

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



## AT8PSN / AT8PMN 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

- Time setting range (AT8PSN: 0.05 to 10 sec, AT8PMN: 0.05 to 10 min)
- Simple time setup and direct read of time range
- Power supply
  - : 100 - 120 VAC~ 50 / 60 Hz / 200 - 240 VAC~ 50 / 60 Hz /
  - 100/110 VDC== / 24 VAC~ 50 / 60 Hz, 24 VDC==
- Application: Protect circuit when momentary power failure and start it again

### 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.
- Power supply should be insulated and limited voltage/current or Class2, SELV power supply device.
- The time of min. power supply is 0.1 sec for SEC unit model, and 2 sec for MIN unit model. The operation of timer begins after turning off the power.
- 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.
- After turning off the power, change the time range, etc.
- 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.  
For selecting the specified model, follow the Autonics website.

**AT8P** ① - ②

### ① Time unit

SN: SEC  
MN: MIN

### ② Power supply

No mark: 200 - 240 VAC~ 50 / 60 Hz  
2: 24 VAC~ 50 / 60 Hz, 24 VDC==  
6: 100 - 120 VAC~ 50 / 60 Hz  
7: 100 / 110 VDC==

## Product Components

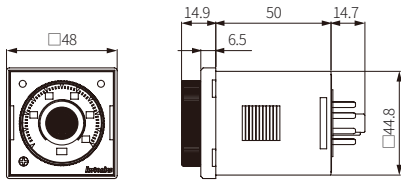
- Product (+ bracket)
- Instruction manual

## Sold Separately

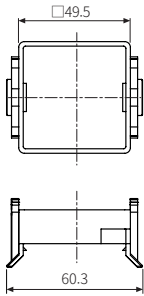
- 8-pin socket: PG-08, PS-08(N)

## Dimensions

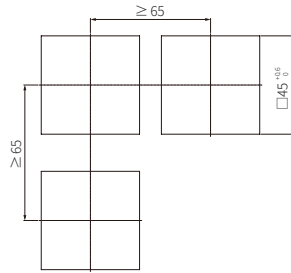
- Unit: mm, For the detailed drawings, follow the Autonics website.



### ■ Bracket



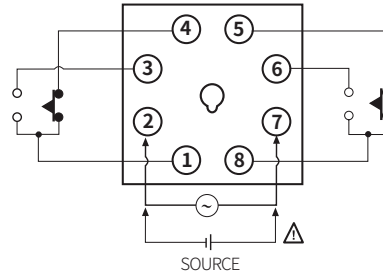
### ■ Panel cut-out



## Connections

### ⚠ Caution

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

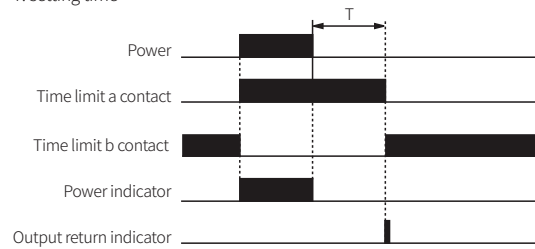


## Operation Timing Chart

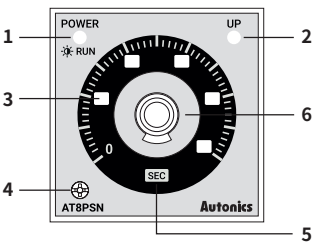
A contact will be ON simultaneously when supplying the power. The a contact will be OFF after T is passed.

Memory retention function: Even though the setting time is changed after turning off the power, the time limit a contact will be OFF after the previous setting time.

- T: setting time



## Unit Descriptions



No.	Name
1	Power indicator
2	Output return indicator
3	Time range display part
4	Time range setting switch
5	Time unit display part
6	Dial for the time setting

## Time Range

Display part	Unit	Range
0.5	SEC / MIN	0 to 0.5
1		0 to 1
5		0 to 5
10		0 to 10

## Specifications

Model	AT8P□	AT8P□-2	AT8P□-6	AT8P□-7
<b>Function</b>	Power OFF Delay			
<b>Time operation</b>	Power OFF Start			
<b>Control output</b>	Relay			
Contact type	Time limit DPDT (2c)			
Contact capacity	250 VAC~ 3 A, 30 VDC≒ 3 A resistive load			
<b>Error</b>	Repeat: ≤ ± 0.2% ± 10 ms SET: ≤ ± 5% ± 50 ms Voltage: ≤ ± 0.5% Temp.: ≤ ± 2%			
<b>Approval</b>	CE, RoHS, ENEC			
<b>Unit weight</b>	≈ 100 g			
<b>Power supply</b>	200 - 240 VAC~ ± 10%, 50 / 60 Hz	24 VAC~ ± 10% 50 / 60 Hz, 24 VDC≒ ± 10%	100 - 120 VAC~ ± 10%, 50 / 60 Hz	100 / 110 VDC≒ ± 10%
<b>Power consumption</b>	AC: ≤ 1.5 VA	AC: ≤ 0.2 VA DC: ≤ 0.2 W	AC: ≤ 1.5 VA	DC: ≤ 0.8 W
<b>Insulation resistive</b>	≥ 100 MΩ (500 VDC≒ megger)			
<b>Dielectric strength</b>	2,000 VAC~ at 50 / 60 Hz for 1 min			
<b>Noise immunity</b>	± 2 kV 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 (for 1 min) 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 (for 1 min) 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: ≥ 10,000,000 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)			