W 48 × H 48 mm Power ON Delay Analog Timers

ATE8 Series

INSTRUCTION MANUAL

DRW161196AD

Autonics

Thank you for choosing our Autonics product.
Read and understand the instruction manual and manual thoroughly before using the product.
For your safety, read and follow the below safety considerations before using.
For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.
Keep this instruction manual in a place where you can find easily.
The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.
Follow Autonics website for the latest information.

Safety Considerations

- Observe all 'Safety Considerations' for safe and proper operation to avoid hazards.
- ⚠ symbol indicates caution due to special circumstances in which hazards may occur.

⚠ Warning Failure to follow instructions may result in serious injury or death.

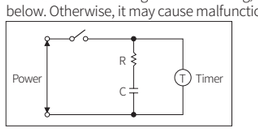
01. Fail-safe device must be installed when using the unit with machinery that may cause serious injury or substantial economic loss. (e.g. nuclear power control, medical equipment, ships, vehicles, railways, aircraft, combustion apparatus, safety equipment, crime/disaster prevention devices, etc.)
Failure to follow this instruction may result in personal injury, economic loss or fire.
02. Do not use the unit in the place where flammable/explosive/corrosive gas, high humidity, direct sunlight, radiant heat, vibration, impact or salinity may be present.
Failure to follow this instruction may result in explosion or fire.
03. Install on a device panel to use.
Failure to follow this instruction may result in fire or electric shock.
04. Do not connect, repair, or inspect the unit while connected to a power source.
Failure to follow this instruction may result in fire or electric shock.
05. Check 'Connections' before wiring.
Failure to follow this instruction may result in fire.
06. Do not disassemble or modify the unit.
Failure to follow this instruction may result in fire or electric shock.

⚠ Caution Failure to follow instructions may result in injury or product damage.

01. Use the unit within the rated specifications.
Failure to follow this instruction may result in fire or product damage.
02. Use a dry cloth to clean the unit, and do not use water or organic solvent.
Failure to follow this instruction may result in fire or electric shock.
03. Keep the product away from metal chip, dust, and wire residue which flow into the unit.
Failure to follow this instruction may result in fire or product damage.

Cautions during Use

- Follow instructions in 'Cautions during Use'.
  Otherwise, it may cause unexpected accidents.
- When supplying or turning off the power, use a switch or etc. to avoid chattering.
- Install a power switch or circuit breaker in the easily accessible place for supplying or disconnecting the power.
- In order to avoid leakage current flowing, connect resistance and condenser like below. Otherwise, it may cause malfunction.



- After turning off the power, change the time range, etc.
- Connect output contacts of different pole to be electrokinetic potential.
- Keep away from high voltage lines or power lines to prevent inductive noise. In case installing power line and input signal line closely, use line filter or varistor at power line and shielded wire at input signal line.
  Do not use near the equipment which generates strong magnetic force or high frequency noise.
- This unit may be used in the following environments.
  - Indoors (in the environment condition rated in 'Specifications')
  - Altitude max. 2,000 m
  - Pollution degree 2
  - Installation category II

Ordering Information

This is only for reference, the actual product does not support all combinations.
For selecting the specified model, follow the Autonics website.

ATE8 - 4 ❶ ❷

❶ Max. time range
1: 1 sec / 10 sec / 1 min / 10 min / 1 hour
3: 3 sec / 30 sec / 3 min / 30 min / 3 hour
6: 6 sec / 60 sec / 6 min / 60 min / 6 hour
C: 12 sec / 12 min / 24 min / 12 hour / 24 hour

❷ Output
No mark: Time limit 1c + Instantaneous 1a
D: Time limit 2c
E: Time limit 1c + Instantaneous 1c

Product Components

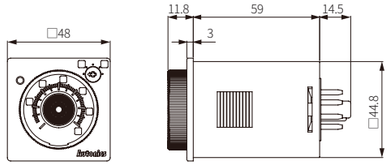
- Product
- Instruction manual

Sold Separately

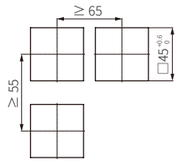
- Bracket: BK-S
- 8-pin socket: PG-08, PS-08(N)

Dimensions

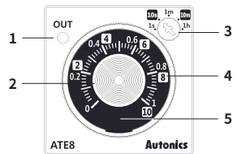
- Unit: mm, For the detailed drawings, follow the Autonics website.



■ Panel cut-out



Unit Descriptions



No.	Name
1	Output indicator (red)
2	Power indicator (white) Flashing: time progressing
3	Time range setting switch • s : sec, m : min, h : hour
4	Time range display part
5	Dial for the time setting

Time Range

■ ATE8-41□

Display part	Range
1s	0.1 to 1
10s	1 to 10
1m	0.1 to 1
10m	1 to 10
1h	0.1 to 1

■ ATE8-43□

Display part	Range
3s	0.3 to 3
30s	3 to 30
3m	0.3 to 3
30m	3 to 30
3h	0.3 to 3

■ ATE8-46□

Display part	Range
6s	0.6 to 6
60s	6 to 60
6m	0.6 to 6
60m	6 to 60
6h	0.6 to 6

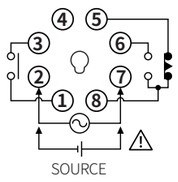
■ ATE8-4C□

Display part	Range
12s	1.2 to 12
12m	1.2 to 12
24m	2.4 to 24
12h	1.2 to 12
24h	2.4 to 24

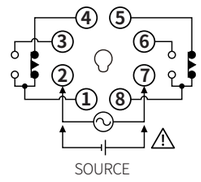
Connections

⚠ Caution
: Refer to the 'specifications' for checking the power supply and control output.

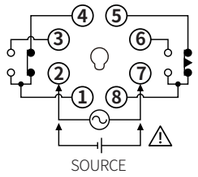
■ ATE8-4□



■ ATE8-4□D



■ ATE8-4□E

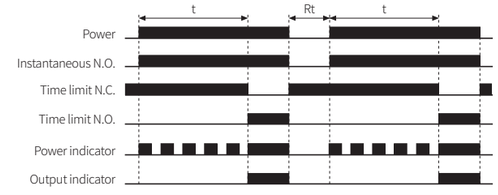


Output Operation

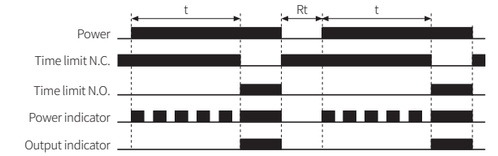
ATE8-4□, ATE8-4□E model: If the time limit is set to 0, time limit contact operates within 30 ms after the operation of instantaneous contact.

- t : setting time, Rt : return time

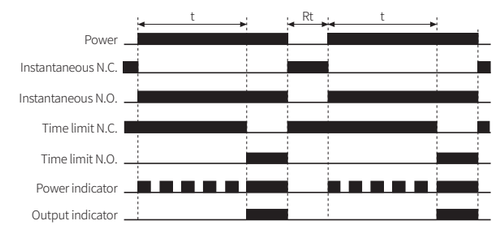
ATE8-4□



ATE8-4□D



ATE8-4□E



Specifications

Model	ATE8-4□	ATE8-4□D	ATE8-4□E
Function	Power ON Delay		
Return time	≤ 200 ms		
Time operation	Power ON Start		
Control output	Relay		
Contact type	Time limit SPDT (1c) + Instantaneous SPST (1a)	Time limit DPDT (2c)	Time limit SPDT (1c) + Instantaneous SPDT (1c)
Contact capacity	250 VAC~ 3A, 30 VDC⎓ 3 A resistive load		
Error	Repeat: ≤ ± 0.3% ± 10 ms SET: ≤ ± 10% ± 50 ms Voltage: ≤ ± 0.5% ± 10 ms Temp.: ≤ ± 2% ± 10 ms		
Approval	CE cULus EAC		
Unit weight (packaged)	≈ 75 g (≈ 122.2 g)		

Power supply	100 - 240 VAC~ ±10% 50 / 60 Hz, 24 - 240 VDC⎓ ±10%
Power consumption	AC: ≤ 3.5 VA, DC: ≤ 2 W
Insulation resistive	≥ 100 MΩ (500 VDC⎓ megger)
Dielectric strength	2,000 VAC~ at 50 / 60 Hz for 1 min
Noise immunity	± 2kV square-wave noise by noise simulator (pulse width 1 μs)
Vibration	0.75 mm double amplitude at frequency of 10 to 55 Hz (for 1 min) in each X, Y, Z direction for 1 hour
Vibration (malfunction)	0.5 mm double amplitude at frequency of 10 to 55 Hz (for 1 min) in each X, Y, Z direction for 10 min
Shock	300 m/s² (≈ 30 G) in each X, Y, Z direction for 3 times
Shock (malfunction)	100 m/s² (≈ 10 G) In each X, Y, Z direction for 3 times
Relay life cycle	Mechanical: ≥ 5,000,000 operations Electrical: ≥ 100,000 operations (250 VAC~ 3 A resistive load)
Ambient temperature	-10 to 55 °C, storage: -25 to 65 °C (no freezing or condensation)
Ambient humidity	35 to 85%RH, storage: 35 to 85%RH (no freezing or condensation)
Protection rating	IP40 (front part, IEC standard)

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