/°C  |
| Voltage drift                          | +/- 0.2 %/V  |
| Setting accuracy of time delay         | +/- 10 % of full scale at 25 °C conforming to IEC 61812-1  |
| Reset time                             | 350 ms on de-energisation typical  |
| On-load factor                         | 100 %  |
| Power consumption in VA                | <= 3 VA at 240 V AC  |
| Power consumption in W                 | <= 1.5 W at 240 V DC   |
| Breaking capacity                      | 0.7 A AC/DC at 20 °C<br>0.5 A AC/DC conforming to UL   |
| Operating frequency                    | 10 Hz  |
| Maximum output current                 | 20 A <= 10 ms  |
| Minimum switching current              | 10 mA  |
| Leakage current                        | < 5 mA   |

|                           |  |
|---------------------------|--|
| Maximum switching voltage | 250 V AC   |
| Voltage drop              | 8 V 2-wire<br>4 V 3-wire                                   |
| Electrical durability     | 100000000 cycles   |
| Marking                   | CE   |
| Creepage distance         | 4 kV/3 conforming to IEC 60664-1                           |
| Mounting position         | Any position in relation to normal vertical mounting plane |
| Mounting support          | 35 mm DIN rail conforming to EN/IEC 60715                  |
| Product weight            | 0.068 kg   |

## Environment

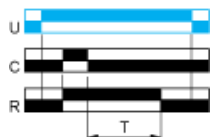
|                                       |  |
|---------------------------------------|--|
| Immunity to microbreaks               | $\leq 20$ ms   |
| Derating factor                       | 5 mA/°C  |
| Standards                             | 2004/108/EC<br>EN 61000-6-1<br>EN 61000-6-2<br>EN 61000-6-3<br>EN 61000-6-4<br>IEC 61812-1<br>2006/95/EC   |
| Product certifications                | CSA<br>CULus<br>GL   |
| Ambient air temperature for storage   | -30...60 °C  |
| Ambient air temperature for operation | -20...60 °C  |
| IP degree of protection               | IP50 (front panel) conforming to IEC 60529<br>IP40 (housing) conforming to IEC 60529<br>IP20 (terminal block) conforming to IEC 60529  |
| Vibration resistance                  | 20 m/s <sup>2</sup> (f = 10...150 Hz) conforming to IEC 60068-2-6  |
| Shock resistance                      | 15 gn (duration = 11 ms) conforming to IEC 60068-2-27  |
| Relative humidity                     | 93 % without condensation conforming to IEC 60068-2-30   |
| Electromagnetic compatibility         | Conducted and radiated emissions conforming to EN 55022 class B<br>Voltage dips and interruptions immunity test, 25/30 cycles at 70 % conforming to IEC 61000-4-11<br>Voltage dips and interruptions immunity test, 1 cycle at 0 % conforming to IEC 61000-4-11<br>Conducted RF disturbances, 0.15...80 MHz at 10 V conforming to IEC 61000-4-6 level 3<br>1.2/50 µs shock waves immunity test, common mode at 2 kV conforming to IEC 61000-4-5 level 3<br>1.2/50 µs shock waves immunity test, differential mode at 1 kV conforming to IEC 61000-4-5 level 3<br>Electrical fast transient/burst immunity test, direct at 2 kV conforming to IEC 61000-4-4 level 3<br>Electrical fast transient/burst immunity test, capacitive connecting clip at 1 kV conforming to IEC 61000-4-4 level 3<br>Susceptibility to electromagnetic fields, 80 MHz to 1 GHz at 10 V/m conforming to IEC 61000-4-3 level 3<br>Electrostatic discharge immunity test, in air at 8 kV conforming to IEC 61000-4-2 level 3<br>Electrostatic discharge immunity test, in contact at 6 kV conforming to IEC 61000-4-2 level 3 |

## 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/ 2 timed outputs

R2

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

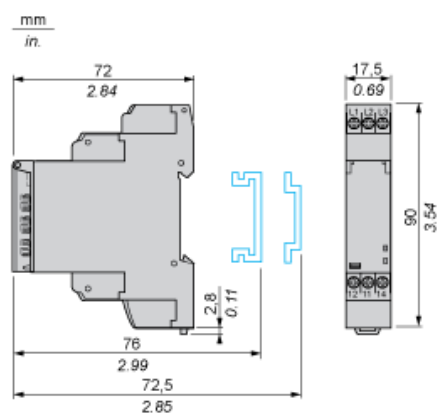
T Timing period

Ta Adjustable On-delay

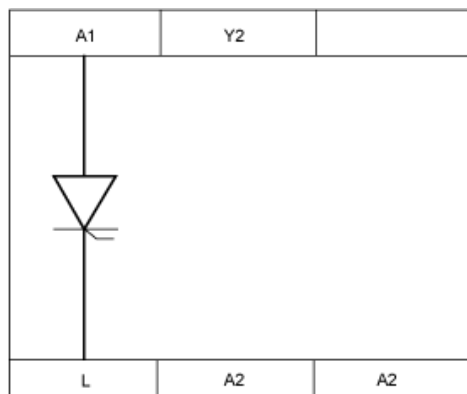
Tr Adjustable Off-delay

U Supply

Width 17.5 mm



## Internal Wiring Diagram



## Wiring Diagram

