

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 (☎)	12 - 240 VAC/DC	
Supply Variation	- 15% to +10% (of ☎)	
Frequency	50/60 Hz	
Signal Supply Range	As per Supply Voltage (☎)	
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 [sfn], 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
1CMTB	12 - 240 V AC/DC, Multifunction (10 Modes), 1 C/O, Light Grey Casing

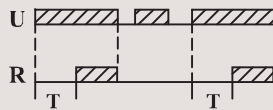
TERMINAL TORQUE & TERMINAL CAPACITY

 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



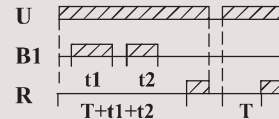
FUNCTIONAL DIAGRAMS FOR 1CMDT0 & 1CMDTB

ON DELAY [tn]



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

ACCUMULATIVE DELAY ON SIGNAL [san]



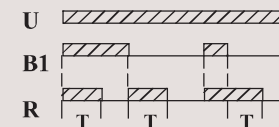
Time commences as supply is present and switch B1 is open. Closing switch B1 pauses timing. Timing resumes when switch B1 is opened again. R energizes at the end of timing.

CYCLIC ON/OFF [cnf]



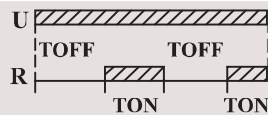
This function is quite similar to the function '1' but initially the relay (R) is ON for period T-ON after the power is applied.

IMPULSE ON/OFF [inf]



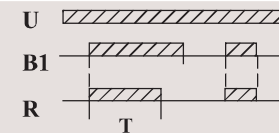
R energizes for the timing period when B1 is opened or closed. When timing commences, changing state of B1 does not affect R but resets timer.

CYCLIC OFF/ON [cfn]



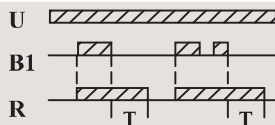
T-ON and T-OFF can be same or different. The relay (R) keeps on changing its status till power is removed.

LEADING EDGE IMPULSE2 [il]



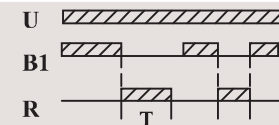
When switch B1 is closed, and remains closed output relay energizes until timing is over. If B1 is opened during timing, R resets.

SIGNAL OFF DELAY [sf]



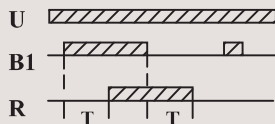
R energizes when switch B1 is closed. Timing commences after S is opened and then the relay de-energizes.

TRAILING EDGE IMPULSE1 [it]



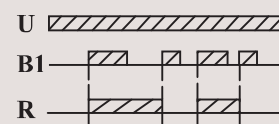
When B1 is opened, R energizes and de-energizes when timing is over. If B1 is closed during timing R resets.

SIGNAL OFF/ON [sfn]



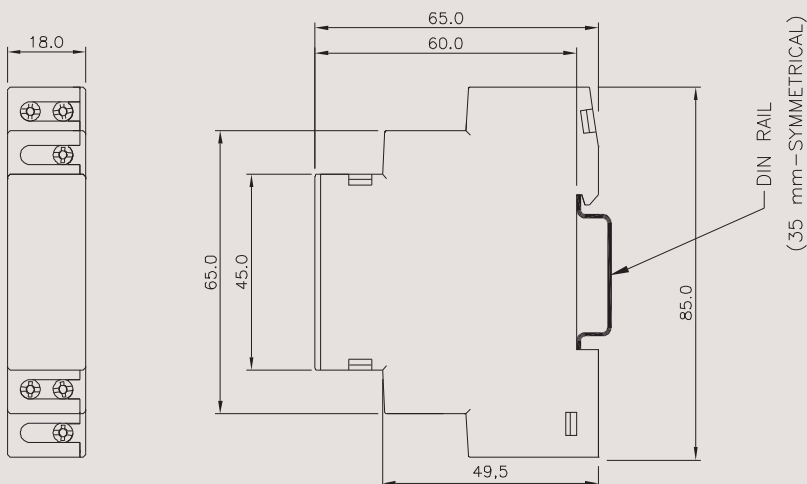
When switch B1 is closed or opened for preset time T, the relay changes its state after time duration T.

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

