

# Autonics

## ANALOG TIMER(POWER OFF DELAY) AT8PSN/AT8PMN

### M A N U A L



Thank you very much for selecting Autonics products.  
For your safety, please read the following before using.

#### Caution for your safety

- ※ Please keep these instructions and review them before using this unit.
- ※ Please observe the cautions that follow;
- Warning** Serious injury may result if instructions are not followed.
- Caution** Product may be damaged, or injury may result if instructions are not followed.
- ※ The following is an explanation of the symbols used in the operation manual.
- Caution:** Injury or danger may occur under special conditions.

#### Warning

- In case of using this unit with machineries(Nuclear power control, medical equipment, vehicle, train, airplane, combustion apparatus, entertainment or safety device etc), it requires installing fail-safe device, or contact us for information required.**  
It may result in serious damage, fire or human injury
- This unit must be mounted on panel.**  
It may give an electric shock.
- Do not connect terminals when it is power on.**  
It may give an electric shock.
- Do not disassemble and modify this unit, when it requires.**  
If needs, please contact us.  
It may give an electric shock and cause a fire.

#### Caution

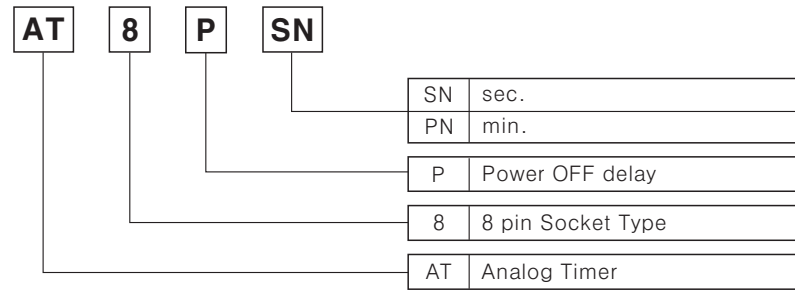
- This unit shall not be used outdoors.**  
It might shorten the life cycle of the product or give an electric shock.
- Please observe specification rating.**  
It might shorten the life cycle of the product and cause a fire.
- In cleaning the unit, do not use water or an organic solvents.**  
It might cause an electric shock or fire that will result in damage to the product.
- Do not use the load beyond rated switching capacity of Relay contact.**  
It may cause insulation failure, contact weld, contact failure, relay broken, fire etc.
- Do not use this unit at place where there are flammable or explosive gas, humidity, direct ray of the sun, radiant heat, vibration, impact etc.**  
It may cause explosion.
- Do not inflow dust or wire dregs into inside of this unit.**  
It may cause a fire or mechanical trouble.

#### Features

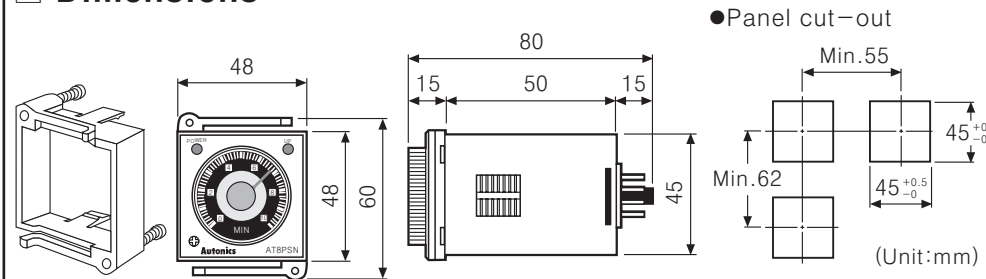
- Control time range(PSN:0.05~10sec., PMN:0.05~10min.)
- Easy time setting and direct reading of a time range with simple adjustment.
- Rated operated voltage : 100 to 120VAC(50/60Hz), 200 to 240VAC(50/60Hz), 100/110VDC, 48VDC, 24VDC
- Usage : Automatically restarted circuit when power is restored after an momentary power failure.

※ The above specification are changeable without notice anytime.

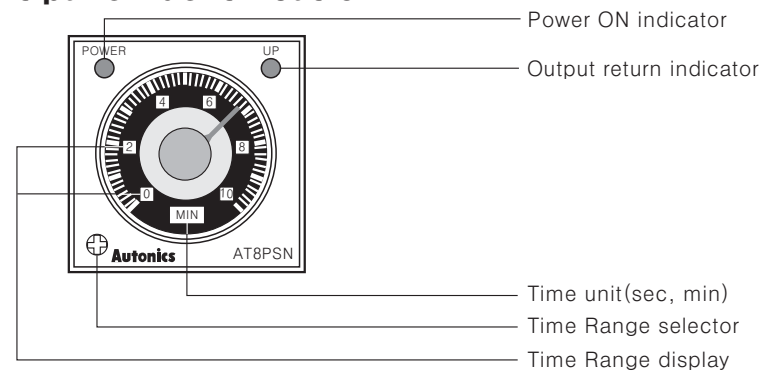
#### Ordering information



#### Dimensions



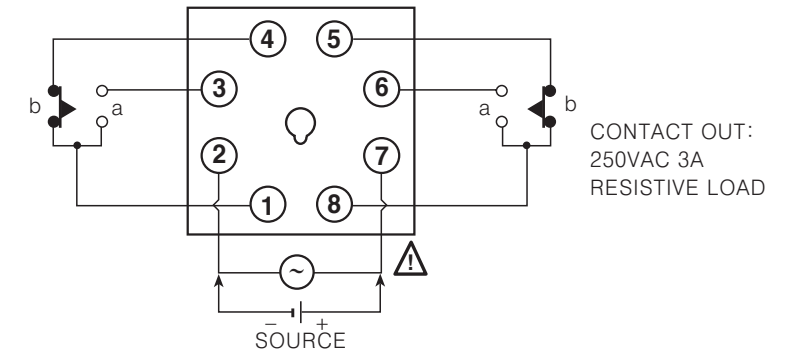
#### Front panel identification



#### Specifications

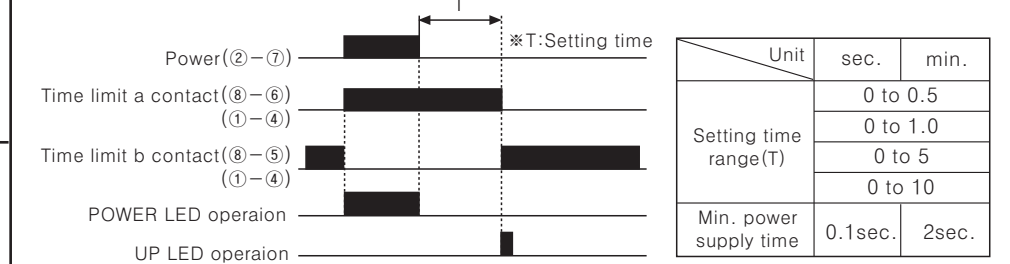
Model		AT8PSN	AT8PMN
Function		Power OFF Delay	
Time range		0.5, 1, 5, 10sec.	0.5, 1, 5, 10min.
Power supply		<ul style="list-style-type: none"> <li>• 100-120VAC 50/60Hz, 200-240VAC 50/60Hz</li> <li>• 100/110VDC, 48VDC, 24VDC</li> </ul>	
Allowable voltage range		90 to 110% of rated voltage	
Power consumption		<ul style="list-style-type: none"> <li>• 100-120VAC : Approx. 0.5VA, 200-240VAC : Approx. 0.9VA</li> <li>• 100/110VDC : Approx. 0.5W, 48VDC : Approx. 0.2W, 24VDC : Approx. 0.1W</li> </ul>	
Control output	Contact	Time-limit DPDT(2c)	
	Capacity	250VAC 3A at resistive load	
Ambient temperature		-10 to 55°C (at non-freezing status)	
Storage temperature		-25 to 65°C (at non-freezing status)	
Ambient humidity		35 to 85%RH	
Deviation		Max. ±0.3%	
Setting error		Max. ±5% ±0.05sec	
Voltage error		Max. ±0.5%	
Temperature error		Max. ±2%	
Insulation resistance		Min. 100MΩ (at 500VDC)	
Dielectric strength		2000VAC 50/60Hz for 1 minute	
Noise strength		±2kV the square wave noise(pulse width:1μs) by the noise simulator	
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz in each of X, Y, Z directions for 1 hour	
	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz in each of X, Y, Z directions for 10 minutes	
Shock	Mechanical	300m/s <sup>2</sup> (Approx. 30G) 3 times at X, Y, Z direction	
	Malfunction	100m/s <sup>2</sup> (Approx. 10G) 3 times at X, Y, Z direction	
Relay life cycle	Mechanical	Min.10,000,000 times	
	Electrical	Min.100,000 times(250VAC 3A at resistive load)	
Weight		Approx. 98g	Approx. 105g

#### Connection



#### Operation and time specification

※ "a" contact turns on when the power applied and then turns off after passing T setting time when the power off. Even though change the setting time after the power is off, time-limit "a" contacts will be off after the setting time which was set before the power off because of the setting time memory retention function.



#### Caution for using

- Power**
  - ① This product is power OFF delay timer, the min. power supplying time is 0.1sec. for AT8PSN type and 2 sec. for AT8PMN. Therefore be sure that this product will operate after power off.
  - ② Please use the power within rating power and apply or cut the power at once to prevent from chattering.
- When supply the power to the Timer with 100 to 120VAC, 200 to 240VAC, 100/110VDC, 48VDC specification, around 0.4A will be flowed for 1sec.(AT8SN), 1sec.(AT8PMN). When supply the power to the Timer with 24VDC specification, 1A will be flowed for 0.1sec.(AT8PSN), 1sec.(AT8PMN). Therefore be sure about the rating of contact and the power capacity.
- When test dielectric voltage and insulation resistance of the control panel with this unit installed.
  - ① Please isolate this unit from the circuit of control panel.
  - ② Please make all terminals of this unit short-circuited.
- Do not use this unit at below places.
  - ① Place where there are severe vibration or impact.
  - ② Place where strong alkalis or acids are used.
  - ③ Place where there are direct ray of the sun
  - ④ Place where strong magnetic field or electric noise are generated.
- Installation environment
  - ① It shall be used indoor
  - ② Altitude Max. 2000m
  - ③ Pollution Degree 2
  - ④ Installation Category II.

※ It may cause malfunction if above instructions are not followed.

#### Main products

- COUNTER
- TIMER
- TEMPERATURE CONTROLLER
- PANEL METER
- TACHOMETER/LINE SPEED METER/ PULSE METER
- DISPLAY UNIT
- PROXIMITY SENSOR
- PHOTOELECTRIC SENSOR
- FIBER OPTIC SENSOR
- PRESSURE SENSOR
- ROTARY ENCODER
- SENSOR CONTROLLER
- POWER CONTROLLER
- STEPPING MOTOR & DRIVER & CONTROLLER

### Autonics Corporation

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