

Electronic Timer - Series Micon® 175

- Multi Function: 10 Different (Non Signal & Signal based) Modes
- Wide Voltage range for both AC & DC
- Wide Time range: 0.1s - 100h
- LED Indications for Power and Relay status
- Independent settings for both ON Time & OFF Time
- Low Power Consumption





Ordering Information

| Cat. No. | Description |
|----------|---|
| 1CMDT0 | 12 - 240 VAC/DC, Multi Function Timer (10 Modes), 1 C/O (RAL 7016 Casing) |
| 1CJDT0 | 12 - 240 VAC/DC, Asymmetric Timer, 1 C/O(RAL 7016 Casing) |
| 1CMDTB | 12 - 240 VAC/DC, Multi Function Timer (10 Modes), 1 C/O (RAL 7035 Casing) |
| 1CJDTB | 12 - 240 VAC/DC, Asymmetric Timer, 1 C/O (RAL 7035 Casing) |

Electronic Timer - Series Micon® 175



| Cat. No. | | 1CJDT0 | 1CMDT0 |
|-------------------------------|--------------------|---|--|
| Parameters | | | |
| Timer Description | | Asymmetric Timer | Multi Function Timer |
| Modes | | 1) Asymmetric ON-OFF, 2) Asymmetric OFF-ON | 1) Signal ON Delay 2) Cyclic ON/OFF 3) Cyclic OFF/ON 4) Signal OFF Delay 5) Signal OFF/ON 6) Accumulative Delay on Signal 7) Impulse ON/OFF 8) Leading Edge Impulse 9) Trailing Edge Impulse 10) Leading Edge Bi-stable |
| Derived Modes | | N A | ON Delay, Interval |
| Supply Voltage (Φ) | | 12 - 240 VAC/DC | |
| Supply Variation | | -15% to +10% (of Φ) | |
| Frequency | | 50/60 Hz | |
| Power Consumption (Max.) | | 2 VA | |
| Timing Range | | 0.1s to 100h | |
| Reset Time | | 200 ms (Max) | |
| Setting Accuracy | | ± 5% of Full scale | |
| Repeat Accuracy | | ± 1% | |
| Output | Relay Output | 1 C/O | 1 C/O |
| | Contact Rating | 8A @ 240 VAC / 5A @ 24 VDC (Resistive) | 8A @ 240 VAC / 5A @ 24 VDC (Resistive) |
| | Electrical Life | 1X10 ⁵ | |
| | Mechanical Life | 5X10 ⁶ | |
| Utilization Category | AC - 15 DC - 13 | Rated Voltage (Ue): 120/240 V, Rated Current (Ie): 3.0/1.5 A Rated Voltage (Ue): 24/125/250 V, Rated Current (Ie): 2.0/0.22/0.1 A | |
| Operating Temperature | | -10°C to +60°C | |
| Storage Temperature | | -15°C to +70°C | |
| LED Indication | | Green LED → Power ON, Amber LED → Relay ON | Green LED → Power ON, Yellow LED → Relay ON |
| Enclosure | | Flame Retardant UL94-V0 | |
| Dimension (W x H x D) (in mm) | | 18 X 85 X 65 | |
| Weight (unpacked) | | 70 g | |
| Mounting | | DIN Rail | |
| Certification | |    | |
| Degree of Protection | | IP 20 for Terminals, IP 40 for Enclosure | |

EMI / EMC

| | |
|-----------------------------------|----------------|
| Harmonic Current Emissions | IEC 61000-3-2 |
| ESD | IEC 61000-4-2 |
| Radiated Susceptibility | IEC 61000-4-3 |
| Electrical Fast Transients | IEC 61000-4-4 |
| Surges | IEC 61000-4-5 |
| Conducted Susceptibility | IEC 61000-4-6 |
| Voltage Dips & Interruptions (AC) | IEC 61000-4-11 |
| Voltage Dips & Interruptions (DC) | IEC 61000-4-29 |
| Conducted Emission | CISPR 14-1 |
| Radiated Emission | CISPR 14-1 |

Environmental

| | |
|----------------------|----------------|
| Cold Heat | IEC 60068-2-1 |
| Dry Heat | IEC 60068-2-2 |
| Vibration | IEC 60068-2-6 |
| Repetitive Shock | IEC 60068-2-27 |
| Non-Repetitive Shock | IEC 60068-2-27 |

Electronic Timer - Series Micon® 175

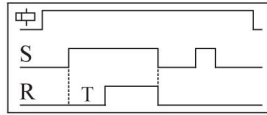


FUNCTIONAL DIAGRAMS FOR 1CMDT0

☐: Supply Voltage, S: Input Signal, R: Relay Output
T: Preset Time, TON: Preset ON Time, TOFF: Preset OFF Time

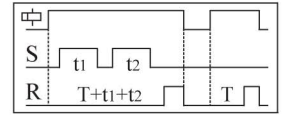
SIGNAL ON DELAY [stn]

On application of input signal, the preset delay time period starts. On completion of the preset time, the output is switched ON and remains ON till the input signal is present.



ACCUMULATIVE DELAY On SIGNAL [san]

On application of supply voltage, the preset delay time period starts. If input signal is applied during this period, the preset time stops and resumes only when the input signal is removed. On completion of the preset time, the output is switched ON.



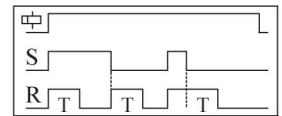
CYCLIC ON/OFF [cnf]

On application of supply voltage, the output is initially switched ON for the preset time duration (T) after which it is switched OFF for the same time duration (T). This cycle continues till the power supply is present.



IMPULSE ON/OFF [inf]

On application or removal of input signal to the timer, the output is immediately switched ON for the preset time duration (T). If the state of the input signal is changed during the preset time, the output does not change state only the time is reset.



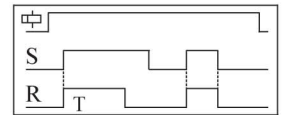
CYCLIC OFF/ON [cfn]

On application of supply voltage, the output is initially switched OFF for the preset time duration (T) after which it is switched ON for the same time duration (T). This cycle continues till the power supply is present.



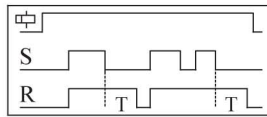
LEADING EDGE IMPULSE [il]

When input signal is applied to the timer the output is immediately switched ON. The output remains ON for the preset time duration (T) after which it is switched OFF. If the input signal is removed during the preset time, the output is immediately switched OFF.



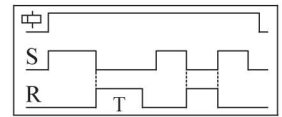
SIGNAL OFF DELAY [sf]

On application of input signal to the timer, the output is immediately switched ON. When the input signal is switched OFF, the preset time delay period starts. On completion of the time period the output is switched OFF.



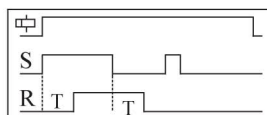
TRAILING EDGE IMPULSE [it]

When the input signal to the timer is removed, the output is immediately switched ON for the preset time duration (T) after which it is switched OFF. If the input signal is applied during the preset time, the output is immediately switched OFF.



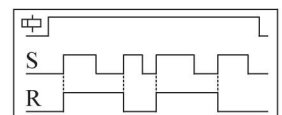
SIGNAL OFF/ON [sfn]

On application of input signal to the timer, the preset delay time period (T) starts. On completion of the time preset time, the output is switched ON. When the input signal is switched OFF, again the preset time delay period (T) starts. On completion of the time period the output is switched OFF.



LEADING EDGE BISTABLE [sbi]

On application of input signal to the timer, the output is switched ON and remains ON even after the input signal is removed. On subsequent application of input signal, the output keeps on changing its state.

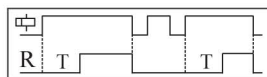


DERIVED MODES

Select mode, 'Signal ON Delay' and short the connection between A1 - B1 before power ON. Select mode, 'Accumulative Delay ON Signal' and keep the connection between A1 - B1 open.

ON DELAY

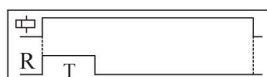
When supply power is applied to the timer, the preset delay time period starts. On completion of the preset time, the output is switched ON and remains ON till the input supply is present.



Select mode, "Leading Edge Impulse" and short the connection between A1 & B1.

INTERVAL

When supply power is applied to the timer, the output is instantly switched ON. On completion of the preset time, the output is switched OFF.



FUNCTIONAL DIAGRAMS FOR 1CJDT0

ASYMMETRIC ON-OFF

On application of supply voltage, the output is initially switched ON for the preset 'ON' time duration (T) after which it is switched OFF for the preset 'OFF' time duration (T). This cycle repeats and continues till the supply is present. The ON time & OFF time are set independently.



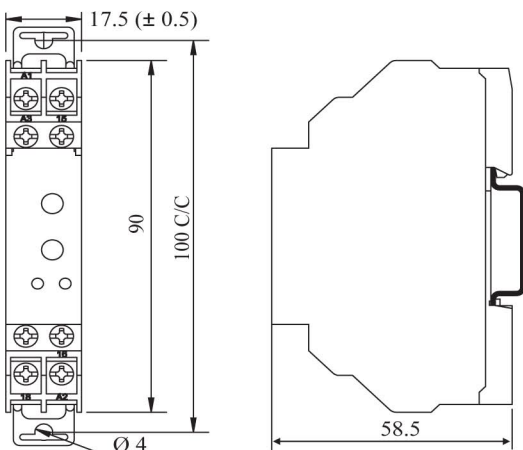
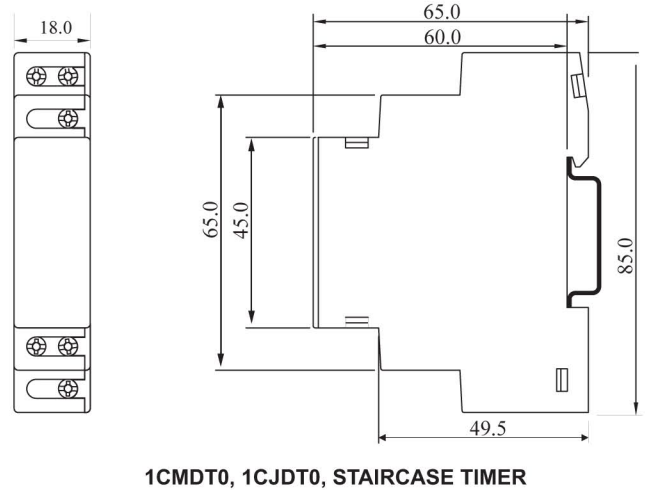
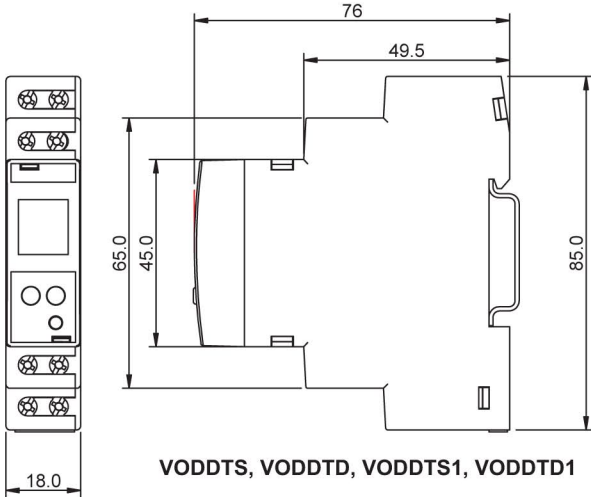
ASYMMETRIC OFF-ON

On application of supply voltage, the output is initially switched OFF for the preset 'OFF' time duration (T) after which it is switched ON for the preset 'ON' time duration (T). This cycle repeats and continues till the supply is present. The ON time & OFF time are set independently.

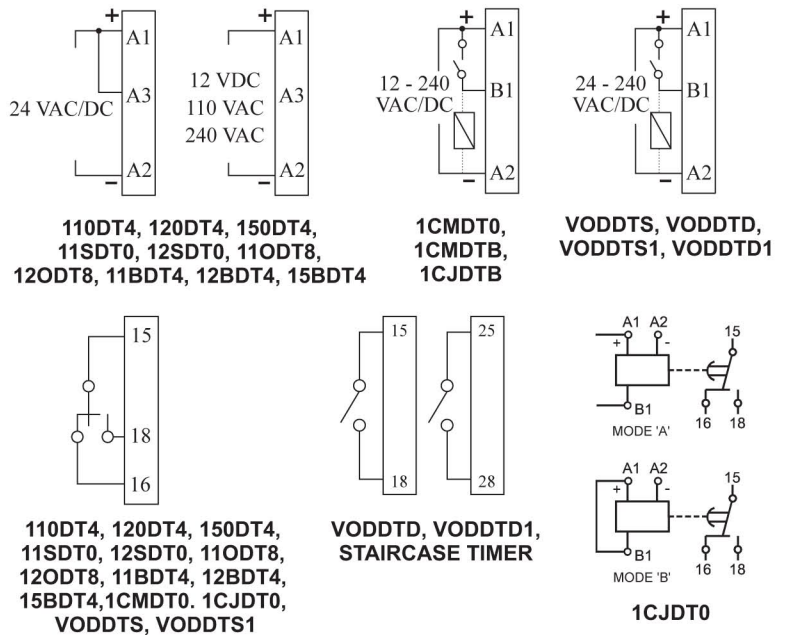


Electronic Timer - Series Micon® 175


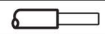
MOUNTING DIMENSIONS (mm)




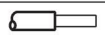
CONNECTION DIAGRAM





TERMINAL TORQUE & CAPACITY

| | |
|---|--|
|  Ø 3.5 mm | Torque - 0.40 N.m (3.5 Lb.in) Terminal screw - M2.5 |
|  | Solid Wire - 1 X 0.3...2.5 mm ² |
| AWG | 1 X 22 to 14 |

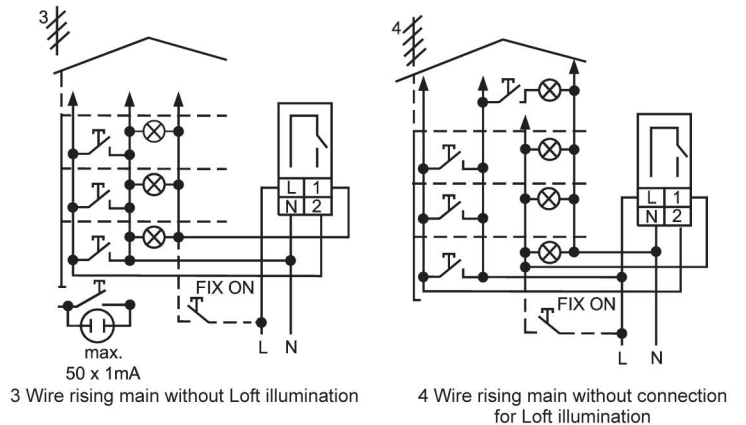
VODDTS, VODDTD, VODDTS1, VODDTD1

| | |
|---|---|
|  Ø 3.5...4.0 mm | Torque - 0.6 N.m (6 Lb.in) Terminal screw - M3 |
|  | Solid Wire - 1 X 1...4 mm ² |
| AWG | 1 X 18 to 10 |

1CMDT0, 1CJDT0, STAIRCASE TIMER

| | |
|---|--|
|  Ø 3.5...5.0 mm | Torque - 1.1 N.m (10 Lb.in) Terminal screw - M3.5 |
|  | Solid Wire - 2 X 0.2...2.5 mm ² |
| AWG | 1 X 24 to 10 |

110DT4, 120DT4, 150DT4, 11SDT0, 12SDT0
11ODT8, 12ODT8, 11BDT4, 12BDT4, 15BDT4



STAIRCASE TIMER