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)
1CQDT9	12 - 240 VAC/DC, Multi Function Timer (10 Modes), 1 C/O - 16A (RAL 7016 Casing)
1CJDT0	12 - 240 VAC/DC, Asymmetric Timer, 1 C/O (RAL 7016 Casing)

*Note: For RAL 7035 Casing, replace 0/9 by B in Cat. No.
UL Approval not applicable for Cat No. 1CQDT9

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Cat. No.	1CMDT0	1CQDT9	1CJDT0
Parameters			
Timer Description	**Multi Function Timer**		**Asymmetric Timer**
Modes	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		1) Asymmetric ON-OFF, 2) Asymmetric OFF-ON
Derived Modes	ON Delay, Interval		N A
Supply Voltage (⊏⊐)	12 - 240 VAC/DC		
Supply Variation	-15% to +10% (of ⊏⊐)		
Frequency	50/60 Hz		
Power Consumption (Max.)	2 VA		
Timing Range	0.1s to 100h		
Reset Time	200 ms (Max)		
Setting Accuracy Repeat Accuracy	± 5% of Full scale ± 1%		
Output — Relay Output	1 C/O		
Output — Contact Rating	8A @ 240 VAC / 5A @ 24 VDC (Resistive)	16A @ 240 VAC / 16A @ 24 VDC (Resistive)	8A @ 240 VAC / 5A @ 24 VDC (Resistive)
Output — Electrical Life	1×10^{5}		
Output — Mechanical Life	5×10^{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 Storage Temperature	-10°C to +60°C -15°C to +70°C		
LED Indication	Green LED → Power ON Yellow LED → Relay ON		Green LED → Power ON Amber 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	CE c(UL)us LISTED RoHS Compliant		
Degree of Protection	IP 20 for Terminals, IP 30 for Enclosure, IP 40 for Front side		

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

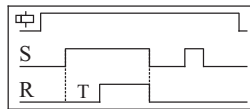|	
Cold Heat	IEC 60068-2-1
Dry Heat	IEC 60068-2-2
Vibration	IEC 60068-2-6
Repetitive Shock	IEC 60068-2-27
Non-Repetitive Shock	IEC 60068-2-27

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FUNCTIONAL DIAGRAMS FOR 1CMDT0

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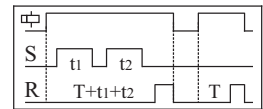T: Preset Time, TON: Preset ON Time, TOFF: Preset OFF Time

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.

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.

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.

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.

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.

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.

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.
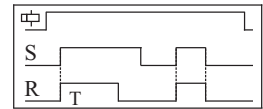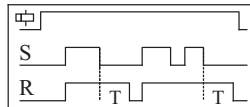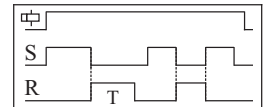
LEADING EDGE IMPULSE [iL]

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.
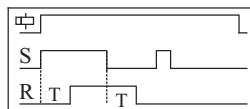
TRAILING EDGE IMPULSE [it]

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.

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.
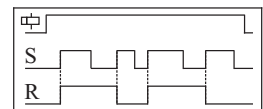
DERIVED MODES

Select 'Signal ON Delay' Mode and short the connection between A1-B1 before power ON OR Select ' Accumulative Delay ON Signal' Mode 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.
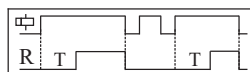
Select mode, "Leading Edge Impulse" and short the connection between A1 & B1.

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.
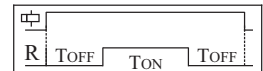
FUNCTIONAL DIAGRAMS FOR 1CJDT0

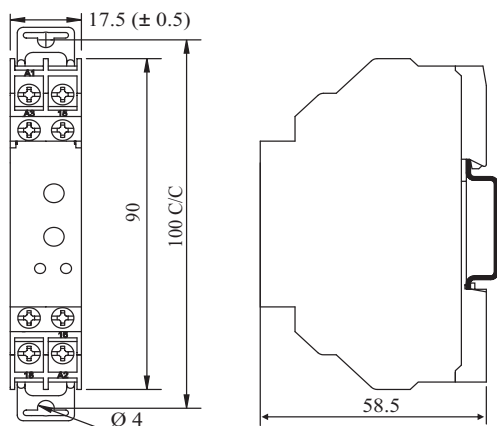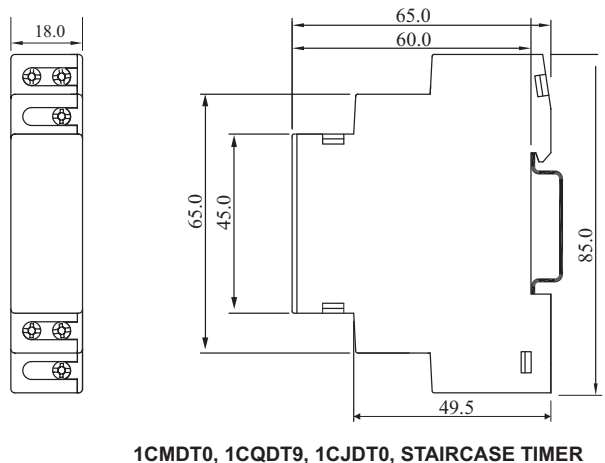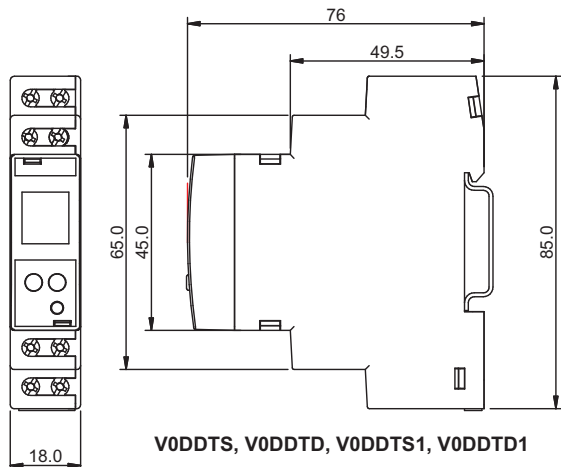### MODE A
ASYMMETRIC OFF-ON

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.

MODE B
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.
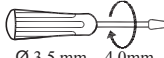
Note: Refer page number 27 for Connection Diagram

Electronic Timer - Series Micon® 175

MOUNTING DIMENSIONS (mm)

V0DDTS, V0DDTD, V0DDTS1, V0DDTD1

1CMDT0, 1CQDT9, 1CJDT0, STAIRCASE TIMER

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

TERMINAL TORQUE & CAPACITY

⌀ 3.5 mm....4.0mm	0.60 N.m (6 Lb.in)
	1 x 4.0 mm² Solid/Stranded Wire
AWG	1 x 20 to 10

V0DDTS, V0DDTD, V0DDTS1, V0DDTD1

⌀ 3.5 mm....4.0mm	0.60 N.m (6 Lb.in)
	1 x 4.0 mm² Solid/Stranded Wire
AWG	1 x 20 to 10

1CMDT0, 1CQ DT9, 1CJDT0, STAIRCASE TIMER

⌀ 3.5 mm....5.0mm	0.80 N.m (7.1 Lb.in)
	2 x 2.5 mm² Solid/Stranded Wire
AWG	2 x 20 to 14

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

CONNECTION DIAGRAM

24 VAC/DC

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

12 VDC
110 VAC
240 VAC

12 - 240 VAC/DC

**1CMDT0,
1CQDT9,
1CJDT0**

24 - 240 VAC/DC

**V0DDTS, V0DDTD,
V0DDTS1, V0DDTD1**

**110DT4, 120DT4, 150DT4,
11SDT0, 12SDT0, 11ODT8,
12ODT8, 11BDT4, 12BDT4,
15BDT4,1CMDT0. 1CJDT0,
1CQDT9, V0DDTS, V0DDTS1**

**V0DDTD, V0DDTD1,
STAIRCASE TIMER**

MODE 'A'

MODE 'B'

1CJDT0

3 Wire rising main without Loft illumination

max.
50 x 1mA

4 Wire rising main without connection
for Loft illumination

STAIRCASE TIMER