

Altech Universal Digital Multi-Timer

Altech's AMT-Series of Universal Digital Multi-Timers comprises 4 models featuring 8 or 18 timer functions to offer highest flexibility in controlling operations. The time range is adjustable from 0.1s to 999h. An LCD display shows current Run time information.



Features

- Multifunctional Timer (8 or 18 Functions)
- Universal Voltage 24~265 VAC/ DC
- Wide Time Range: 0.1s ~ 999h
- 3 Digit LCD Display for Preset Time and Run Time
- DIN Rail Mounted
- 17.5mm Width



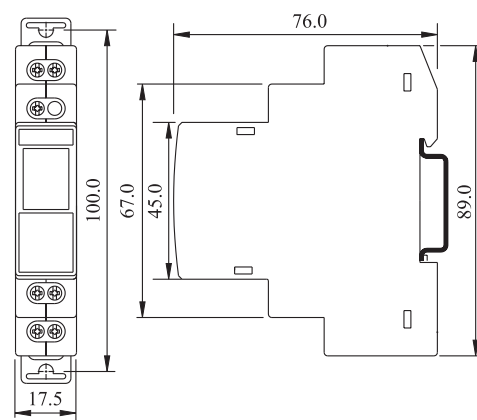
Digital Timers

Cat. No.	AMT8-S1	AMT8-D2	AMT12-S1	AMT12-D2
Output Contacts	1 C/O	2 NO	1 C/O	2 NO
Functions	8	8	18	18
	1) ON Delay		1) ON Delay	
	2) Cyclic OFF/ ON		2) Cyclic OFF/ ON	
	3) Cyclic ON/ OFF		3) Cyclic ON/ OFF	
	4) Signal ON/ OFF		4) Impulse on Energizing	
	5) Signal OFF Delay		5) Accumulative Delay on Signal	
	6) Interval		6) Accumulative Delay on Inverted Signal	
	7) Signal OFF/ ON		7) Accumulative Impulse on Signal	
	8) One Shot Output		8) Signal ON Delay	
			9) Inverted Signal ON Delay	
			10) Signal OFF Delay	
			11) Impulse ON/ OFF	
			12) Signal OFF/ ON	
			13) Leading Edge Impulse 1	
			14) Leading Edge Impulse 2	
			15) Trailing Edge Impulse 1	
			16) Trailing Edge Impulse 2	
			17) Delayed Impulse	
			18) Inverted Signal ON Delay 2	

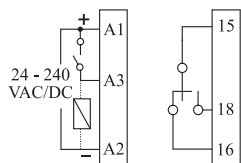
Specifications

Supply Voltage	24 - 265 VAC/ DC (50, 60Hz)
Power Consumption	10 VA max.
Timing Range	0.1s ~ 999h
Reset Time	200ms max.
Repeat Accuracy	±0.5%
Output Contact Rating	8A @ 240 VAC/ 24 VDC (resistive)
Electrical Life	10,000 switching cycles
Mechanical Life	2,000,000 switching cycles
AC-15 Rating	Rated Voltage (Ue): 125/ 240V, Rated Current (Ie): 3/1.5A
DC-13 Rating	Rated Voltage (Ue): 125/ 250V, Rated Current (Ie): 2/0.22/0.1A
Operating Temperature	-10°C ~ +55°C (+14°F ~ 131°F)
Storage Temperature	-20°C ~ +65°C (-4°F ~ 149°F)
Weight	85g (0.14lb.)
Protection Enclosure	IP30
Protection Terminals	IP20
Torque	0.40 Nm (3.5 lb.in.)
Terminal Wire Size	0.3-2.5 mm ² (22-14 AWG)

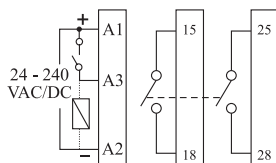
Dimensions



Connection Diagrams



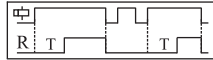
AMT8-S1, AMT12-S1



AMT8-S2, AMT12-S2

Functional Diagrams for AMT12-S1 and AMT12-D2

ON DELAY [0]



On application of supply voltage, the preset delay time period starts. On completion of the preset time, the output is switched ON and remains ON till the supply voltage is present

CYCLIC OFF/ON {OFF Start, (Sym, Asym)} [1]



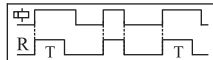
On application of supply voltage, the output is initially switched OFF for the preset 'OFF' time duration (TOFF) after which it is switched ON for the preset 'ON' time duration (TON). This cycle repeats and continues till the supply is present.

CYCLIC ON/OFF {ON start, (Sym, Asym)} [2]



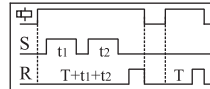
On application of supply voltage, the output is instantly switched ON for the preset time duration (TON) after which it is switched OFF for the preset 'OFF' time duration (TOFF). This cycle repeats and continues till the supply is present.

IMPULSE ON ENERGIZING [3]



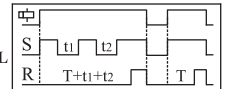
On application of supply voltage, the output is instantly switched ON for the preset time duration (T) after which it is switched OFF.

ACCUMULATIVE DELAY ON SIGNAL [4]



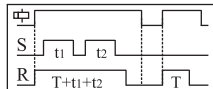
On application of supply voltage, the preset timing duration commences. When input signal is applied the timing pauses and resumes only when the input signal is removed. The output is switched ON at the end of the preset time duration (T).

ACCUMULATIVE DELAY ON INVERTED SIGNAL [5]



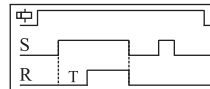
On application of supply voltage and input signal, the preset timing duration commences. When the signal is removed the timing pauses and resumes when the signal is applied. The output is switched ON at the end of the preset time duration (T).

ACCUMULATIVE IMPULSE ON SIGNAL [6]



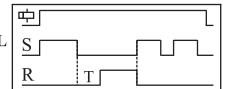
When supply is ON, R energizes. When switch S is closed timing is suspended and remains suspended till switch S is opened again. Interrupting supply resets timer.

SIGNAL ON DELAY [7]



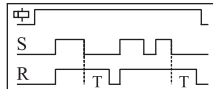
On application of input signal, the preset delay time period starts. On completion of the preset time, the output is switched ON and remains ON till the input signal is present

INVERTED SIGNAL ON DELAY [8]



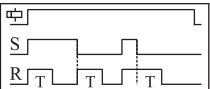
On application of supply voltage, the preset delay time period starts. When input signal is applied, the timing pauses & resumes only when the signal is removed. On completion of the preset time, the output is switched ON.

SIGNAL OFF DELAY [9]



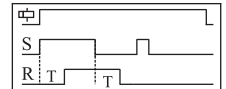
On application of supply voltage and input signal, the output is switched ON. When the signal is removed the preset time duration commences & the output is switched OFF at the end of the time duration.

IMPULSE ON/OFF [A]



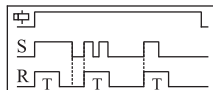
On application or removal of input signal, the output is switched ON & the preset time duration (T) commences. On completion of the time duration the output is switched OFF. When timing commences, changing the state of the input signal resets the time.

SIGNAL OFF/ON [b]



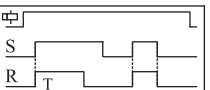
On application of input signal, the preset delay time period (T) starts. On completion of the preset time, the output is switched ON. On removal of input signal, the preset time period starts again and the output is switched ON when the preset time duration is complete.

LEADING EDGE IMPULSE1 [C]



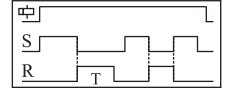
On application of input signal the output is immediately switched ON. The output remains ON for the preset time duration (T) after which it is switched OFF. If the input signal is removed during the preset time, the output remains unaffected.

LEADING EDGE IMPULSE2 [d]



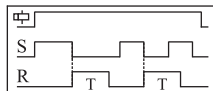
On application of input signal the output is immediately switched ON. The output remains ON for the preset time duration (T) after which it is switched OFF. If the input signal is removed during the preset time, the output is immediately switched OFF.

TRAILING EDGE IMPULSE1 [E]



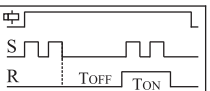
When the input signal to the timer is removed, the output is immediately switched ON for the preset time duration (T) after which it is switched OFF. If the input signal is applied during the preset time, the output is immediately switched OFF.

TRAILING EDGE IMPULSE2 [F]



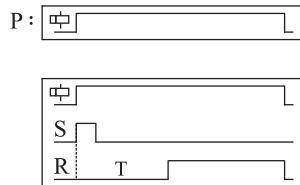
When the input signal to the timer is removed, the output is immediately switched ON for the preset time duration (T) after which it is switched OFF. If the input signal is applied during the preset time, the output remains unaffected.

DELAYED IMPULSE [G]



when switch S is closed, TOFF starts. Relay energizes at the end of TOFF period. Then, TON starts irrespective of signal level and relay de-energizes at the end of TON period.

Functional Diagrams for AMT8-S1 and AMT8-D2



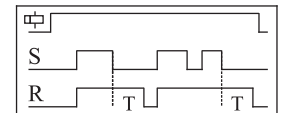
ON DELAY (A)



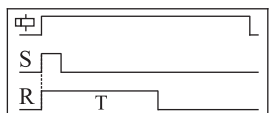
CYCLIC OFF/ON {OFF Start, (Sym, Asym)} (b)



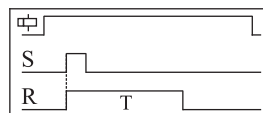
CYCLIC ON/OFF {ON Start, (Sym, Asym)} (C)



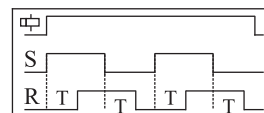
SIGNAL ON/OFF (d)



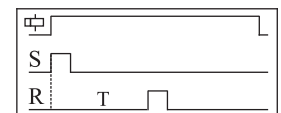
SIGNAL OFF DELAY (E)



INTERVAL (F)



SIGNAL OFF / ON (G)



ONE SHOT OUTPUT (H)

- Note:**
1. For Power-On operation (P) connect the terminal B1 to A1 permanently.
 2. If the Signal (S) changes during the Timer Duration (T), it does not change the output relay but re-triggering takes places and the Timer Duration is extended.