

# 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



<b>Cat. No.</b>	<b>1CMDT0</b>	
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	<b>1.</b> On Delay [tn], <b>2.</b> Cyclic ON/OFF [cnf], <b>3.</b> Cyclic OFF/ON [cfn], <b>4.</b> Signal OFF Delay [sf], <b>5.</b> Signal OFF/ON [sfn], <b>6.</b> Accumulative Delay on Signal [san], <b>7.</b> Impulse ON/OFF [inf], <b>8.</b> Leading Edge Impulse [iL], <b>9.</b> Trailing Edge Impulse [it], <b>10.</b> 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 <sup>5</sup>	
Mechanical Life	1X10 <sup>7</sup>	
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

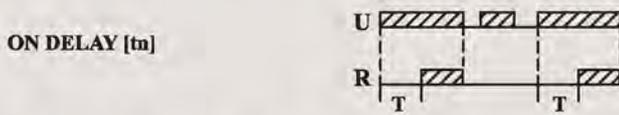
Cat. No.	Description
1CMDT0	12 - 240 V AC/DC, Multifunction (10 Modes), 1 C/O, Dark Grey Casing
1CMDTB	12 - 240 V AC/DC, Multifunction (10 Modes), 1 C/O, Light Grey Casing

## TERMINAL TORQUE & TERMINAL CAPACITY

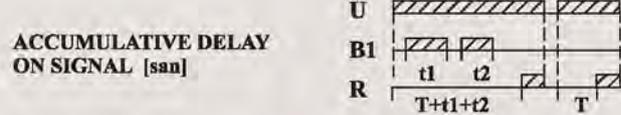
 Ø3.5...4.0 mm	0.6 N.m (6 Lb.in) Terminal screw - M3
	1 x 0.8...5 mm <sup>2</sup> Solid/Stranded Cu wire
AWG	1 x 18 to 10



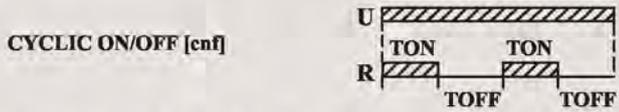
## FUNCTIONAL DIAGRAMS FOR 1CMDT0 & 1CMDTB



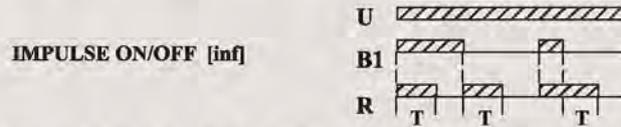
Timing commences when supply is present. R energizes at the end of the timing period.



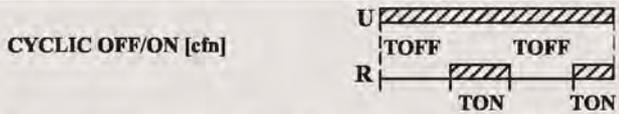
Time commences as supply is present and switch B1 is open. Closing switch B1 pauses timing. Timing resumes when switch B1 is opened again. R energizes at the end of timing.



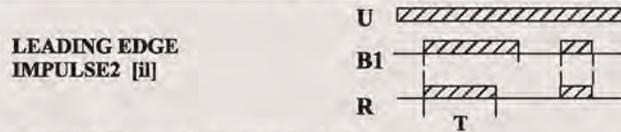
This function is quite similar to the function '1' but initially the relay (R) is ON for period T-ON after the power is applied.



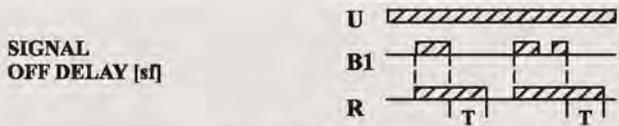
R energizes for the timing period when B1 is opened or closed. When timing commences, changing state of B1 does not affect R but resets timer.



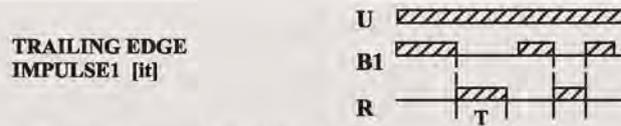
T-ON and T-OFF can be same or different. The relay (R) keeps on changing its status till power is removed.



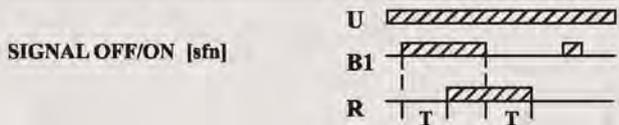
When switch B1 is closed, and remains closed output relay energizes until timing is over. If B1 is opened during timing, R resets.



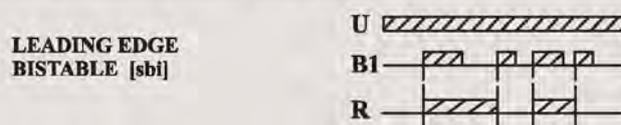
R energizes when switch B1 is closed. Timing commences after S is opened and then the relay de-energizes.



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

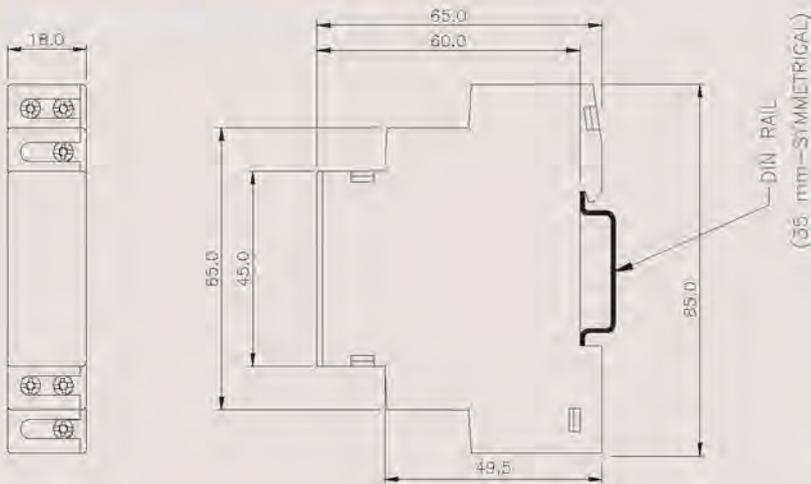


When switch B1 is closed or opened for preset time, T, the relay changes its state after time duration T.



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

