

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.

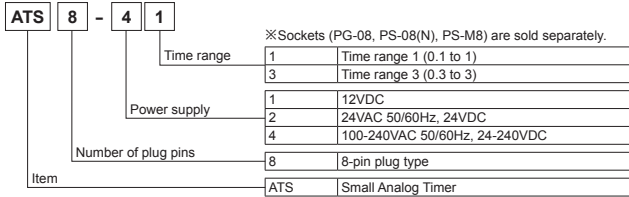
⚠ Warning

- 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.

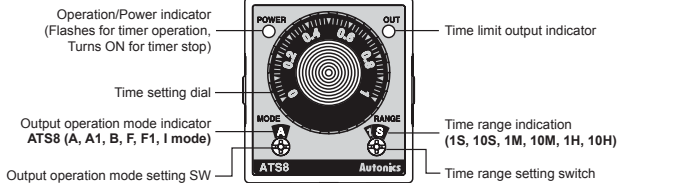
⚠ Caution

- 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

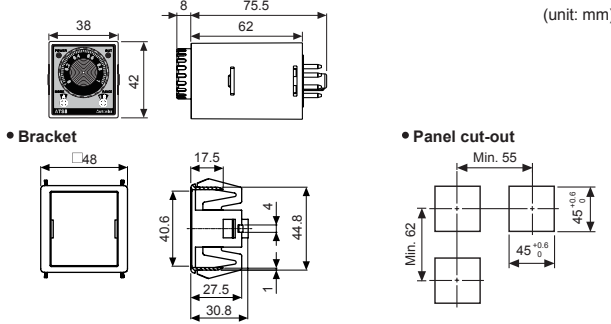


■ Time Specifications

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		

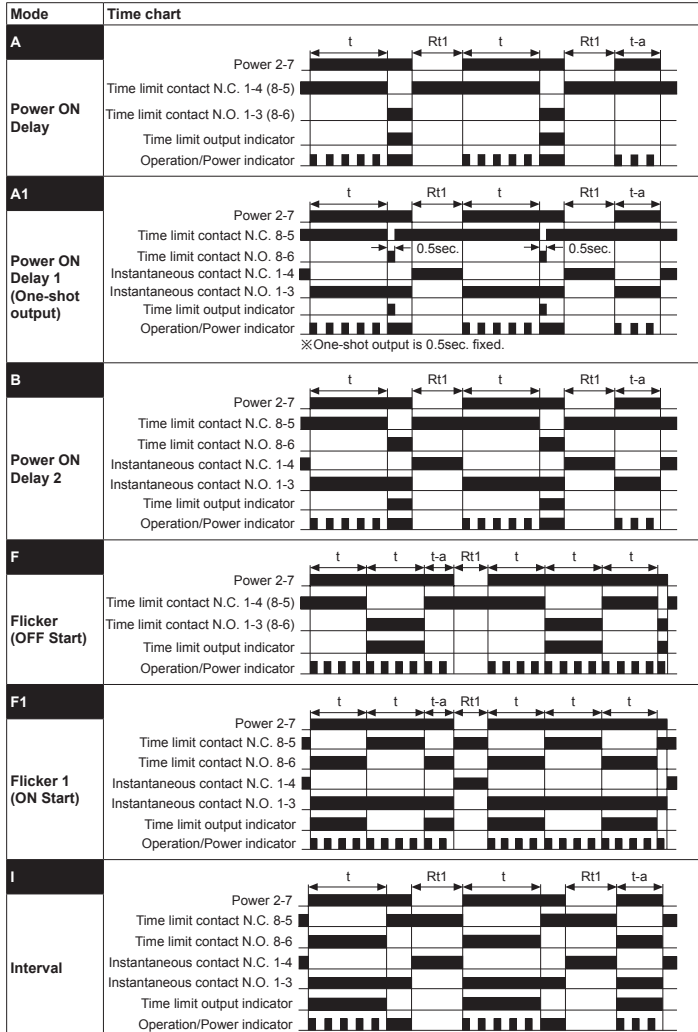
※The above specifications are subject to change and some models may be discontinued without notice.

■ Dimensions



■ Output Operation Mode

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



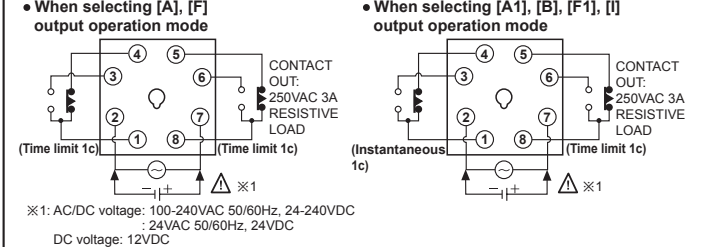
※In case of F, F1 output operation mode, setting time should be over 100ms. If not, it may cause abnormal output operation due to under 100ms of setting time.

■ Specifications

Model	ATS8-□1	ATS8-□3
Function	Multi Function Timer	
Control time setting range ^{※1}	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	Time limit DPDT (2c) or Instantaneous SPDT (1c)+Time limit SPDT (1c) selectable by output operation mode	
Relay	Mechanical	
Life cycle	Electrical	
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 ² (approx. 30G) in each X, Y, Z direction 3 times
	Malfunction	100m/s ² (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 ^{※2}	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



■ 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.
 - 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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