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
- Relay Outputs
- 2 Digit LCD Display for Preset Time and Run-Time
- DIN Rail Mounted
- 17.5mm Width

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: -10ºC ~ +55ºC (+14ºF ~ 131ºF)
- Storage Temperature: -20ºC ~ +65ºC (-4ºF ~ 149ºF)
- 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 mm² (22-14 AWG)

Connection Diagrams

Dimensions

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Altech Smart Relay

Technical Specifications

- Programmable Smart Relay
- Expansion Module
- Base Module
- RS485 Communication Module

Altech Smart Relay Connection Diagrams

Power Supply Wiring:
1. Although the Altech Smart Relay has been designed to withstand the effects of any electrical noise that might be present in a power supply, care should be taken to ensure that it is not subjected to prolonged periods of high current or over voltage. Any power supply wiring should be kept as short as possible and run in a separate circuit from other power lines.

Wiring of Input/Output:
1. Ensure all input/outputs are wired according to the wiring diagram provided.
2. When wiring input/outputs, ensure that input voltage is within the specified range and that output loads are within the rated current and voltage limits.
Altech Smart Relay

Technical Specifications

*250 lines of ladder programming
*10 soft functions, Timer, Counter
*2 Analog Input
*4 Digital Input
*4 Digital Outputs
*8 Relays

Features

• Supports 48 I/Os (32 digital inputs & 16 digital outputs)
• 256 KB flash memory
• 8 KB RAM
• Support software update & modification of pre-selected parameters of functional blocks, viewing I/O status and programming on the device
• PC software for programming, online & offline

Programming Features

• Designed C software for programming, online & offline
• Programming features: Compare, Counters, Compare Counters, D/A/Analog
• 250 lines of ladder programming
• 10 soft functions, Timer, Counter

Communication Module

RS485 Communication Module

-4 -20 mA input
-0 to +10 VDC input

Mounting Dimensions

Programmable Smart Relay

Expansion Module

Communication Module

Connection Diagrams

1. Separate input and output lines.
2. When the output lines are running close to power supply or input lines, use shielded wires and ground them.
3. It may be necessary to insert an isolation transformer between the supply and line terminals of the Altech Smart Relay.

Connection Between Base Module & Expansion Module

Connection Between Base Module & Communication Module

Power Supply Wiring

1. Although the Altech Smart Relay has been designed to withstand the negative effects of any electrical noise that might be present in some cases, it is advisable to mount the Altech Smart Relay inside a cabinet with shielding. This is required by the NEC for the Altech Smart Relay.
2. For power supply wiring, it is recommended to use a 12-24 VDC input equipped with 200 mA current for power supply wiring.

Wiring of input/output

1. Input/output wiring should be kept as short as possible.
2. When the output lines are running close to power supply or input lines, use shielded wires and ground them.

Accessories

• Standard unit
• RS-485 protocol (can be used as digital inputs)

Technical Specifications

| PARAMETER | PROGRAM
|-----------|-----------|
| UTILITIES | PARAMETER
| LOAD | LOAD | LOAD |
| I1 I2 I3 I4 I5 I6 | C1 C2 | C1 C2 |
| Altech Corp.® | Altech Corp.® | www.altechcorp.com |
### 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**

### Digital Timers

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>AMT8-S1</th>
<th>AMT8-D2</th>
<th>AMT12-S1</th>
<th>AMT12-D2</th>
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<tbody>
<tr>
<td>No. of Timer Functions</td>
<td>8</td>
<td>8</td>
<td>18</td>
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<tr>
<td>1) ON Delay [A]</td>
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<tr>
<td>2) Cyclic OFF/ON [b]</td>
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<td>3) Cyclic ON/OFF [C]</td>
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<td>4) Signal ON/OFF [d]</td>
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<td>5) Signal OFF Delay [E]</td>
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<td>6) Interval [F]</td>
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<td>7) Signal OFF/ON [G]</td>
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<td>8) One Shot Output [H]</td>
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<td>9) Inverted Signal ON Delay [I]</td>
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<td>10) Signal OFF Delay [J]</td>
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<td>11) Impulse ON/OFF [A]</td>
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<td>12) Signal OFF/ON [b]</td>
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<td>13) Leading Edge Impulse 1 [C]</td>
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<td>14) Leading Edge Impulse 2 [d]</td>
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<td>15) Trailing Edge Impulse 1 [E]</td>
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<td>16) Trailing Edge Impulse 2 [F]</td>
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<td>17) Delayed Impulse [G]</td>
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<td>18) Inverted Signal ON Delay 2 [H]</td>
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</tbody>
</table>

### 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
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- **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 mm² (22-14 AWG)

### Connection Diagrams

- **Dimensions**: 17.5mm Width

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**_SmartRelay Outside.pdf_**