

# ATE8 Series

## DIN W48×H48mm Analog Timer

### ■ Features

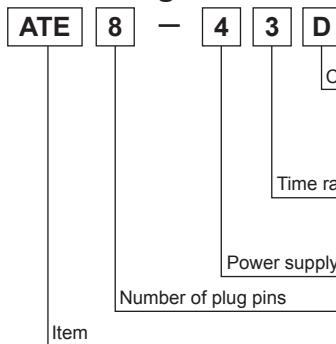
- DIN W48×H48mm
- Easy and simple time setting
- Cost-effective
- Easy time setting
- Wide range of time
- Power supply: 100-240VAC 50/60Hz, 24-240VDC



⚠ Please read "Safety Considerations" in operation manual before using.



### ■ Ordering Information



No mark	Time limit SPDT (1c)+Instantaneous SPST (1a)
D	Time limit DPDT (2c)
E	Time limit SPDT (1c)+Instantaneous SPST (1c)
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
4	100-240VAC 50/60Hz, 24-240VDC
8	8-pin plug type
ATE	Analog timer

※8-pin socket (PG-08, PS-08(N)) is sold separately.

### ■ 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)
	Contact capacity	250VAC~ 3A, 30VDC== 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 1min		
Noise immunity	±2KV the square wave noise (pulse width 1μs) by noise simulator		
Vibration	Mechanical	0.75mm amplitude at frequency 10 to 55Hz (for 1min) 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 <sup>2</sup> (approx. 30G) in each X, Y, Z direction for 3 times	
	Malfunction	100m/s <sup>2</sup> (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, c, UL US		
Weight*2	Approx. 122.2g (approx. 75g)		

※1: Refer to time specifications for control time setting range by model.

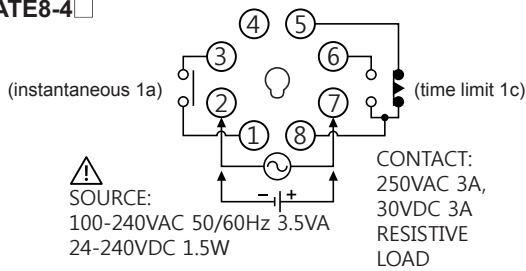
※2: The weight includes packaging. The weight in parenthesis is for unit only.

※Environment resistance is rated at no freezing or condensation.

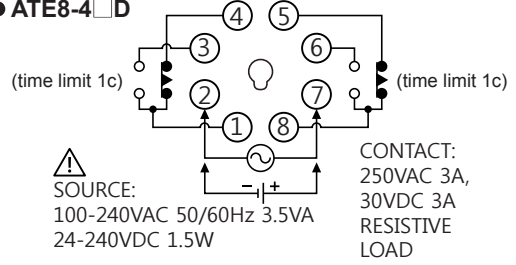
# Analog Timer

## Connections

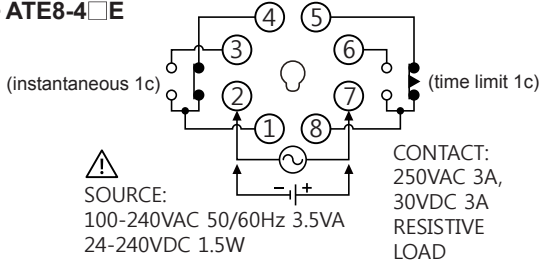
### ● ATE8-4□



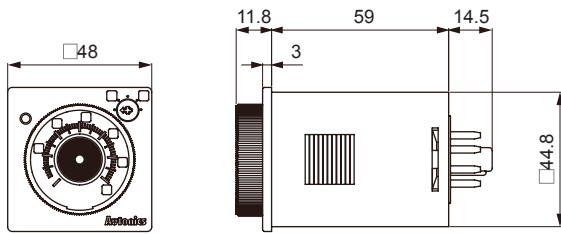
### ● ATE8-4□D



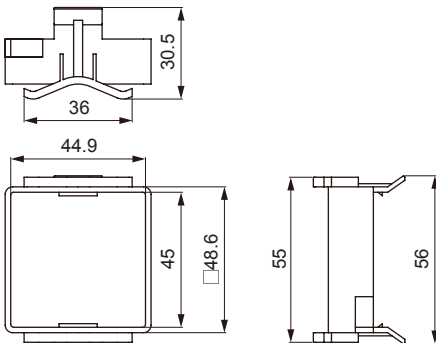
### ● ATE8-4□E



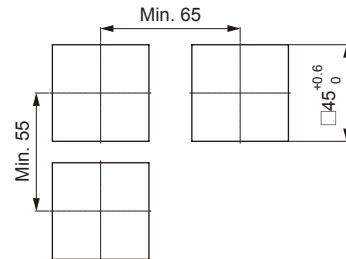
## Dimensions



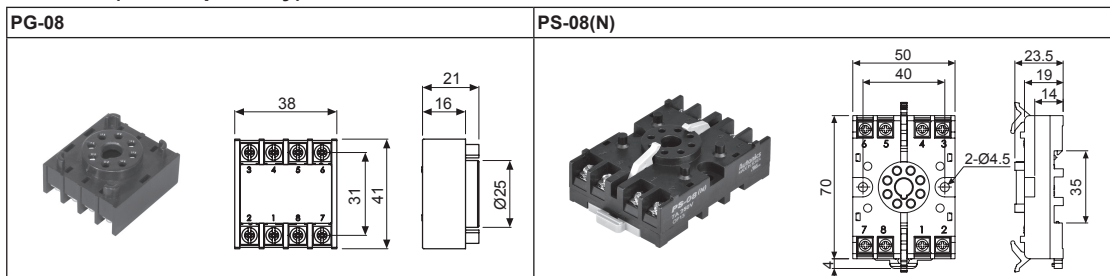
### ○ Bracket (sold separately (BK-S))



### ○ Panel cut-out



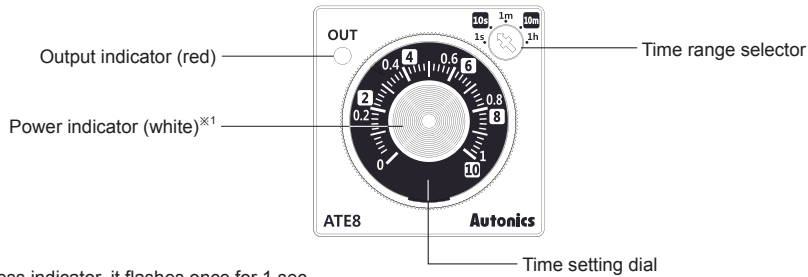
### ● Socket (sold separately)



(A)	Photoelectric Sensors
(B)	Fiber Optic Sensors
(C)	Door/Area Sensors
(D)	Proximity Sensors
(E)	Pressure Sensors
(F)	Rotary Encoders
(G)	Connectors/ Connector Cables/ Sensor Distribution Boxes/Sockets
(H)	Temperature Controllers
(I)	SSRs / Power Controllers
(J)	Counters
(K)	Timers
(L)	Panel Meters
(M)	Tacho / Speed / Pulse Meters
(N)	Display Units
(O)	Sensor Controllers
(P)	Switching Mode Power Supplies
(Q)	Stepper Motors & Drivers & Controllers
(R)	Graphic/ Logic Panels
(S)	Field Network Devices
(T)	Software

# ATE8 Series

## Unit Description



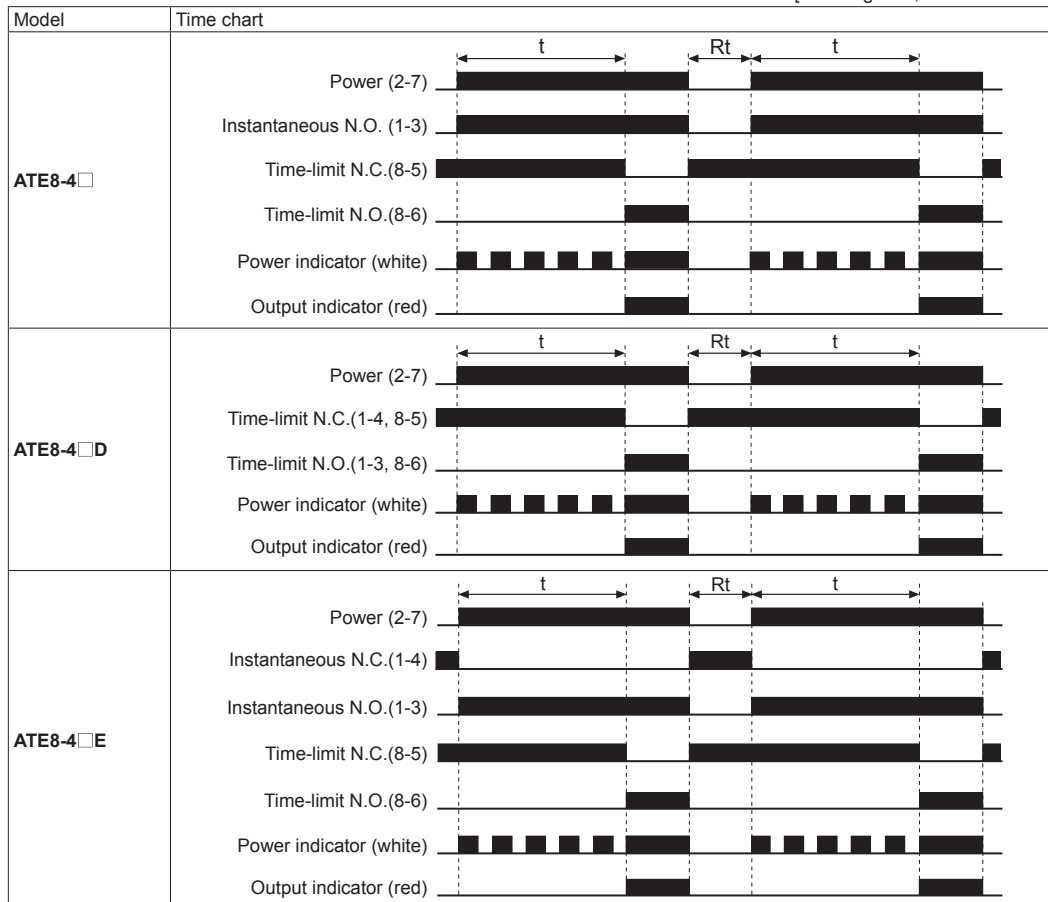
※1: As time progress indicator, it flashes once for 1 sec.

## 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		1 to 10 sec		60		6 to 60 sec
	1	m	0.1 to 1 min		6	m	0.6 to 6 min
	10		1 to 10 min		60		6 to 60 min
ATE8-43□	1	h	0.1 to 1 hour		6	h	0.6 to 6 hour
	3		0.3 to 3 sec		12		s
	30	s	3 to 30 sec	12	m	1.2 to 12 min	
	3		0.3 to 3 min	24		2.4 to 24 min	
ATE8-43□	30	m	3 to 30 min	12	h	1.2 to 12 hour	
	3		0.3 to 3 hour	24		2.4 to 24 hour	

## Operation Mode

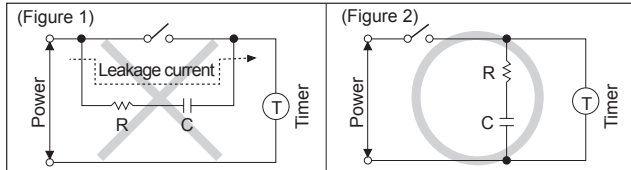
[t: Setting time, Rt: Return time]



※When time-limit of ATE8-4□, ATE8-4□E is set to 0, time-limit contact operates within 30ms right after instantaneous contact operation.

## ■ Proper Usage

- Follow instructions in 'Proper Usage'. 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 as (Figure 2).  
If connect as (Figure 1), it may cause malfunction due to leakage current.v



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

(A)  
Photoelectric  
Sensors

(B)  
Fiber  
Optic  
Sensors

(C)  
Door/Area  
Sensors

(D)  
Proximity  
Sensors

(E)  
Pressure  
Sensors

(F)  
Rotary  
Encoders

(G)  
Connectors/  
Connector Cables/  
Sensor Distribution  
Boxes/Sockets

(H)  
Temperature  
Controllers

(I)  
SSRs / Power  
Controllers

(J)  
Counters

(K)  
Timers

(L)  
Panel  
Meters

(M)  
Tacho /  
Speed / Pulse  
Meters

(N)  
Display  
Units

(O)  
Sensor  
Controllers

(P)  
Switching  
Mode Power  
Supplies

(Q)  
Stepper Motors  
& Drivers  
& Controllers

(R)  
Graphic/  
Logic  
Panels

(S)  
Field  
Network  
Devices

(T)  
Software