

Thank you for choosing our Autonics product.

Please read the following safety considerations before use.

**■ Safety Considerations**

- ※Please observe all safety considerations for safe and proper product operation to avoid hazards.
- ※Safety considerations are categorized as follows.
- ⚠Warning** Failure to follow these instructions may result in serious injury or death.
- ⚠Caution** Failure to follow these instructions may result in personal injury or product damage.
- ※The symbols used on the product and instruction manual represent the following
- ⚠ symbol represents caution due to special circumstances in which hazards may occur.

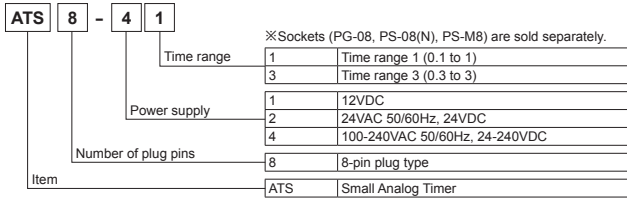
**⚠ Warning**

- 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, fire, or economic loss.
- The unit must be installed on a device panel before use.**  
Failure to follow this instruction may result in electric shock.
- Do not connect, repair, or inspect the unit while connected to a power source.**  
Failure to follow this instruction may result in electric shock.
- Do not disassemble or modify the unit. Please contact us if necessary.**  
Failure to follow this instruction may result in electric shock or fire.

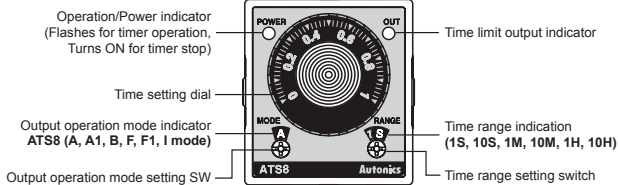
**⚠ Caution**

- Do not use the unit outdoors.**  
Failure to follow this instruction may result in shortening the life cycle of the unit, or electric shock.
- Use the unit within the rated specifications.**  
Failure to follow this instruction may result in shortening the life cycle of the unit, or fire.
- Do not use loads beyond the rated switching capacity of the relay contact.**  
Failure to follow this instruction may result in insulation failure, contact melt, contact failure, relay broken, or fire.
- Do not use water or oil-based detergent when cleaning the unit. Use dry cloth to clean the unit.**  
Failure to follow this instruction may result in electric shock or fire.
- Do not use the unit where flammable or explosive gas, humidity, direct sunlight, radiant heat, vibration, or impact may be present.**  
Failure to follow this instruction may result in fire or explosion.
- Keep dust and wire residue from flowing into the unit.**  
Failure to follow this instruction may result in fire or product damage.

**■ Ordering Information**



**■ Unit Description**

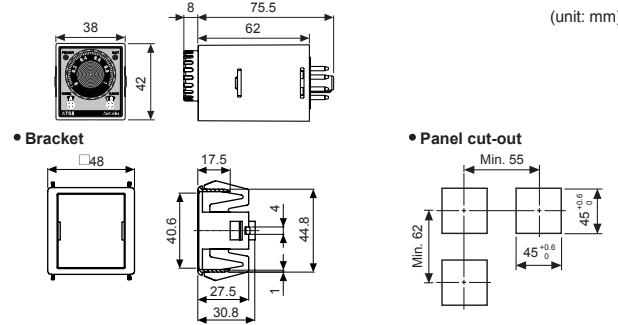


**■ Time Specifications**

Model	Time range	Time unit	Time setting range	Model	Time range	Time unit	Time setting range
ATS8-□1	1S	SEC	0.1 to 1 sec.	ATS8-□3	1S	SEC	0.3 to 3 sec.
	10S		1 to 10 sec.		10S		3 to 30 sec.
	1M		0.1 to 1 min.		1M		0.3 to 3 min.
	10M	1 to 10 min.	10M		3 to 30 min.		
	1H	0.1 to 1 hour	1H		0.3 to 3 hour		
	10H	1 to 10 hour	10H		3 to 30 hour		

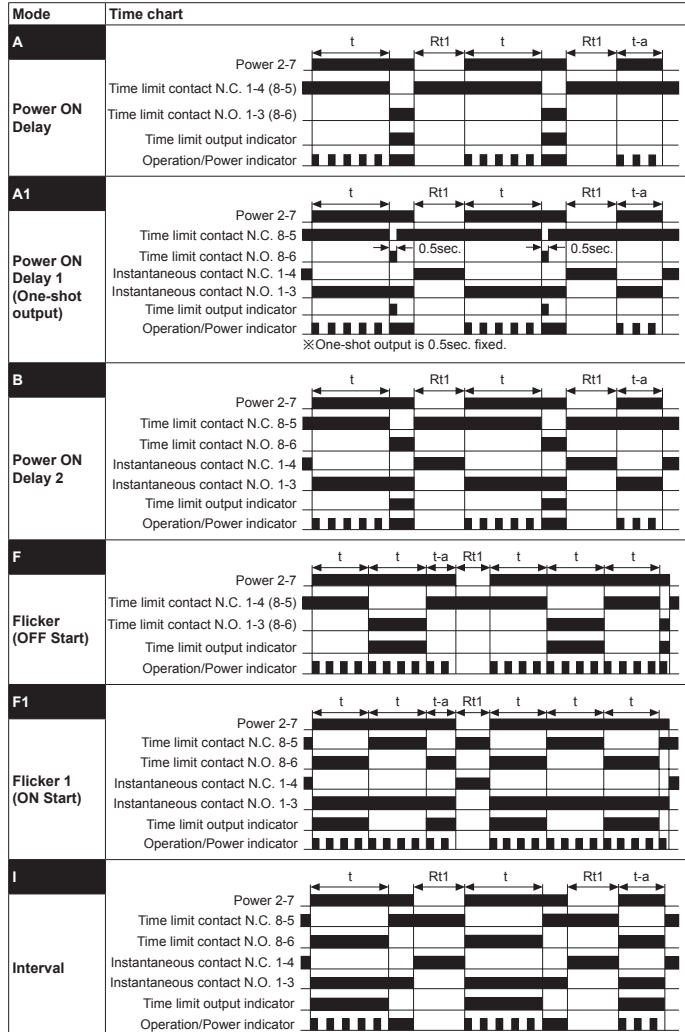
※The above specifications are subject to change and some models may be discontinued without notice.

**■ Dimensions**



**■ Output Operation Mode**

[t: Setting time, t-a: Rt: Return time, Rt1>Rt]



※In case of F, F1 output operation mode, setting time should be over 100ms. If not, it may cause abnormal output operation due to under 100ms of setting time.

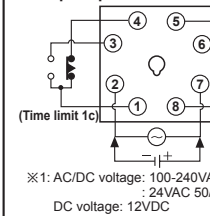
**■ Specifications**

Model	ATS8-□1	ATS8-□3
Function	Multi Function Timer	
Control time setting range <sup>※1</sup>	0.1sec. to 10hour	0.3sec. to 30hour
Power supply	+100-240VAC 50/60Hz, 24-240VDC universal +24VAC 50/60Hz, 24VDC universal + 12VDC	
Allowable voltage range	90 to 110% of rated voltage	
Power consumption	+Max. 4.2VA (100-240VAC), Max. 2W (24-240VDC) +Max. 4.5VA (24VAC), Max. 2W (24VDC) +Max. 1.5W (12VDC)	
Return time	Max. 100ms	
Time operation	Power ON Start	
Control output	Contact type	Time limit DPDT (2c) or Instantaneous SPDT (1c)+Time limit SPDT (1c) selectable by output operation mode
	Contact capacity	250VAC 3A resistive load
Relay	Mechanical Min. 10,000,000 operations	
Life cycle	Electrical Min. 100,000 operations (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	2,000VAC 50/60Hz for 1 minute	
Noise resistance	±2kV the square wave noise (pulse width 1μs) by noise simulator	
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz (for 1 min.) in each X, Y, Z direction for 1 hour
	Malfunction	0.5mm amplitude at frequency of 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 3 times
	Malfunction	100m/s <sup>2</sup> (approx. 10G) in each X, Y, Z direction 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
Approval	CE, RoHS	
Accessory	Bracket	
Weight <sup>※2</sup>	Approx. 95g (approx. 70g)	

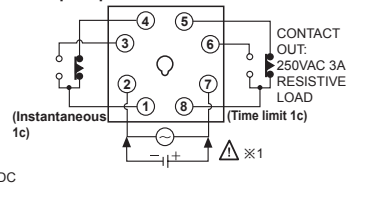
※1: Refer to time specifications for control time setting range by model.  
※2: The weight includes packaging. The weight in parentheses is for unit only.  
※ Environment resistance is rated at no freezing or condensation.

**■ Connections**

• When selecting [A], [F] output operation mode



• When selecting [A1], [B], [F1], [I] output operation mode



**■ Cautions During Use**

- Please connect DC power input after checking polarity of power.
- In case of 12VDC, 24VAC, 24VDC model, isolated and limited voltage/current or Class 2 sources should be provided for power supply.
- When applying the power to the timer, please apply the rated power at the moment by switch, relay, etc. Otherwise it might cause malfunction.
- When supply the power to the Timer, connection shown in Figure 1 might cause malfunction due to leakage current through R and C. Please connect R and C as shown in Figure 2 to prevent malfunction.
- It might cause malfunction if changing the setting time, time range or operation mode during operating unit.
- Please change the setting time, time range or operation mode after cut the power off.
- 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.
- Installation environment
  - ①It shall be used indoor
  - ②Altitude Max. 2000m
  - ③Pollution Degree 2
  - ④Installation Category II

※Failure to follow these instructions may result in product damage.

**■ 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, Co., Nd: YAG)
- Laser Welding/Cutting System
- Temperature Controllers
- Temperature/Humidity Transducers
- SSRs/Power Controllers
- Counters
- Timers
- Panel Meters
- Pressure Sensors/Pulse (Rate) Meters
- Display Units
- Sensor Controllers

**Autonics Corporation**  
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Trusted Partner In Industrial Automation

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