

Autonics POWER OFF DELAY TIMER AT8PSN/AT8PMN SERIES

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

1. In case of using this unit with machineries(Nuclear power control, medical equipment, vehicle, train, airplane, combustion apparatus, entertainment or safety device etc), it is required to install fail-safe device, or contact us. It may cause a fire, human injury or property loss.

2. Install the unit on a panel. It may give an electric shock.

3. Do not connect, inspect or repair when power is on. It may give an electric shock.

4. Do not disassemble the case. Please contact us if it is required. It may cause an electric shock or a fire.

Caution

1. This unit shall not be used outdoors. It might shorten the life cycle of the product or give an electric shock.

2. Please observe the rated specifications. It might shorten the life cycle of the product and cause a fire.

3. Do not use beyond of the rated switching capacity of Relay contact. It may cause insulation failure, contact melt, contact failure, relay broken and fire etc.

4. In cleaning unit, do not use water or an oil-based detergent and use dry towels. It may cause an electric shock or a fire.

5. Do not use this unit in place where there are flammable or explosive gas, humidity, direct ray of the light, radiant heat, vibration and impact etc. It may cause a fire or an explosion.

6. Do not inflow dust or wire dregs into the unit. It may cause a fire or a malfunction.

Ordering information

AT	8	P	SN	-	
Item					200~240VAC
Power supply					2 24VAC/DC
Unit					6 100~120VAC
Operation					7 100/110VDC
Plug Type					SN sec
Item					MN min
Item					P Power OFF Delay
Item					8 8 Pin
Item					AT Analog Timer

※8 Pin socket(PG-08, PS-08) : Sold separately

※ The above specifications are subject to change and some models may be discontinued without notice.

Features

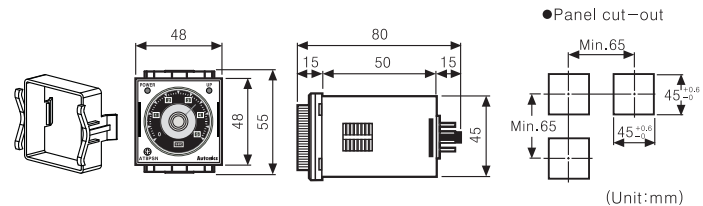
- Control time range(PSN:0.05~10 sec., PMN:0.05~10 min.)
- Easy time setting and direct reading of a time range with simple adjustment.
- Rated operated voltage : 100 to 120VAC 50/60Hz, 200 to 240VAC 50/60Hz, 100/110VDC, 24VAC 50/60Hz, 24VDC(Universal)
- Usage : Automatically restarted circuit when power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

Specifications

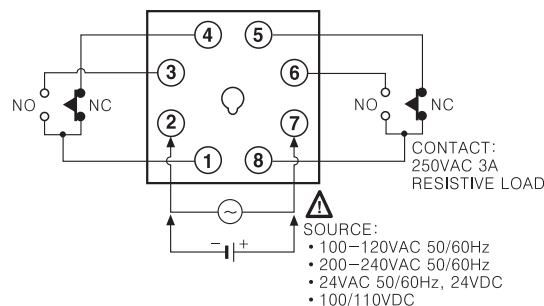
Model	AT8PSN-□	AT8PMN-□
Function	Power OFF Delay	
Control time setting range	0.05 sec ~ 10 sec	0.05 min ~ 10 min
Power supply	<ul style="list-style-type: none"> • 100~120VAC 50/60Hz • 24VAC 50/60Hz, 24VDC (Universal) 	<ul style="list-style-type: none"> • 200~240VAC 50/60Hz • 100/110VDC
Allowable voltage range	90 ~ 110% of rated voltage	
Power consumption	<ul style="list-style-type: none"> • 100~120VAC : 1.5VA • 24VAC : 0.2VA, 24VDC : 0.2W 	<ul style="list-style-type: none"> • 200~240VAC : 1.5VA • 100/110VDC : 0.8W
Control output	Time limit DPDT(2c)	
Contact	250VAC 3A resistive load	
Relay life cycle	Min.10,000,000 times	
Relay Mechanical	Min. 100,000 times(250VAC 3A resistive load)	
Electrical	Min. 100,000 times(250VAC 3A resistive load)	
Repeat error	Max. ±0.2% ±10ms	
Setting error	Max. ±5% ±50ms	
Voltage error	Max. ±0.5%	
Temperature error	Max. ±2%	
Insulation resistance	100MΩ (at 500VDC megger)	
Dielectric strength	2000VAC 50/60Hz for 1 minute	
Noise strength	Square-wave noise by noise simulator, apply ±2kV in power input terminals	
Vibration	Destruction	0.75mm amplitude at frequency of 10 to 55Hz in each of X, Y, Z directions for 1 hours
	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz in each of X, Y, Z directions for 10 minutes
Shock	Destruction	300m/s ² (Approx. 30G) 3 times at X, Y, Z direction
	Malfunction	100m/s ² (Approx. 10G) 3 times at X, Y, Z direction
Environment	Ambient temperature	-10 ~ 55°C, Storage temperature: -25 ~ 65°C
	Ambient humidity	35 ~ 85%RH, Storage Humidity: 35 ~ 85%RH
Unit weight	Approx. 100g	

※Environment resistance is rated at no freezing or condensation.

Dimensions

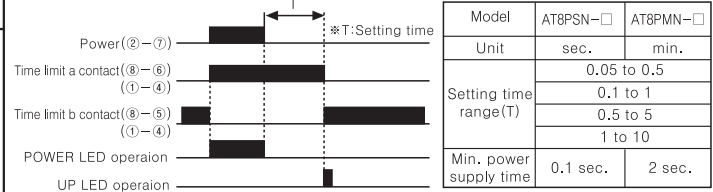


Connections



Operation and time specification

※ "a" contact becomes on as soon as power is supplied, then becomes off when the setting time [T] is up after the power is turned 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.



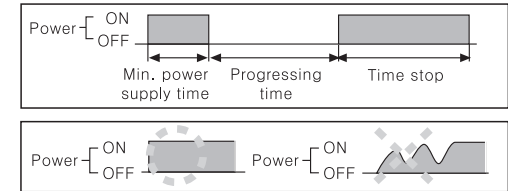
Caution for using

1. Power

①This product is power OFF delay timer, the min. power supplying time is 0.1sec. for AT8PSN-□ and 2 sec. for AT8PMN-□.

Therefore be sure that this product will operate after power off.

②Please observe the allowable voltage range and apply or cut the power at once to prevent from chattering.



2. In case of 24VAC/DC, 100/110VDC model, isolated and limited voltage/current or Class 2 source should be provided for power supply.

3. When supplying the power to the timer with 100~120VAC or 200~240VAC, approx. 0.5A will flow for 0.5 sec.(AT8PMN-□), or for 0.05 sec.(AT8PSN-□). When supplying the power to the timer with 24VDC,100/110VDC approx. 1.5A will flow for 0.5 sec.(AT8PMN-□), or for 0.05 sec.(AT8PSN-□). Therefore be sure about the rating of contact and the power capacity.

4. When performing dielectric voltage test or insulation resistance test while the unit is installed on control panel,

①Please isolate this unit from the circuit of control panel.

②Please make all terminals of this unit short-circuited.

5. Do not use this unit at below places.

①Place where there are severe vibration or impact.

②Place where strong alkalis or acids are used.

③Place where there are direct ray of the sun

④Place where strong magnetic field or electric noise are generated.

6. Installation environment

①It shall be used indoor

②Altitude Max. 2000m

③Pollution Degree 2

④Installation Category II

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

Major products

- Photoelectric sensors
- Fiber optic sensors
- Door sensors
- Door side sensors
- Area sensors
- Proximity sensors
- Pressure sensors
- Rotary encoders
- Connector/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/soldering system
- Temperature controllers
- Temperature/Humidity transducers
- SSR/Power controllers
- Counters
- Timers
- Panel meters
- Tachometer/Pulse(Rate)meters
- Display units
- Sensor controllers

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