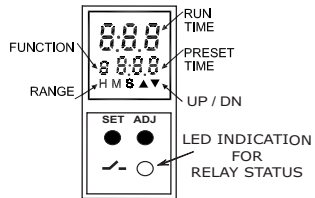


FEATURES:

- 8 functions
- Wide operating voltage : 24 to 240 VAC / DC
- Multi Range : 0.1 s to 999 h
- Up/Down counting modes
- 3Digit LCD for preset Timer and Run Time
- Clear LED indication of Relay status
- Key lock Function
- Conforms to IEC standards of EMI/EMC
- Compact size (17.5 mm single width module)



1. PRESET TIME : The Timer Duration selected by the user.
2. RUN TIME : In Down counting (▼) mode it indicates the remaining while in Up counting (▲) mode indicates the elapsed time.
3. Up/Down (▲▼) blinks during the .Timer Duration(T)

THE KEYS:

KEY	OPERATION	RESULT
	Apply Power & Hold Program Mode the key for >3 sec.	
OR		
	Press both >3 sec program after power on	
	Press in program mode	
	Press in program mode Edit blinking parameter	
	Press for >3 sec. During Timer operation Reset Timer	
	Press for >3 sec. during Timer operation Select, Edit parameter Lock/Unlock Preset Time	
	Press during timer operation Edit Preset Time during Timer operation	

Programming Instructions:

Apply power & hold the SET key for >3 sec. OR press both ADJ & SET key for >3 sec. After power ON. Now follow the steps given below

KEY	DISPLAY	RESULT
	F 5:39 HM ▼	Press ADJ Key to select desired function (e.g F)
	F 5:39 HM ▼	Confirms function then range indicator blinks
	F 5:39 HM ▼	Press ADJ Key to select range (e.g. HM range 'HM')



Confirms range selection. 1st digit of preset time blinks.(For modes 'B' & 'C' two preset times 'on' & 'off' to be set)



Press ADJ key to adjust desired preset time digit (e.g. From 5 to 8)



Press Set to confirm 1st digit selection now 2nd digit blinks



Change with ADJ Key (e, g, from 3 to 0)



Confirms 2nd digit selection ,now 3rd digit of preset Time blinks.



Change with ADJ Key (e, g, from 9 to 6)



Now UP/DOWN Indicator blinks



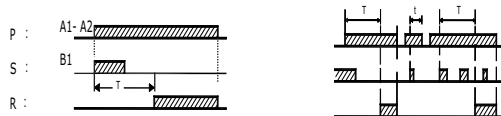
Change with ADJ Key (e, g, from DOWN to UP)



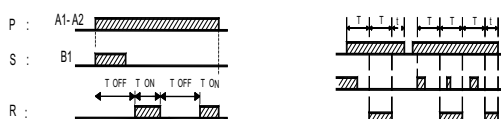
Confirms counting mode . Program Over. Timer starts working normally.

TIMING DIAGRAMS:

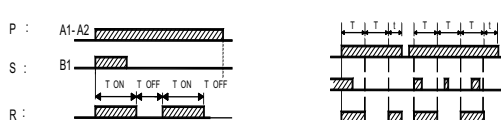
1.ON DELAY [H]



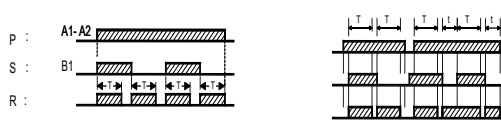
2.CYCLIC OFF/ ON {OFF START (Sym,Asym)} [b]



3.CYCLIC ON/OFF {ON START (Sym, Asym)} [c]

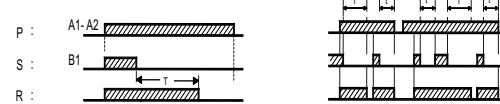


4.SIGNAL ON/OFF [d]

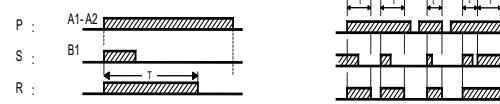


T: PRESET TIME T : PERIOD <T P :POWER S :SIGNAL R : RELAY

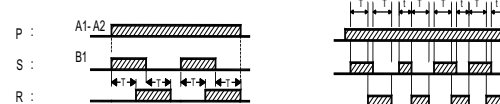
5.SIGNAL OFF DELAY [E]



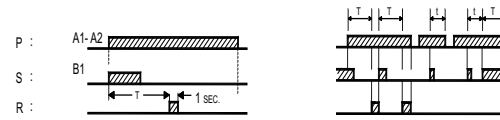
6.INTERVAL [F]



7.SIGNAL OFF/ON [G]



8. ONE SHOT OUTPUT [H]



T: PRESET TIME T : PERIOD <T P :POWER S :SIGNAL R : RELAY

FUNCTIONAL DESCRIPTION

1.ON DELAY [H]

The Timer starts when both power (p) and signal (s) are applied .The relay is energized at the end of preset Timer (T) and remains on till power is removed.

2.CYCLIC OFF/ ON {OFF START (Sym,Asym)} [b]

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

3.CYCLIC ON/OFF {ON START (Sym, Asym)} [c]

This function is quite similar to the function "b" but Initially the relay is ON for period T-ON after the power is applied.

4.SIGNAL ON/OFF [d]

The output relay is turned ON for preset Time (T) When ever the signal (S) is applied or removed .(Refer Note :2)

5.SIGNAL OFF DELAY [E]

Output relay become on when signal (S) is applied. The Timer duration (S) is removed .At the end of timer Duration (T) the output relay goes OFF. Signal (S), if Applied during the timer duration (S) will re-trigger the timer and the total duration will be extended.

6.INTERVAL [F]

When Signal (S) is applied ,The Timer Starts and the Output trelay is energized .The output relay be comes OFF at the end of timer duration (T).

7.SIGNAL OFF/ON [G]

When Signal (s) is applied or removed ,The relay changes .Its state after timer duration (T) (Refer Nots :2)

8.ONE SHOT OUTPUT [H]

When Signal (s) is applied ,the timer duration (T) Starts. At the end of Timer duration (T), the relay gets energized for approximately 1 sec.(Refer Note:2)

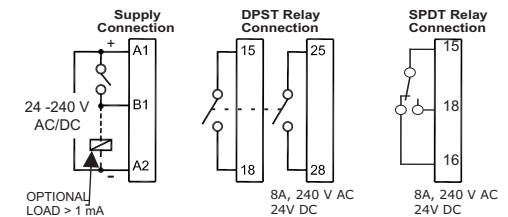
1.For power -on operation the terminal B1 and A1 must.

2.In case of all modes except mode G a change in Signal(s) status during the Timing Duration (T), does not affect output status but resets timing and re-triggers timing.

3.Output de-energises when device enters PROGRAM MODE and starts new cycle after coming out of. PROGRAM MODE.

4.Loads which have current requirement 1mA, can only be used as Optional Load .For e.g Contactor coil ,AC Relay Coil, etc,

CONNECTIONS



TECHNICAL SPECIFICATIONS

CAT.No.	AMT8-S1	AMT8-D2															
SUPPLY CHARACTERISTICS																	
Nominal Supply (Un)	24 - 240 VAC / DC (50 - 60 Hz, +/- 2 Hz)																
Limits	-15 % to +10% of Un																
Power Consumption (Max.)	~10 VA																
RELAY OUTPUT CHARACTERISTICS																	
Contact Arrangement	1 C/O	2 NO															
Contact Rating	(Resistive) 8A / @ 240 VAC /24 VDC																
Contact Material	Ag Ni																
Mechanical Life Expectancy	2 x 10 ⁷																
Electrical Life Expectancy	1 x 10 ⁵																
Switching Frequency (Max.)	1800 Operations / hr. @ rated load																
Status Indication on panel	Red LED - Relay ON																
FEATURE CHARACTERISTICS																	
Modes Available	1. ON Delay (A) 2. Cyclic OFF/ON (Sym, Asym) (B) 3. Cyclic ON/OFF(Sym, Asym) (C) 4. Signal ON/OFF (D) 5. Signal Off Delay (E) 6. Interval (F) 7. Signal OFF/ON (G) 8. One Shot Output (H)																
Timing Ranges	<table border="1"> <thead> <tr> <th>h:m</th> <th>m:s</th> <th>hr</th> <th>min</th> <th>sec</th> </tr> </thead> <tbody> <tr> <td>9:59</td> <td>9:59</td> <td>999</td> <td>999</td> <td>999</td> </tr> <tr> <td></td> <td></td> <td>99.9</td> <td>99.9</td> <td>99.9</td> </tr> </tbody> </table>		h:m	m:s	hr	min	sec	9:59	9:59	999	999	999			99.9	99.9	99.9
h:m	m:s	hr	min	sec													
9:59	9:59	999	999	999													
		99.9	99.9	99.9													
Repeat Accuracy	+/-0.5% of selected range																
Variation in timing due to voltage change	+/-2%																
Variation in timing due to temperature change	+/-5%																
Operating Temperature	-10° C to +55° C																
Storage Temperature	-20° C to +65° C																
Humidity (Non - Condensing)	93 % Rh																
Mounting	Base/Din-Rail (35 mm Sym.)																
Terminal capacity	1.5 mm ² (Pin type lugs)																
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 III																
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 IV																
Conducted Susceptibility	IEC 61000-4-6 Ed. 2.2 (2006-05) Level III																
Voltage Dips & Interruptions(AC)	IEC 61000-4-11 Ed. 2.0 (2004-03)																
Voltage Dips & Interruptions(DC)	IEC 61000-4-29 Ed. 1.0 (2000-08)																
Conducted Emission	CISPR 14-1 Ed. 5.0 (2005-11) Class B																
Radiated Emission	CISPR 14-1 Ed. 5.0 (2005-11) Class B																
Safety:																	
Test Voltage Between I/P & O/P	IEC 60947-5 Ed.3.0 (2002-12) 2 kV																
Impulse Voltage Between I/P & O/P	IEC 60947 - 5-1 Ed. 3.0 (2003-11) Level IV																
Single Fault	IEC 61010-1 Ed. 2.0 (2001-02) Level IV																
Insulation Resistance	UL 508 Ed.17 (1999-01) <2000MΩ																
Leakage Current	UL 508 Ed.17 (1999-01) <3.5mA																
Degree of Protection	IP 20 for Terminal; IP-40 for Housing																
Pollution Degree	II																
Type of Insulation	Reinforced																
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																

ALTECH DIGITAL TIMER

Altech Corp.®

CAT. NOS.:
AMT8-S1
AMT8-D2

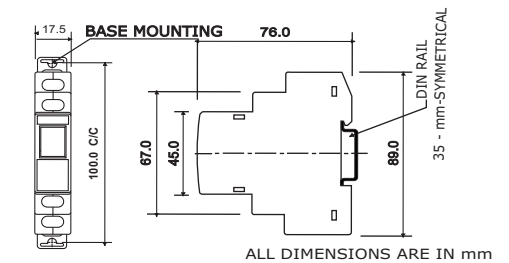


▲ CAUTION:

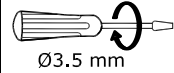

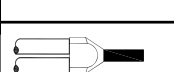
1. Always follow instructions stated in this product.
2. Before installation, check to ensure that the specifications agree with the intended application.
3. Installation to be done by skilled electrician.
4. Automation & Control devices must be properly installed so that they are protected against any risk of involuntary actuations.

Note :- Product innovation being a continuous process. We reserve the right to alter specification without any prior notice.

OVERALL DIMENSIONS



TERMINAL DETAILS

	0.54 N.m (5 Lb.in) Terminal screw - M2.5
	1 x 0.2...2.5 mm ² Solid Wire / Single Wire Ferrule
	2 x 0.2...0.5 mm ² Insulated Twin Wire Ferrule
AWG	1 x 24 to 13