

# W 48 × H 48 mm Power ON Delay Analog Timers



## ATE8 Series PRODUCT MANUAL

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

### Features

- DIN W 48 × H 48 mm
- Easy and simple time setting
- Cost-effective
- Easy time setting
- Wide range of time
- Power supply: 100 - 240 VAC ~ 50 / 60 Hz, 24 - 240 VDC =

### 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.

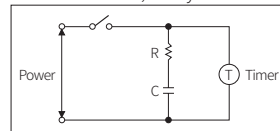
- 01. Fail-safe device must be installed when using the unit with machinery that may cause serious injury or substantial economic loss. (e.g. nuclear power control, medical equipment, ships, vehicles, railways, aircraft, combustion apparatus, safety equipment, crime/disaster prevention devices, etc.)**  
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.

ATE **1** - **2** **3** **4**

### 1 Plug type

8: 8-pin plug

### 3 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

### 2 Power supply

4: 100 - 240 VAC ~ 50 / 60 Hz,  
 24 - 240 VDC =

### 4 Output

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

## Product Components

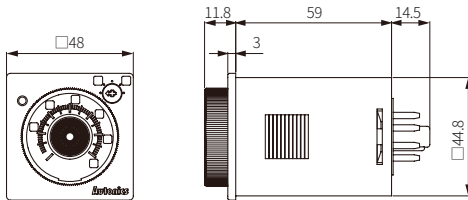
- Product
- Instruction manual

## Sold Separately

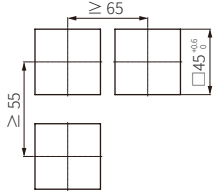
- Bracket: BK-S
- 8-pin controller socket: PG-08, PS-08(N)

## Dimensions

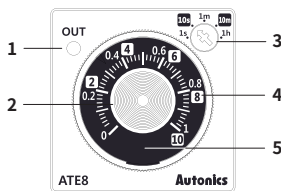
- Unit: mm, For the detailed drawings, follow the Autonics website.



### 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

### ATE8-46

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

### ATE8-43

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

### ATE8-4C

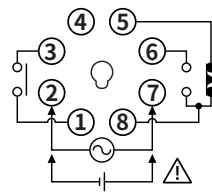
Display part	Range
12s	1.2 to 12
12m	1.2 to 12
24m	2.4 to 24
12h	1.2 to 12
24h	2.4 to 24

## Connections

### Caution

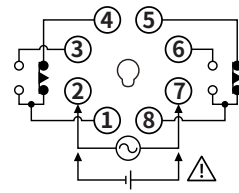
Refer to the 'specifications' for checking the power supply and control output.

### ATE8-4



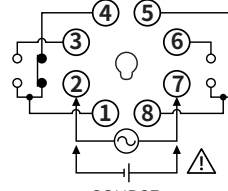
SOURCE

### ATE8-4D



SOURCE

### ATE8-4E



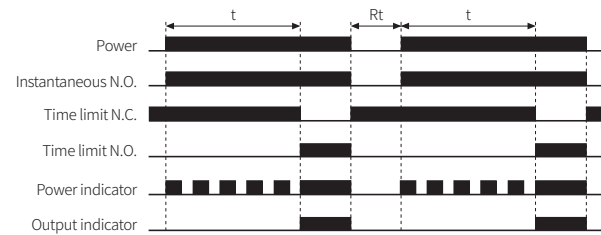
SOURCE

## Output Operation

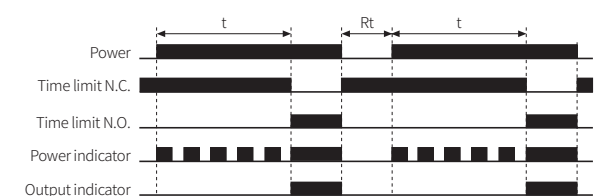
ATE8-4, ATE8-4E model: If the time limit is set to 0, time limit contact operates within 30 ms after the operation of instantaneous contact.

- t : setting time, Rt : return time

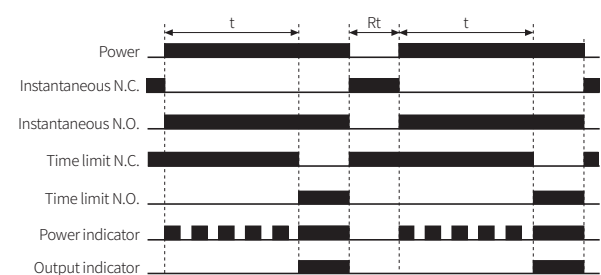
### ATE8-4



### ATE8-4D



### ATE8-4E

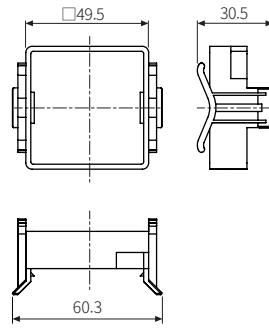


## Specifications

Model	ATE8-4□	ATE8-4□D	ATE8-4□E
<b>Function</b>	Power ON Delay		
<b>Return time</b>	≤ 200 ms		
<b>Time operation</b>	Power ON Start		
<b>Control output</b>	Relay		
<b>Contact type</b>	Time limit SPDT (1c) + Instantaneous SPST (1a)	Time limit DPDT (2c)	Time limit SPDT (1c) + Instantaneous SPDT (1c)
<b>Contact capacity</b>	250 VAC~ 3A, 30 VDC= 3 A resistive load		
<b>Error</b>	Repeat: ≤ ± 0.3% ± 10 ms SET: ≤ ± 10% ± 50 ms Voltage: ≤ ± 0.5% ± 10 ms Temp.: ≤ ± 2% ± 10 ms		
<b>Certification</b>	CE UK c SA US ENEC		
<b>Unit weight (packaged)</b>	≈ 75 g (≈ 122.2 g)		
<b>Power supply</b>	100 - 240 VAC~ 50 / 60 Hz, 24 - 240 VDC=		
<b>Permissible voltage range</b>	90 to 110 % of rated voltage		
<b>Power consumption</b>	AC: ≤ 3.5 VA, DC: ≤ 2 W		
<b>Insulation resistive</b>	≥ 100 MΩ (500 VDC= megger)		
<b>Dielectric strength</b>	Between the charging part and the case : 3,000 VAC~ at 50 / 60 Hz for 1 min		
<b>Noise immunity</b>	± 2kV square-wave noise by noise simulator (pulse width 1 μs)		
<b>Vibration</b>	0.75 mm double amplitude at frequency of 10 to 55 Hz in each X, Y, Z direction for 1 hour		
<b>Vibration (malfunction)</b>	0.5 mm double amplitude at frequency of 10 to 55 Hz in each X, Y, Z direction for 10 min		
<b>Shock</b>	300 m/s <sup>2</sup> (≈ 30 G) in each X, Y, Z direction for 3 times		
<b>Shock (malfunction)</b>	100 m/s <sup>2</sup> (≈ 10 G) in each X, Y, Z direction for 3 times		
<b>Relay life cycle</b>	Mechanical: ≥ 5,000,000 operations Electrical: ≥ 100,000 operations (250 VAC~ 3 A resistive load)		
<b>Ambient temperature</b>	-10 to 55 °C, storage: -25 to 65 °C (no freezing or condensation)		
<b>Ambient humidity</b>	35 to 85%RH, storage: 35 to 85%RH (no freezing or condensation)		
<b>Protection rating</b>	IP40 (front part, IEC standard)		



## Sold Separately: Bracket BK-S

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



## Sold Separately: 8-pin Controller Socket

- For detailed information, refer to the 'PG Series, PS Series' manual.

Appearance	Pins	Rated Voltage	Rated current	Feature	Model
	8-pin	250 VAC~	7 A (resistance load)	Controller sockets	PG-08
	8-pin	250 VAC~	7 A (resistance load)	Controller sockets (DIN Rail / Panel)	PS-08(N)