

ATE Series

DIN W48 × H48mm Solid State ON Delay Timer

■ Features

- DIN W48 × H48mm
- Easy and simple time setting
- Cost-effective
- Easy time setting
- Wide range of time
- Power supply
 - ATE : 110/220VAC 50/60Hz
 - ATE1, ATE2 : 110VAC, 220VAC 50/60Hz, 12VDC, 24VDC (Option)



⚠ Please read "Caution for your safety" in operation manual before using.

■ Ordering information

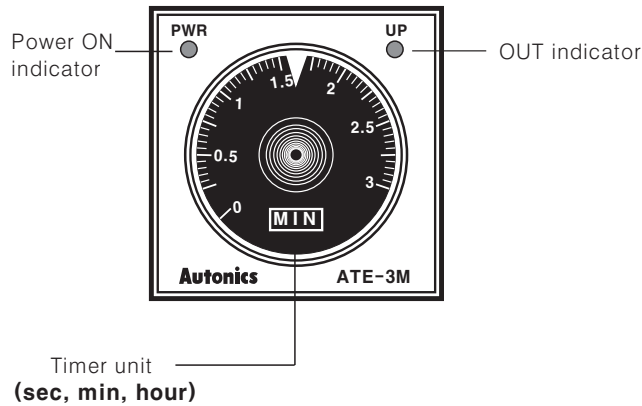
| | | | | | |
|-----|--|---|----|--------|---|
| ATE | | - | 10 | S | |
| | | | | s | sec(1, 3, 6, 10, 30, 60) |
| | | | | m | min(3, 6, 10, 30, 60) |
| | | | | h | hour(3, 6, 12, 24) |
| | | | | Number | Max. time range |
| | | | | | Time-limit SPDT(1c), Instantaneous SPST(1a) |
| | | | 1 | | Time-limit DPDT(2c) |
| | | | 2 | | Time-limit SPDT(1c), Instantaneous SPDT(1c) |
| | | | | ATE | ON Delay Timer |

■ Specifications

| Model | | ATE- s m h | ATE1- s m h | ATE2- s m h |
|----------------------------|------------------|--|---|---|
| Function | | Power ON Delay | | |
| Control time setting range | | sec(1, 3, 6, 10, 30, 60), min(3, 6, 10, 30, 60), hour(3, 6, 12, 24) | | |
| Power supply | | 110/220VAC 50/60Hz | 110VAC, 220VAC 50/60Hz, 12VDC, 24VDC (Option) | |
| Allowable voltage range | | 90 ~ 110% of rated voltage | | |
| Power consumption | | Approx. 10VA (240VAC 60Hz), Approx. 2W (24VDC, 12VDC) | | |
| Reset time | | Max. 200ms | | |
| Timing operation | | Power ON Start type | | |
| Control output | Contact type | Time limit SPDT(1c), Instantaneous SPST(1a) | Time limit DPDT(2c) | Time limit SPDT(1c), Instantaneous SPDT(1c) |
| | Contact capacity | 250VAC 3A resistive load | | |
| Relay life cycle | Mechanical | Min. 10,000,000 times | | |
| | Electrical | Min. 100,000 times (250VAC 3A resistive load) | | |
| Repeat error | | Max. ±0.3% | | |
| SET error | | Max. ±5% ±0.05sec | | |
| Voltage error | | Max. ±0.5% | | |
| Temperature error | | Max. ±2% | | |
| Insulation resistance | | 100MΩ (at 500VDC mega) | | |
| Dielectric strength | | 2000VAC 50/60Hz for 1 minute | | |
| Noise strength | | ±2kV the square wave noise (pulse width: 1μs) by the noise simulator | | |
| Vibration | Mechanical | 0.75mm amplitude at frequency of 10 ~ 55Hz in each of X, Y, Z directions for 1 hours | | |
| | Malfunction | 0.5mm amplitude at frequency of 10 ~ 55Hz in each of X, Y, Z directions for 10 minutes | | |
| Shock | Mechanical | 300m/s ² (Approx. 30G) in X, Y, Z directions 3 times | | |
| | Malfunction | 100m/s ² (Approx. 10G) in X, Y, Z directions 3 times | | |
| Ambient temperature | | -10 ~ 55°C (at non-freezing status) | | |
| Storage temperature | | -25 ~ 65°C (at non-freezing status) | | |
| Ambient humidity | | 35 ~ 85%RH | | |
| Unit weight | | Approx. 75g | | |

Single Time Range Timer

Front panel identification



Time setting range

| Max. setting time | Setting range |
|-------------------|---------------|
| 1sec | 0~1sec |
| 3sec | 0~3sec |
| 6sec | 0~6sec |
| 10sec | 0~10sec |
| 30sec | 0~30sec |
| 60sec | 0~60sec |
| 3min | 0~3min |
| 6min | 0~6min |
| 10min | 0~10min |
| 30min | 0~30min |
| 60min | 0~60min |
| 3hour | 0~3hour |
| 6hour | 0~6hour |
| 12hour | 0~12hour |
| 24hour | 0~24hour |

Operation mode

t : Setting time, Rt : Reset time

| Model | Time chart |
|-------------|------------|
| ATE | |
| ATE1 | |
| ATE2 | |

(A) Counter

(B) Timer

(C) Temp. controller

(D) Power controller

(E) Panel meter

(F) Tacho/Speed/Pulse meter

(G) Display unit

(H) Sensor controller

(I) Switching power supply

(J) Proximity sensor

(K) Photo electric sensor

(L) Pressure sensor

(M) Rotary encoder

(N) Stepping motor & Driver & Controller

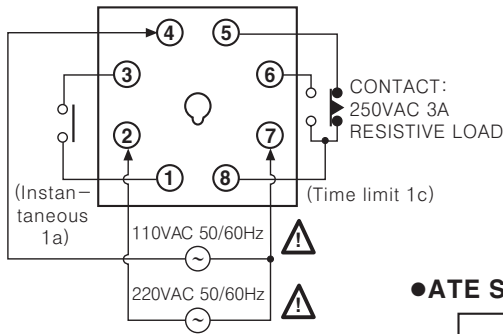
(O) Graphic panel

(P) Production stoppage models & replacement

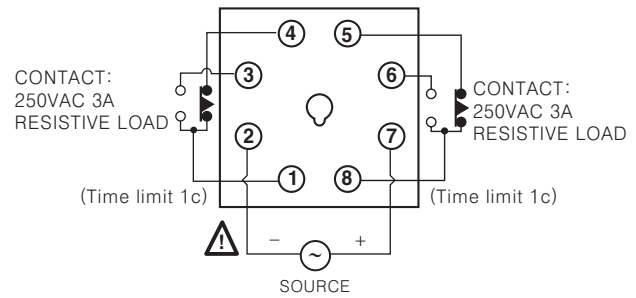
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Connections

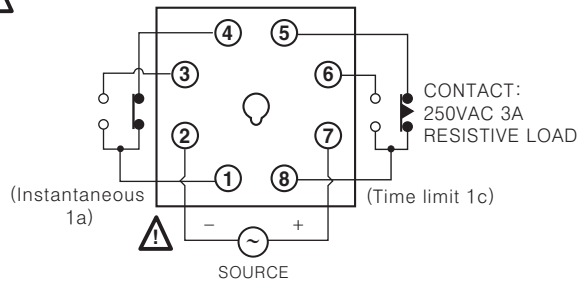
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ATE1 Series

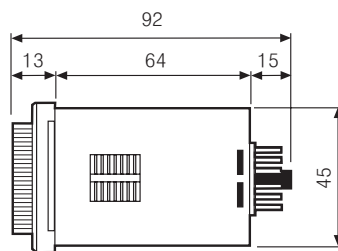
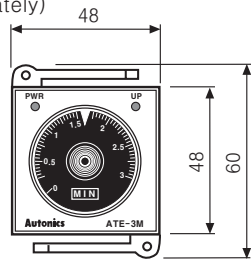
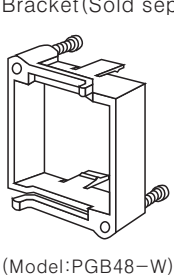


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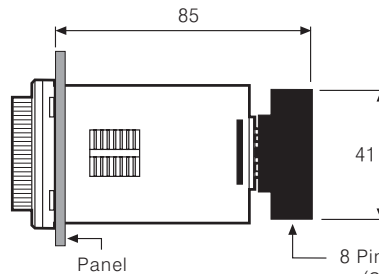
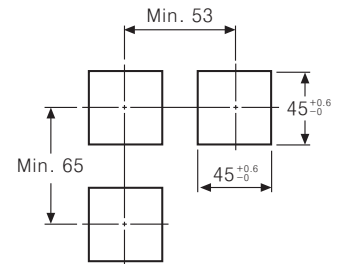


Dimensions

Bracket (Sold separately)



Panel cut-out



(Unit:mm)

Proper usage

Environment

Please avoid the following places:

- A place where this product may be damaged by strong impact or vibration.
- A place where corrosive gas or flammable gas and water, oil, dust exist.
- A place where magnetic and electrical noise occur.
- A place where high temperature and humidity are beyond rated specification.
- A place where there are strong alkalis and acids.
- A place where there are direct rays of sun.

Noise

- 1) We test 2kV, Pulse width 1μs against Impulse voltage between power terminals and 1kV, Pulse width 1μs at noise simulator against external noise voltage.

Please install MP condenser (0.1~1μF) or Oil condenser between power terminals when over Impulse noise voltage occurs.

- 2) When testing dielectric voltage and insulation resistance of the control panel with this unit installed.

- Please isolate this unit from the circuit of control panel.

- Please make all terminals of this unit short-circuited.

(It prevents the damage of inner circuit.)