

Electronic Timer - Series Micon® 175

- Compact 17.5mm
- Wide time range: 0.1s - 100h
- Highly accurate
- Multi-function: 10 different functions (Signal & Non Signal based)
- Multi-voltage: Single model suitable for both AC and DC applications
- Separate indications for power and relay status
- Low power consumption



Cat. No.		1CMDT0
Supply Voltage (㉑)		12 - 240 VAC/DC
Supply Variation		- 15% to +10% (of ㉑)
Frequency		50/60 Hz
Signal Supply Range		As per Supply Voltage (㉑)
Power Consumption (Max.)		2 VA
Modes		1. On Delay [tn], 2. Cyclic ON/OFF [cnf], 3. Cyclic OFF/ON [cfn], 4. Signal OFF Delay [sf], 5. Signal OFF/ON [sfm], 6. Accumulative Delay on Signal [san], 7. Impulse ON/OFF [inf], 8. Leading Edge Impulse [iL], 9. Trailing Edge Impulse [it], 10. Leading Edge Bi-stable [sbi]
Timing Ranges		0.1s to 100h
Accuracy:		
Setting Accuracy		± 5% of Full scale
Repeat Accuracy		± 1%
Relay Output		1 C/O (SPDT)
Contact Rating		8A (resistive) @ 240 VAC / 5A (resistive) @ 24 VDC
Contact Material		Ag Alloy
Electrical Life		1X10 ⁵
Mechanical Life		1X10 ⁷
LED Indication		Green LED → Power ON, Yellow LED → Relay ON
Initiate Time		100 ms (Max.)
Reset Time		100 ms (Max.)
Utilization Category	AC - 15	Rated Voltage (Ue): 120/240 V, Rated Current (Ie): 3.0/1.5 A
	DC - 13	Rated Voltage (Ue): 24/125/250 V, Rated Current (Ie): 2.0/0.22/0.1 A
Operating Temperature		-15°C to +60°C
Storage Temperature		-20°C to +80°C
Humidity (Non Condensing)		95% (Rh)
Enclosure		Flame Retardant UL94-V0
Dimension (W x H x D) (in mm)		18 X 60 X 85
Weight (unpacked)		70 g
Mounting		Base / DIN rail
Certification		 
Degree of Protection		IP 20 for Terminals, IP 40 for Enclosure
EMI/ EMC		
Harmonic Current Emissions		IEC 61000-3-2 Ed. 3.0 (2005-11) Class A
ESD		IEC 61000-4-2 Ed. 1.2 (2001-04) Level II
Radiated Susceptibility		IEC 61000-4-3 Ed. 3.0 (2006-02) Level IV
Electrical Fast Transients		IEC 61000-4-4 Ed. 2.0 (2004-07) Level IV
Surges		IEC 61000-4-5 Ed. 2.0 (2005-11) Level III
Conducted Susceptibility		IEC 61000-4-6 Ed. 2.2 (2006-05) Level III
Voltage Dips & Interruptions		IEC 61000-4-11 Ed. 2.0 (2004-03) Performance Criteria B/A
Conducted Emission		CISPR 14-1 Ed. 5.0 (2005-11) Class A
Radiated Emission		CISPR 14-1 Ed. 5.0 (2005-11) Class A
Environmental		
Cold Heat		IEC 60068-2-1 Ed. 6.0 (2007-03)
Dry Heat		IEC 60068-2-2 Ed. 5.0 (2007-07)
Vibration		IEC 60068-2-6 Ed. 7.0 (2007-12) 5g
Repetitive Shock		IEC 60068-2-27 Ed. 4.0 (2008-02) 40g, 6ms
Non-repetitive shock		IEC 60068-2-27 Ed. 4.0 (2008-02) 30g, 15ms

ORDERING INFORMATION

Cat. No.	Description
1CMDT0	12 - 240 V AC/DC, Multifunction (10 Modes), 1 C/O, Dark Grey Casing
1CMDTB	12 - 240 V AC/DC, Multifunction (10 Modes), 1 C/O, Light Grey Casing

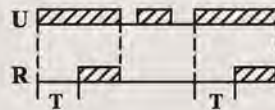
TERMINAL TORQUE & TERMINAL CAPACITY

 Ø3.5...4.0 mm	0.6 N.m (6 Lb.in) Terminal screw - M3
	1 x 0.8...5 mm ² Solid/Stranded Cu wire
AWG	1 x 18 to 10



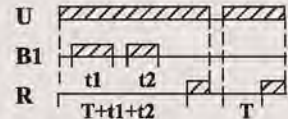
FUNCTIONAL DIAGRAMS FOR 1CMDT0 & 1CMTDTB

ON DELAY [tn]



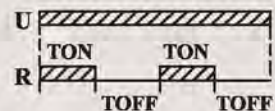
Timing commences when supply is present. R energizes at the end of the timing period.

ACCUMULATIVE DELAY ON SIGNAL [san]



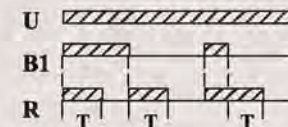
Time commences as supply is present and switch B1 is open. Closing switch B1 pauses timing. Timing resumes when switch B1 is opened again. R energizes at the end of timing.

CYCLIC ON/OFF [cnf]



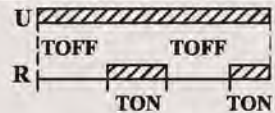
This function is quite similar to the function '1' but initially the relay(R) is ON for period T-ON after the power is applied.

IMPULSE ON/OFF [inf]



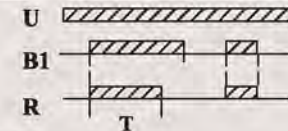
R energizes for the timing period when B1 is opened or closed. When timing commences, changing state of B1 does not affect R but resets timer.

CYCLIC OFF/ON [cfn]



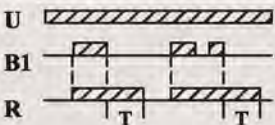
T-ON and T-OFF can be same or different. The relay(R) keeps on changing its status till power is removed.

LEADING EDGE IMPULSE2 [il]



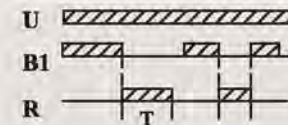
When switch B1 is closed, and remains closed output relay energizes until timing is over. If B1 is opened during timing, R resets.

SIGNAL OFF DELAY [sf]



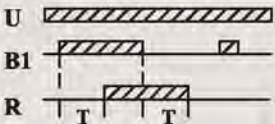
R energizes when switch B1 is closed. Timing commences after S is opened and then the relay de-energizes.

TRAILING EDGE IMPULSE1 [it]



When B1 is opened, R energizes and de-energizes when timing is over. If B1 is closed during timing R resets.

SIGNAL OFF/ON [sfn]



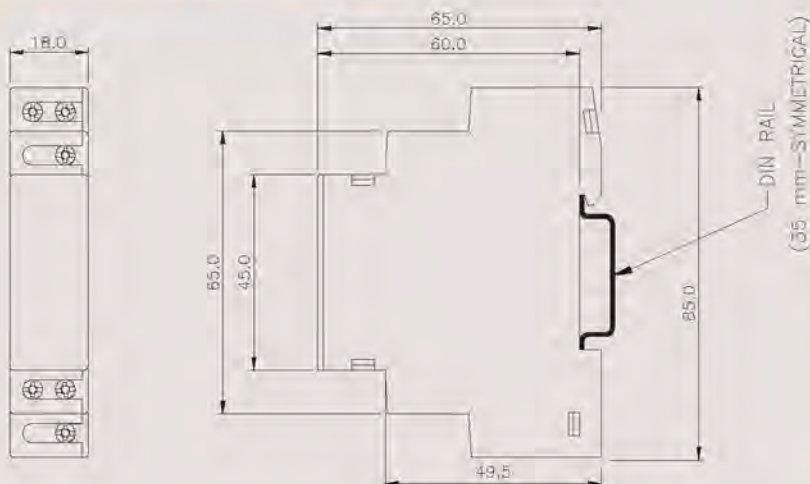
When switch B1 is closed or opened for preset time, T, the relay changes its state after time duration T.

LEADING EDGE BISTABLE [sbi]



Relay energizes when B1 is closed. Further every time B1 is closed, R keeps on changing its status till supply is on.

MOUNTING DIMENSION (mm)



CONNECTION DIAGRAM

