Autonics TCD230045AA

$W48 \times H48 mm$ 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 \times 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

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.

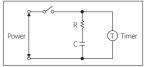
- 02. Use a dry cloth to clean the unit, and do not use water or organic solvent. Failure to follow this instruction may result in fire or electric shock
- 03. Keep the product away from metal chip, dust, and wire residue which flow

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 0 - 2 3

• Plug type 8: 8-pin plug 3 A 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

Power supply

4: 100 - 240 VAC \sim 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

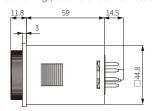
Sold Separately

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

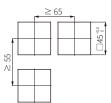
Dimensions

• 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□

AILO 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□

_ /::20 10			
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□

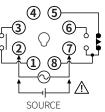
Display part	Range
12s	1.2 to 12
12m	1.2 to 12
24m	2.4 to 24
12h	1.2 to 12
24h	2.4 to 24

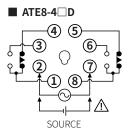
Connections

△ Caution

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

■ ATE8-4□

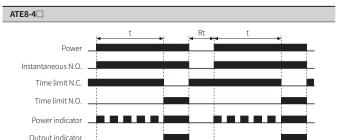




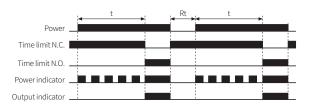
Output Operation

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.

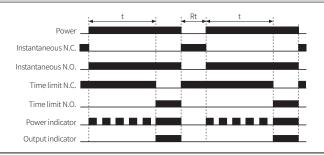
• t: setting time, Rt: return time



ATE8-4□D



ATE8-4□E



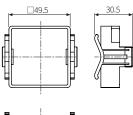
Specifications

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: $\leq \pm 0.3\% \pm 10$ ms SET: $\leq \pm 10\% \pm 50$ ms Voltage: $\leq \pm 0.5\% \pm 10$ ms Temp.: $\leq \pm 2\% \pm 10$ ms				
Certification	C € ĽK c PU us ERI				
Unit weight (packaged)	$ s \approx 75 \mathrm{g} (\approx 122.2 \mathrm{g})$				

Unit weight (packaged)	≈ 75 g (≈ 122.2 g)		
Power supply	100 - 240 VAC ~ 50 / 60 Hz, 24 - 240 VDC==		
Permissible voltage range	90 to 110 % of rated voltage		
Power consumption	$AC: \leq 3.5 \text{ VA, DC:} \leq 2 \text{ W}$		
Insulation resistive	≥ 100 MΩ (500 VDC== megger)		
Dielectric strength	Between the charging part and the case $: 3,000 \text{VAC} \sim \text{at } 50 / 60 \text{Hz}$ for 1 min		
Noise immunity	\pm 2kV square-wave noise by noise simulator (pulse width 1 μ s)		
Vibration	0.75 mm double amplitude at frequency of 10 to 55 Hz in each X, Y, Z direction for 1 hour		
Vibration (malfunction)	0.5 mm double amplitude at frequency of 10 to 55 Hz in each X, Y, Z direction for 10 min		
Shock	$300 \text{ m/s}^2 (\approx 30 \text{ G})$ in each X, Y, Z direction for 3 times		
Shock (malfunction)	$100 \text{m/s}^2 (\approx 10 \text{G})$ In each X, Y, Z direction for 3 times		
Relay life cycle	Mechanical: \geq 5,000,000 operations Electrical: \geq 100,000 operations (250 VAC \sim 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)		

Sold Separately: Bracket BK-S

 \bullet 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)