

Autonics

8 Pin PLUG TYPE ANALOG TIMER ATE8 SERIES

INSTRUCTION MANUAL



Thank you for choosing our Autonics product.
Please read the following safety considerations before use.

■ Safety Considerations

- ※Please observe all safety considerations for safe and proper product operation to avoid hazards.
- ※Safety considerations are categorized as follows.
- ⚠Warning** Failure to follow these instructions may result in serious injury or death.
- ⚠Caution** Failure to follow these instructions may result in personal injury or product damage.
- ※The symbols used on the product and instruction manual represent the following
- △ symbol represents caution due to special circumstances in which hazards may occur.

⚠ Warning

1. **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 fire, personal injury, or economic loss.
2. **Install on a device panel to use.** Failure to follow this instruction may result in electric shock or fire.
3. **Do not connect, repair, or inspect the unit while connected to a power source.** Failure to follow this instruction may result in electric shock or fire.
4. **Check 'Connections' before wiring.** Failure to follow this instruction may result in fire.
5. **Do not disassemble or modify the unit.** Failure to follow this instruction may result in electric shock or fire.

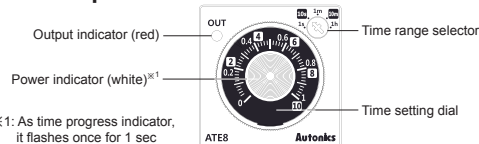
⚠ Caution

1. **Use the unit within the rated specifications.** Failure to follow this instruction may result in fire or product damage.
2. **Use dry cloth to clean the unit, and do not use water or organic solvent.** Failure to follow this instruction may result in electric shock or fire.
3. **Do not use the unit in the place where flammable/explosive/corrosive gas, humidity, direct sunlight, radiant heat, vibration, impact, or salinity may be present.** Failure to follow this instruction may result in fire or explosion.
4. **Keep metal chip, dust, and wire residue from flowing into the unit.** Failure to follow this instruction may result in fire or product damage.

■ Ordering Information

ATE	8	—	4	3	D	※Sockets (PG-08, PS-08 (N)) are sold separately.	
Control output						No mark	Time limit 1c+Instantaneous 1a
Time range						D	Time limit 2c
Power supply						E	Time limit 1c+Instantaneous 1c
Number of plug pins						1	1 sec/10 sec/1 min/10 min/1 hour
Item						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
						4	100-240VAC 50/60Hz, 24-240VDC
						8	8-pin plug type
						ATE	Analog timer

■ Unit Description



※1: As time progress indicator, it flashes once for 1 sec

※The above specifications are subject to change and some models may be discontinued without notice.
※Be sure to follow cautions written in the instruction manual and the technical descriptions (catalog, homepage).

■ Specifications

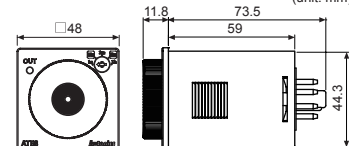
Model	ATE8-4	ATE8-4 D	ATE8-4 E
Function	Power ON Delay Timer		
Control time setting range ^{※1}	0.1 sec to 24 hour		
Power supply	100-240VAC~ 50/60Hz, 24-240VDC=		
Permissible voltage range	90 to 110% of rated voltage		
Power consumption	Max. 3.5VA (100-240VAC~ 50/60Hz), Max. 2.0W (24-240VDC=)		
Return time	Max. 200ms		
Time operation	Power ON Start		
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. 5,000,000 operations	
	Electrical	Min. 100,000 operations (250VAC 3A resistive load)	
Repeat error	Max. ±0.3% ±0.01 sec		
Set error	Max. ±5% ±0.05 sec		
Voltage error	Max. ±0.5% ±0.01 sec		
Temp. error	Max. ±2% ±0.01 sec		
Insulation resistance	Over 100MΩ (at 500VDC megger)		
Dielectric strength	2,000VAC 50/60Hz for 1 min		
Noise immunity	±2kV the square wave noise (pulse width 1μs) by noise simulator		
Vibration	Mechanical	0.75mm amplitude at frequency 10 to 55Hz (for 1 min) in each X, Y, Z direction for 1 hour	
	Malfunction	0.5mm amplitude at frequency 10 to 55Hz (for 1 min) in each X, Y, Z direction for 10 min	
Shock	Mechanical	300m/s ² (approx. 30G) in each X, Y, Z direction for 3 times	
	Malfunction	100m/s ² (approx. 10G) in each X, Y, Z direction for 3 times	
Environment	Ambient temp.	-10 to 55°C, storage: -25 to 65°C	
	Ambient humid.	35 to 85%RH, storage: 35 to 85%RH	
Protection structure	IP40 (front part, IEC standard)		
Approval	CE, UL, US		
Weight ^{※2}	Approx. 122.2g (approx. 75g)		

※1: Refer to time specifications for control time setting range by model.
※2: The weight includes packaging. The weight in parenthesis is for unit only.
※Environment resistance is rated at no freezing or condensation.

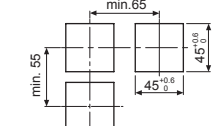
■ Time Specifications

Model	Time range	Time unit	Time setting range	Model	Time range	Time unit	Time setting range
ATE8-41	1	s	0.1 to 1 sec	ATE8-46	6	s	0.6 to 6 sec
	10	s	1 to 10 sec		60	s	6 to 60 sec
	1	m	0.1 to 1 min		6	m	0.6 to 6 min
ATE8-43	1	m	1 to 10 min	ATE8-4C	6	m	6 to 60 min
	1	h	0.1 to 1 hour		6	h	0.6 to 6 hour
	3	s	0.3 to 3 sec		12	s	1.2 to 12 sec
ATE8-43	30	s	3 to 30 sec	ATE8-4C	12	m	1.2 to 12 min
	3	m	0.3 to 3 min		24	m	2.4 to 24 min
	30	m	3 to 30 min		12	h	1.2 to 12 hour
ATE8-43	3	h	0.3 to 3 hour	ATE8-4C	24	h	2.4 to 24 hour

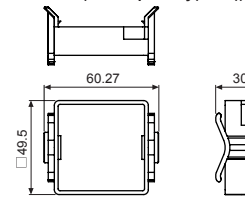
■ Dimensions



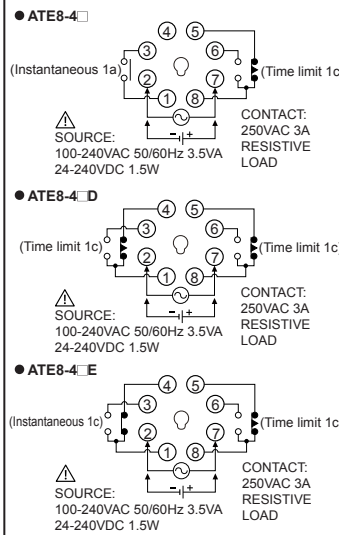
■ Panel cut-out



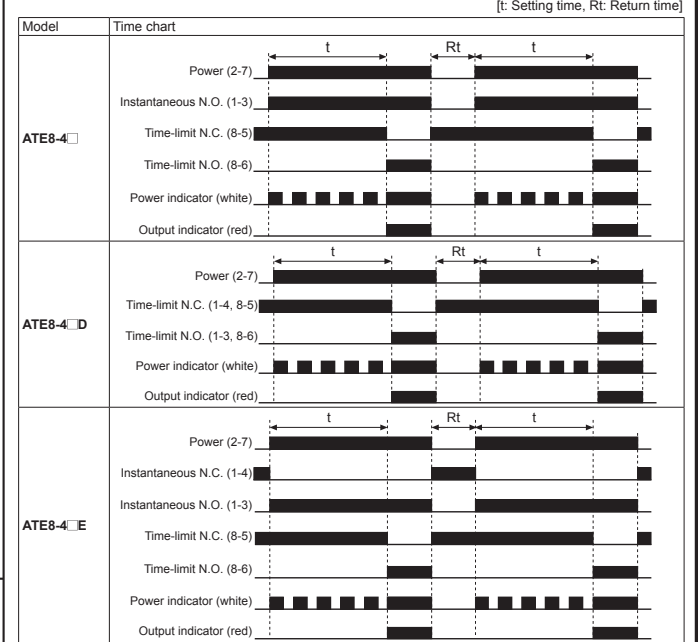
■ Bracket (sold separately)(BK-S)



■ Connections



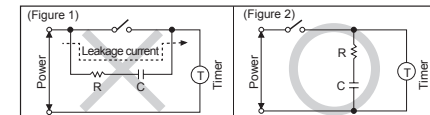
■ Operation Mode



※In case of ATE8-4, ATE8-4 E, after operating instantaneous contact, time-limit contact operates within 30ms.

■ Cautions during Use

1. Follow instructions in 'Cautions during Use'. Otherwise, it may cause unexpected accidents.
2. When supplying or turning off the power, use a switch or etc. to avoid chattering.
3. Install a power switch or circuit breaker in the easily accessible place for supplying or disconnecting the power.
4. In order to avoid leakage current flowing, connect resistance and condenser as (Figure 2). If connect as (Figure 1), it may cause malfunction due to leakage current.



5. 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.
6. Connect output contacts of different pole to be electrokinetic potential.
7. Change setting time(T1), Y-Δ switching time or etc. after turning off the power of the timer.
8. This unit may be used in the following environments.
 - ①Indoors (in the environment condition rated in 'Specifications')
 - ②Altitude max. 2,000m
 - ③Pollution degree 2
 - ④Installation category II

■ Major Products

- Photoelectric Sensors
- Fiber Optic Sensors
- Door Side Sensors
- Area Sensors
- Proximity Sensors
- Pressure Sensors
- Rotary Encoders
- Connectors/Sockets
- Switching Mode Power Supplies
- Control Switches/Lamps/Buzzers
- I/O Terminal Blocks & Cables
- Stepper Motors/Drivers/Motion Controllers
- Graphic/Logic Panels
- Field Network Devices
- Laser Marking System (Fiber, Co₂, Nd: YAG)
- Laser Welding/Cutting System
- Temperature Controllers
- Temperature/Humidity Transducers
- SSRs/Power Controllers
- Counters
- Timers
- Panel Meters
- Tachometers/Pulse (Rate) Meters
- Display Units
- Sensor Controllers

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