DIN W48×H48mm Analog Timer

Upgrade

Shaded parts(▬) are changed and added functions from previous ATE Series.

▣ 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

ATE **8** — **4** **3** **D**

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

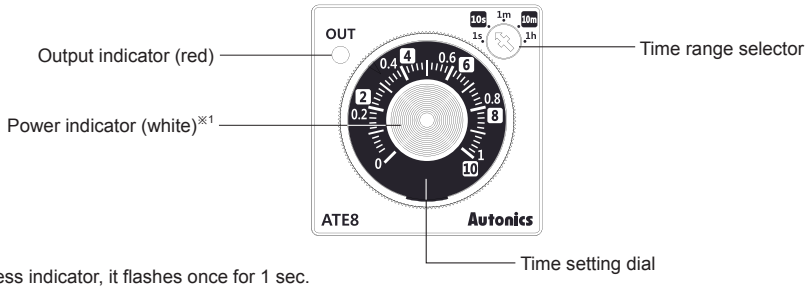
※8-pin socket (PG-08, PS-08(N)) is sold separately.

▣ 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)	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 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^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℃, storage: -25 to 65℃		
	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.

■ Unit Description



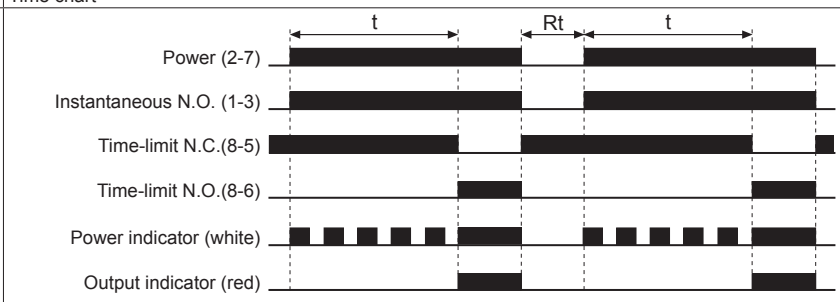
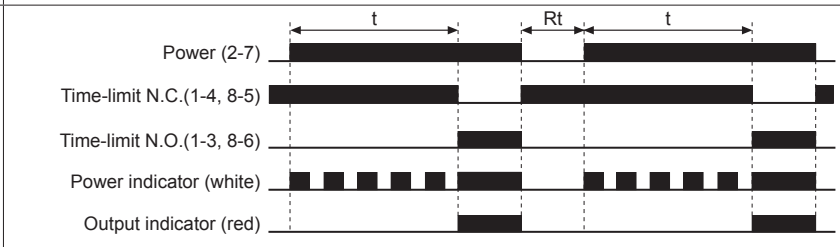
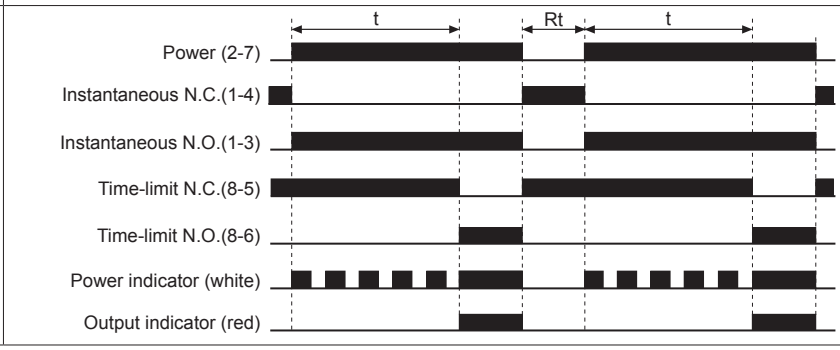
※1: As time progress indicator, it flashes once for 1 sec.

■ 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
	1	h	0.1 to 1 hour		6	h	0.6 to 6 hour
ATE8-43□	3	s	0.3 to 3 sec	ATE8-4C□	12	s	1.2 to 12 sec
	30		3 to 30 sec		12	m	1.2 to 12 min
	3	m	0.3 to 3 min		24		2.4 to 24 min
	30		3 to 30 min		12	h	1.2 to 12 hour
	3	h	0.3 to 3 hour		24		2.4 to 24 hour

■ Operation Mode

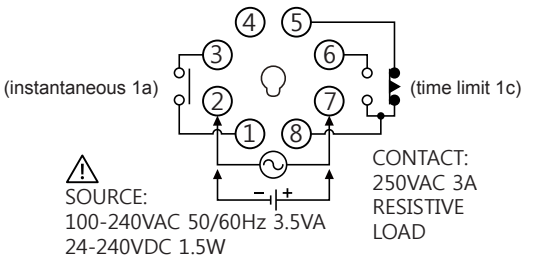
[t: Setting time, Rt: Return time]

Model	Time chart
ATE8-4□	
ATE8-4□D	
ATE8-4□E	

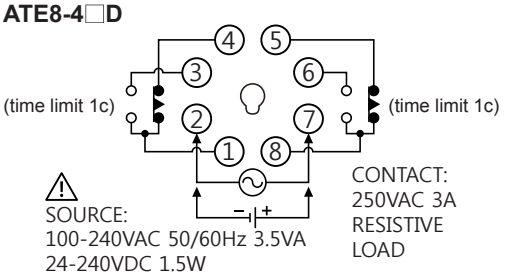
※When time-limit of ATE8-4□, ATE8-4□E is set to 0, time-limit contact operates within 30ms right after instantaneous contact operation.

▣ Connections

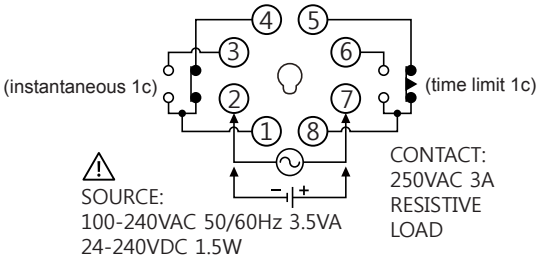
● **ATE8-4□**



● **ATE8-4□D**



● **ATE8-4□E**

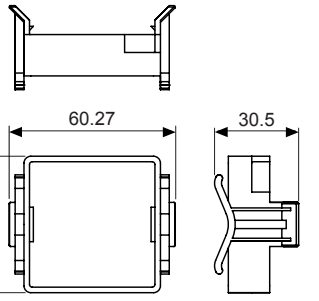


▣ Dimensions

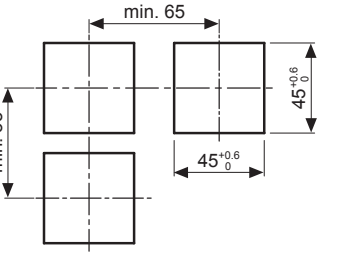
(unit: mm)

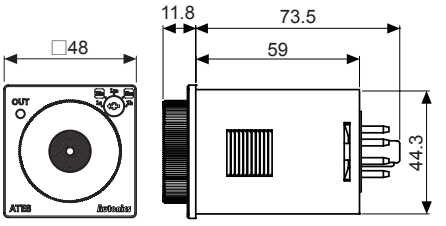
※Nameplate design is changed and rear length is shorten than previous.

● **Braket (sold separately (BK-S))**



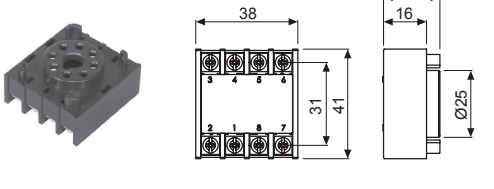
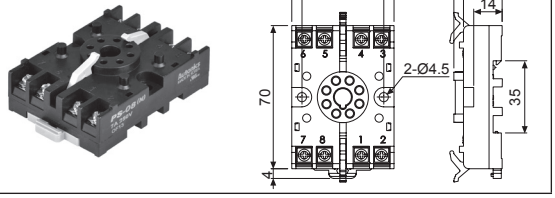
● **Panel cut-out**





※8-pin socket (PG-08, PS-08(N)) is sold separately. Refer to the '(G)Connectors/Connector Cables/Sensor Distribution Boxes/Sockets'.

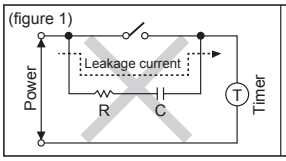
● **Socket (sold separately)**

PG-08	PS-08(N)
	

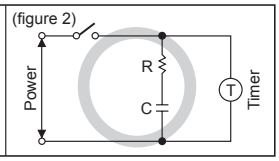
▣ Proper Usage

- When supplying the power to the timer, use switch, or relay, etc for instant supply. When supplying power slowly, it may cause malfunction.
- When supply the power to the timer, connection shown in (figure 1) might cause malfunction due to circuitous leakage current through resistance (R) and condenser (C). Please connect resistance (R) and condenser (C) as shown in (figure 2) to prevent malfunction due to circuitous leakage current.

(figure 1)



(figure 2)



- Connect bipolar output contacts as potential.
- Testing dielectric voltage or insulation resistance when the unit is installed at control panel
  ①Isolate the unit from the circuit of control panel.
  ②Short all terminals of the unit.
- Do not use the unit in the following environments.
  ①Environments with high vibration or shock.
  ②Environments with strong alkali or strong acid materials
  ③Environments with exposure to direct sunlight
  ④Near machinery which produces strong magnetic force or electric noise
- This product may be used in the following environments.
  ①Indoor
  ②Altitude max. 2,000m
  ③Pollution degree 2
  ④Installation category II

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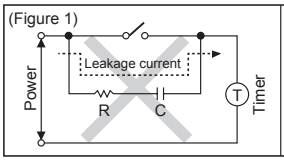
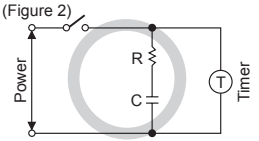
(Figure 1)



(Figure 2)



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