TECHNICAL SPECIFICATIONS:		
Cat. No.:	1CMDT0	1CMDTB
SUPPLY CHARACTERISTIC:		
Supply Voltage ⏚	12 - 240 VAC / DC	
Supply Variation	-15 % to +10 % of ⏚	
Frequency	50 to 60 Hz, (± 3 Hz)	
Power Consumption (Max.)	2 VA	
RELAY O/P CHARACTERISTICS:		
Contact Arrangement	1 C/O Potential free contacts	
Contact Rating (Resistive Load)	6A (Res.) @ 250 V AC, 5A at 24 VDC	
Contact Material	AgNi	
Electrical Life	50000 Operations min.	
Mechanical Life	10000000 Operations min.	
FEATURE CHARACTERISTICS:		
Set Time (Ts)	0.1 seconds to 100 hrs	
Setting Accuracy	+/- 5% of full scale	
Repeat Accuracy	+/- 1%	
Mode Adjustment	Refer "Timing diagrams of Functions"	
Supply Indication on front panel	Green LED for power Yellow LED for Relay.	
Mounting	Din-Rail	
Dimensions (W X H X D)	18 x 60 x 85 (in mm)	
Weight (Unpacked)	72 gms.	
Humidity	95% Rh Non Condensing	
Operating Temperature	-10° C to + 60° C	
Storage Temperature	-15° C to + 70° C	
Housing Color	Dark Gray	Light Gray
Max. Operating Altitude	2000 m	
Housing	Flame retardant (UL 94-V0)	
Degree & Protection	IP - 20 for Terminal, IP - 40 for Housing.	
Pollution Degree	II	
Isolation (I/P and O/P)	2 kV	
Isolation (Terminal and Casing)	4 kV	
Type of Insulation	Reinforced	
Certifications	CE, RoHS	
Initiate Time	Max. 100 ms	
Reset Time	Max. 200 ms	
Signal sensing time	> = 40 ms (For Un > = 110 VAC / DC) and > = 60 ms (for Un < 110 VAC / DC)	
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 III	
Electrical Fast Transient	IEC 61000-4-4 Ed. 2.0 (2004-07) Level IV	
Surge	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 (AC)	IEC 61000-4-11 Ed. 2.0 (2004-3) For ⩽ 24 VAC/DC, Performance Criteria B	
Conducted Emission	CISPR 14-1 Ed. 5.0 (2005 -11) Class B	
Radiated Emission	CISPR 14-1 Ed. 5.0 (2005-11) Class A	

ELECTRONIC TIMER - SERIES MICON™175

MULTI-FUNCTION

Cat. No.: **1CMDT0**
1CMDTB

CE

RoHS ✓

CAUTION:

1. Always follow instructions stated in this product leaflet.
2. Before installation, check to ensure that the specifications agree with the intended application.
3. Installation to be done by skilled electrician.
4. Automation & Control devices must be properly installed so that they are protected against any risk of involuntary actuations.
5. Suitable dampers should be provided in case of excessive vibrations.
6. Use of 250 mA fuse in series with product supply is recommended.
7. The timers shall be placed in an enclosure that is minimum 200% of the size of the timer in the end use application.
8. Setting of all potentiometers must be in clockwise direction only.

NOTE:

Product innovation being a continuous process, we reserve the right to alter specifications without any prior notice.

TERMINAL DETAILS:

 Ø3.5...4.0 mm	0.6 N.m (6 Lb.in) Terminal screw - M3
	1 x 0.8..4 mm^2 Solid / Stranded Wire
AWG	1 x 18 to 10

Use Cu wire of 75°C only.

AWG	CURRENT (A)
12	5.00
14	3.33
16	1.67

ELECTRONIC TIMER - SERIES MICON™ 175

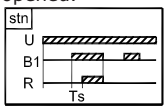
MULTI-FUNCTION

Series 175 1M MULTIMODE Timer is manufactured to a high degree of precision & accuracy. The time settings are stepless and can be set with the knob.

FUNCTION DIAGRAM :

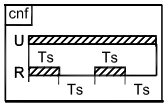
stn) Signal On Delay:

Timing starts when Switch (S) is closed. R energizes at end of period Ts and de-energizes when Switch (S) is opened.



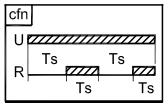
cnf) Cyclic On/Off: On start

Initially the relay (R) is On for period Ts after the power is applied. The relay (R) keeps on changing its status till power is removed with On and period = Ts.



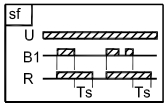
cfn) Cyclic Off/ On : Off start

Initially the relay (R) is Off for period Ts after the power is applied. The relay (R) keeps on changing its status till power is removed with On and Off period = Ts.



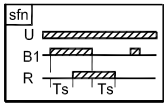
sf) OFF Delay, Constant Supply (Signal Off Delay)

R energizes when Switch (S) is closed. Timing commences after Switch (S) is opened and then the relay de-energizes.



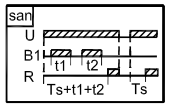
sfn) Signal Off/On

When Switch (S) is closed or opened for preset time Ts, the relay changes its state after time duration Ts.



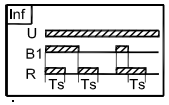
san) Accumulative Delay On Signal

Time commences as supply is present and Switch (S) is open. Closing Switch (S) pauses timing. Timing resumes when Switch (S) opened again R energizes at the end of timing.



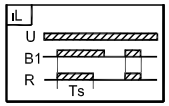
inf) Impulse On/Off

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



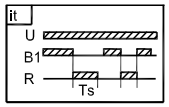
iL) ON Impulse, Constant Supply

When switch (S) is closed and remains closed output relay energizes until timing is over. If Switch (S) is Opened during period Ts, R resets.



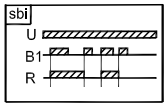
it) OFF Impulse, Constant Supply

When Switch (S) is opened, R energizes and de-energizes when timing is over. If Switch (S) is closed during period Ts R resets.



sbi) Leading Edge Bi-stable or Step relay

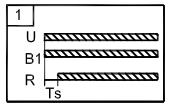
After every Signal, the output contact changes state, alternately switching from open to closed & vice versa.



Derived Modes :

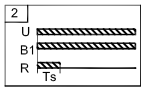
1) ON Delay

1. Select mode signal On Delay (stn) and close Switch (S) or short A1-B1 before power ON, it will work as ON Delay.
2. Select mode Accumulative On Delay (san) keeping signal open before power ON and during execution of time as well, it will work as ON Delay.

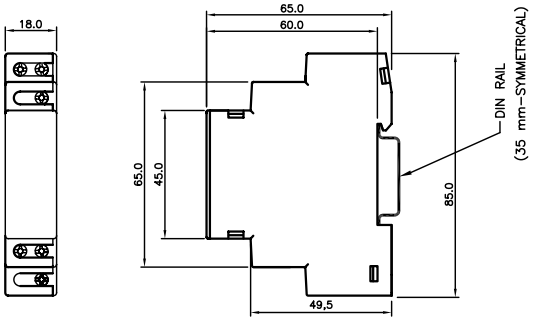


2) INTERVAL

Select mode (iL) ON Impulse. If Switch (S) is closed between A1-B1 before making power supply ON and during execution of timing, it will work as Interval.

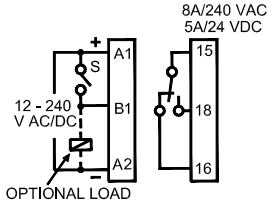


Overall product dimensions and mounting details :



OVERALL DIMENSIONS
65.0X85.0X18.0

WIRING DIAGRAM:



INSTALLATION:

a. DIN-Rail Mounting:
The Timer should be mounted on 35 mm symmetrical DIN Rail.

Safety:	
Test Voltage between I/P and O/P	IEC 60947-5-1 Ed.3.0 (2003-11) 2 kv
Test Voltage between all terminals and enclosure	IEC 60947-5-1 Ed.3.0 (2003-11) 4 kv
Impulse Voltage between I/P and o/p	IEC 60947-5-1 Ed.3.0 (2003-11) Level IV
Single Fault	IEC 61010-1 Ed.2.0 (2001-02)
Insulation Resistance	UL 508 Ed.17 (1999-01) > 50 kΩ
Leakage Current	UL 508 Ed.17 (1999-01) < 3.5 mA
Product	IEC 61812-1 Ed.1.0 (1996-10)
Environmental:	
Cold Heat	IEC 60068-2-1 Ed.6.0 (2007-03)
Dry Heat	IEC 60068-2-2 Ed.5.0 (2007-07)
Repetitive Shock	IEC 60068-2-27 Ed.4.0 (2008-02), 40 g, 6 ms
Non-Repetitive Shock	IEC 60068-2-27 Ed.4.0 (2008-02), 30 g, 15 ms