

W 38 × H 42 mm Twin Analog Timers



ATS8W / ATS11W 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

- Wide power supply range
: 100 - 240 VAC ~ 50 / 60 Hz, 24 - 240 VDC = universal /
24 VAC ~ 50 / 60 Hz, 24 VDC = / 12 VDC =
- Various output operations (6 operation modes)
- Multi time range (12 types of time range)
- Twin timer to set ON/OFF time individually
- Close and DIN rail mounting with the dedicated socket (PS-M8) width 41 mm (ATS8W)
- Easy installation/maintenance with the dedicated bracket for DIN 48 × 48 mm

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.

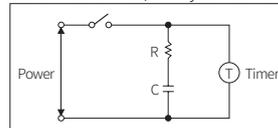
- 01. Fail-safe device must be installed when using the unit with machinery that may cause serious injury or substantial economic loss. (e.g. nuclear power control, medical equipment, ships, vehicles, railways, aircraft, combustion apparatus, safety equipment, crime/disaster prevention devices, etc.)**
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.
- 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.
- In order to avoid leakage current flowing, connect resistance and condenser like below. Otherwise, it may cause malfunction.



- Do not connect two or more timers with only one input contact or transistor simultaneously.
- 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, the actual product does not support all combinations.
For selecting the specified model, follow the Autonics website.

ATS **1** **2** - **3** **4**

1 Plug type

8: 8-pin plug
11: 11-pin plug

2 Time operation

W: Twin (flicker)

3 Power supply

1: 12 VDC=
2: 24 VAC~ 50 / 60 Hz, 24 VDC=
4: 100 - 240 VAC~ 50 / 60 Hz, 24 - 240 VDC=

4 Time range

1: 0.1 to 1
3: 0.3 to 3

Product Components

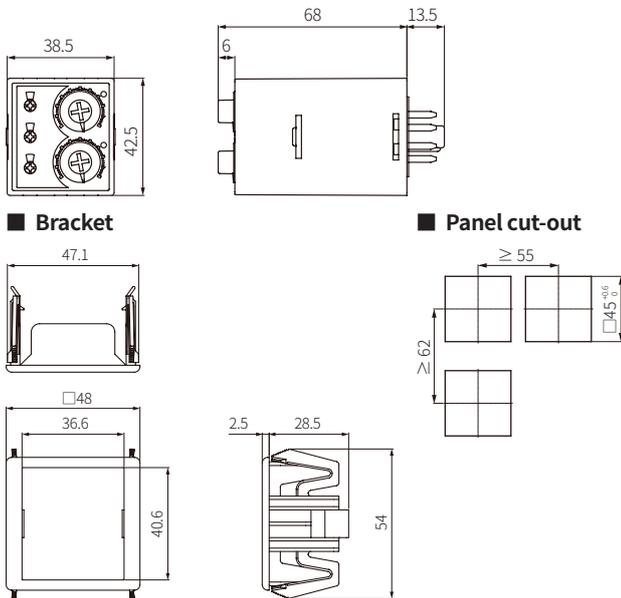
- Product (+ bracket)
- Instruction manual

Sold Separately

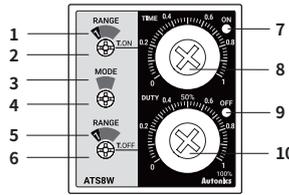
- 8-pin controller socket: PG-08, PS-08(N), PS-M8
- 11-pin controller socket: PG-11, PS-11(N)

Dimensions

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



Unit Descriptions



No.	Name
1	ON time range display part
2	ON time setting switch
3	Output operation mode display part
4	Output operation mode setting switch
5	OFF time range display part
6	OFF time range setting switch
7	ON operation indicator (red)
8	ON time dial
9	OFF operation indicator (green)
10	Dial for OFF time / ON Duty

Output Operation Mode

For the detailed timing chart for operation output mode, refer to the manual.

F1	Flicker 1 (OFF Start)
F2	Flicker 2 (OFF Start)
F3 ⁰¹⁾	Flicker 3 (OFF Start)
N1	Flicker 1 (ON Start)
N2	Flicker 2 (ON Start)
N3 ⁰¹⁾	Flicker 3 (ON Start)

01) The modes are Flicker operation with setting the TIME and DUTY.
ON time range is changed to TIME range and OFF time range is changed to DUTY range.

Time Range

ON / OFF time range display part	Unit	Range	
		ATS□W-□1	ATS□W-□3
1S	SEC	0.1 to 1	0.3 to 3
10S		1 to 10	3 to 30
1M	MIN	0.1 to 1	0.3 to 3
10M		1 to 10	3 to 30
1H	HOUR	0.1 to 1	0.3 to 3
10H		1 to 10	3 to 30

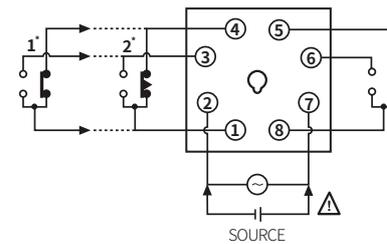
Connections

⚠ Caution

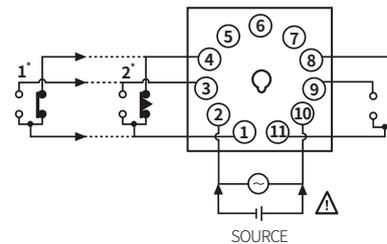
: Refer to the 'specifications' for checking the power supply and control output.

- 1*: output operation mode - F2, N2
- 2*: output operation mode - F1, F3, N1, N3

■ ATS8W



■ ATS11W



Specifications

Model	ATS□W-1□	ATS□W-2□	ATS□W-4□
Function	ON / OFF Flicker operation		
Return time	≤ 100 ms		
Time operation	Power ON Start		
Control output	Relay		
Contact type	Time limit DPDT (2c), Instantaneous SPDT (1c) + Time limit SPDT (1c)		
Contact capacity	250 VAC~ 3 A, 30 VDC= 3 A resistive load		
Error	Repeat: ≤ ± 0.2% ± 10 ms SET: ≤ ± 5% ± 50 ms Voltage: ≤ ± 0.5% Temp.: ≤ ± 2%		
Certification	CE UK c RoHS ENEC		
Unit weight (packaged)	≈ 75 g (≈ 100 g)		

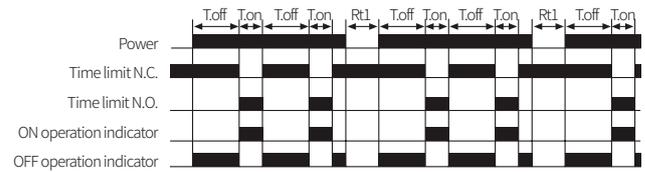
Power supply	12 VDC=	24 VAC~ 50 / 60 Hz, 24 VDC=	100 - 240 VAC~ 50 / 60 Hz, 24 - 240 VDC=
Permissible voltage range	90 to 110 % of rated voltage		
Power consumption	DC: ≤ 1.5 W	AC: ≤ 4.5 VA DC: ≤ 2 W	AC: ≤ 4.2 VA DC: ≤ 2 W
Insulation resistive	≥ 100 M.Ω (500 VDC= megger)		
Dielectric strength	Between the charging part and the case : 3,000 VAC~ at 50 / 60 Hz for 1 min		
Noise immunity	± 500 V square-wave noise by noise simulator (pulse width 1 μs)		± 2kV square-wave noise by noise simulator (pulse width 1 μs)
Vibration	0.75 mm double amplitude at frequency of 10 to 55 Hz in each X, Y, Z direction for 1 hour		
Vibration (malfunction)	0.5 mm double amplitude at frequency of 10 to 55 Hz in each X, Y, Z direction for 10 min		
Shock	300 m/s ² (≈ 30 G) in each X, Y, Z direction for 3 times		
Shock (malfunction)	100 m/s ² (≈ 10 G) in each X, Y, Z direction for 3 times		
Relay life cycle	Mechanical: ≥ 10,000,000 operations Electrical: ≥ 100,000 operations (250 VAC~ 3 A resistive load)		
Ambient temperature	-10 to 55 °C, storage: -25 to 65 °C (no freezing or condensation)		
Ambient humidity	35 to 85%RH, storage: 35 to 85%RH (no freezing or condensation)		

Output Operation Mode

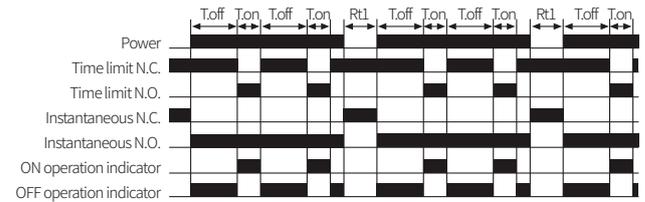
Mode setting time: ≥ 100 ms

- T.on : ON setting time, T.off : OFF setting time, TIME : cycle, DUTY : ON time duty rate, Rt : return time (Rt1 > Rt)

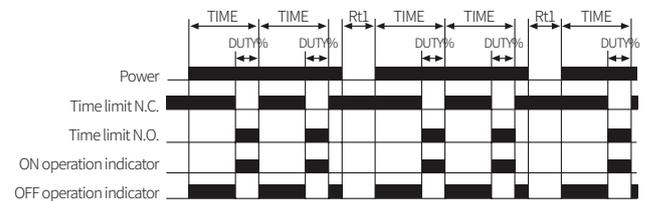
F1



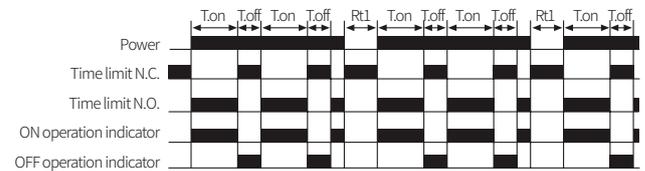
F2



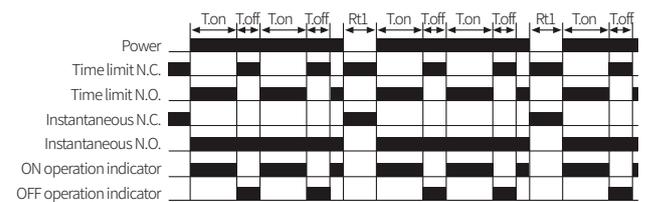
F3⁰¹⁾



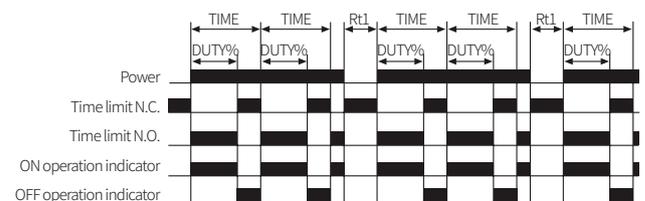
N1



N2



N3⁰¹⁾



01) The modes are Flicker operation with setting the TIME and DUTY.
ON time range is changed to TIME range and OFF time range is changed to DUTY range.

Sold Separately: 8-pin Controller Socket

• For detailed information, refer to the 'PG Series, PS Series' manual.

Appearance	Pins	Rated Voltage	Rated current	Feature	Model
	8-pin	250 VAC~	7 A (resistance load)	Controller sockets	PG-08
	8-pin	250 VAC~	7 A (resistance load)	Controller sockets (DIN Rail / Panel)	PS-08(N)
	8-pin	250 VAC~	7 A (resistance load)	Controller sockets (only for ATS series)	PS-M8

Sold Separately: 11-pin Controller Socket

• For detailed information, refer to the 'PG Series, PS Series' manual.

Appearance	Pins	Rated Voltage	Rated current	Feature	Model
	11-pin	250 VAC~	7 A (resistance load)	Controller socket	PG-11
	11-pin	250 VAC~	7 A (resistance load)	Controller socket (DIN Rail / Panel)	PS-11(N)