Twin Timer with free power, compact size W38×H42mm

▣ Features

- Wide power supply range
  : 100-240VAC 50/60Hz / 24-240VDC (universal),
  24VAC 50/60Hz / 24VDC (universal), 12VDC
- 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 a dedicated socket (PS-M8) width 41mm
- Easy mounting and installation/maintenance with
  dedicated bracket for DIN 48×48mm

Please read "Caution for your safety" in operation manual before using.

▣ Ordering information

ATS 8 W – 4 1

※Sockets (PG-08, PS-08, PS-M8, PG-11, PS-11) are sold separately.

Time range	1	Time range 1(0.1 to 1)
	3	Time range 3(0.3 to 3)
Power supply	1	12VDC
	2	24VAC / 24VDC
	4	100-240VAC / 24-240VDC
Time operation	W	Twin(Flicker) operation
Number of plug pins	8	8-pin plug type
	11	11-pin plug type
Item	ATS	Small Analog Timer

▣ Specifications

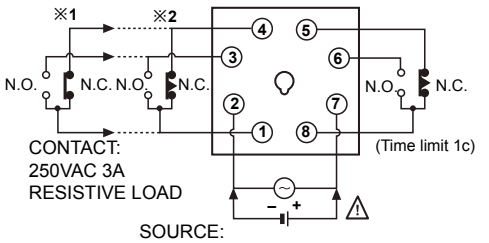
Model		ATS8W-□1	ATS11W-□1	ATS8W-□3	ATS11W-□3
Function		ON/OFF Flicker operation			
Control time setting range		0.1sec to 10hour		0.3sec to 30hour	
Power supply		•100-240VAC 50/60Hz, 24-240VDC (universal) •24VAC 50/60Hz, 24VDC (universal) •12VDC			
Allowable voltage range		90 to 110% of rated voltage			
Power consumption		•100-240VAC : 4.2VA, 24-240VDC : 2W •24VAC : 4.5VA, 24VDC : 2W •12VDC : 1.5W			
Return time		Max. 100ms			
TIme operation		Power ON Start type			
Control output	Contact type	Time limit DPDT(2c), Instantaneous SPDT(1c)+Time limit SPDT(1c) selectable according to output operation mode			
	Contact capacity	250VAC 3A resistive load			
Relay life cycle	Mechanical	Min. 10,000,000 operations			
	Electrical	Min. 100,000 operations(250VAC 3A resistive load)			
Repeat error		Max. ±0.2% ±10ms			
Set 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 min.			
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 of X, Y, Z directions for 1 hour			
	Malfunction	0.5mm mplitude at frequency of 10 to 55HHz(for 1 min.) in each of X, Y, Z directions for 10 min.			
Shock	Mechanical	300m/s² (approx. 30G) in each of X, Y, Z directions 3 times			
	Malfunction	100m/s² (approx. 10G) in each of X, Y, Z directions 3 times			
Environment	Ambient temperature	-10 to 55℃, storage: -25 to 65℃			
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH			
Approval		CE cULus			
Accessory		Bracket			
Unit weight		Approx. 72g			

※Environment resistance is rated at no freezing or condensation.

▣ Connections

◎ ATS8W

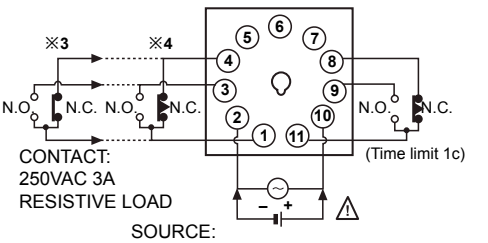
※1: When selecting [F2], [N2] output operation mode
※2: When selecting [F1], [F3], [N1], [N3] output operation mode



SOURCE:
•100-240VAC 50/60Hz, 24-240VDC
•24VAC 50/60Hz, 24VDC
•12VDC

◎ ATS11W

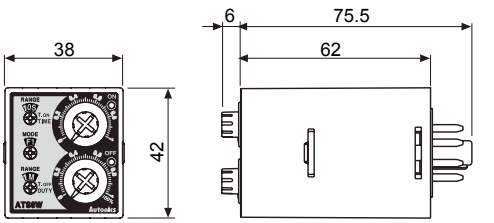
※3: When selecting [F2], [N2] output operation mode
※4: When selecting [F1], [F3], [N1], [N3] output operation mode



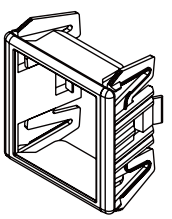
SOURCE:
•100-240VAC 50/60Hz, 24-240VDC
•24VAC 50/60Hz, 24VDC
•12VDC

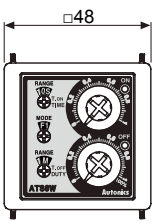
▣ Dimensions

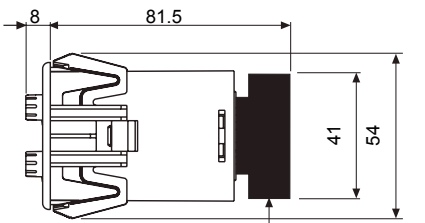
(unit : mm)



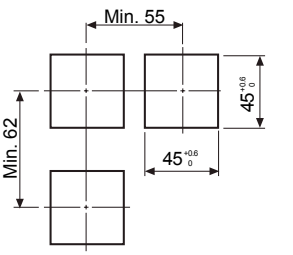
● Bracket



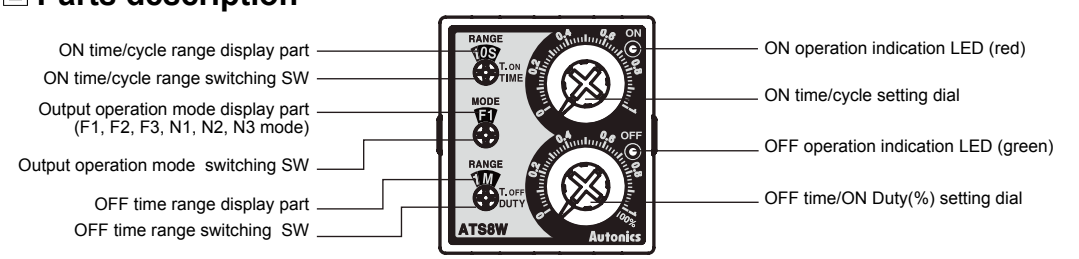




●Panel cut-out



▣ Parts description



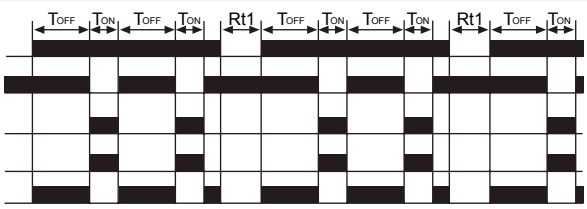
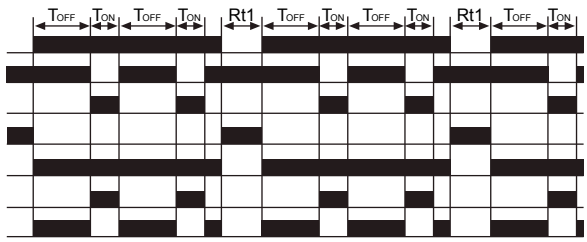
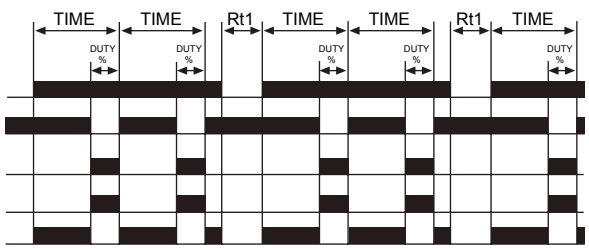
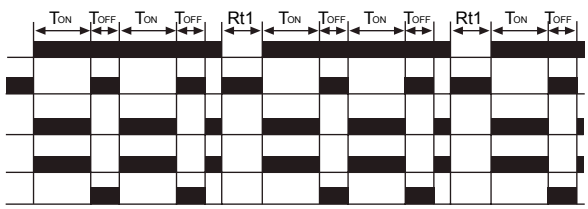
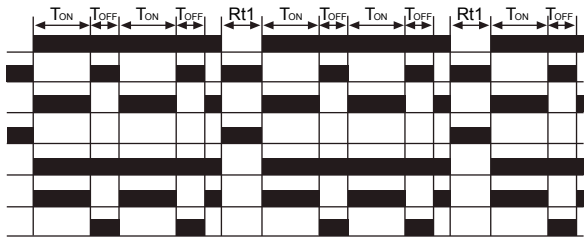
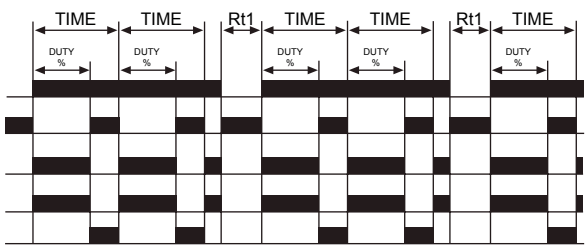
※Turn the time range switching SW and output operation mode switching SW clockwise.

▣ Time range

Time range	Time unit	ATS8W-□1 ATS11W-□1	ATS8W-□3 ATS11W-□3
		Setting time range	Setting time range
1S	sec	0.1 to 1 sec	0.3 to 3 sec
10S		1 to 10 sec	3 to 30 sec
1M	min	0.1 to 1 min	0.3 to 3 min
10M		1 to 10 min	3 to 30 min
1H	hour	0.1 to 1 hour	0.3 to 3 hour
10H		1 to 10 hour	3 to 30 hour

▣ Output operation mode

[T_{ON} : ON setting time, T_{OFF} : OFF setting time, TIME : Cycle, DUTY : ON Time duty rate, Rt : Return time, Rt1>Rt]

Mode	Time chart
F1 **OFF Start Flicker1**	
F2 **OFF Start Flicker 2**	
F3 **OFF Start Flicker 3**	
N1 **ON Start Flicker 1**	
N2 **ON Start Flicker 2**	
N3 **ON Start Flicker 3**	

※If the time is set too short, the output may not work properly due to contact output response time. Please set the time at least over 100ms.

※F3, N3 mode operates fliker by setting cycle(TIME) and ON Duty(%). ON time range changes to cycle(TIME) range and OFF time range changes to ON Duty(%).

▣ Proper usage

◎ Terminal connection

- Refer to the connection diagrams and wire it correctly.
- Power connection
  For power connection of ATS8W/ATS11W Series , when it is AC power, connect it to the designated power terminal regardless of polarity. When it is DC power, be sure that the polarity for connecting.

Power supply	8-pin type	11-pin type
AC Type	Terminal ② - ⑦	Terminal ② - ⑩
DC Type	Terminal ② ← ⊖ Terminal ⑦ ← ⊕	Terminal ② ← ⊖ Terminal ⑩ ← ⊕

- Turn OFF a power switch and be sure that not to supply induced voltage, residual voltage between timer power terminals. (When wiring power cable parallel with high voltage line, power line, induced voltage may occur between power terminals.)
- For DC power, ripple should be below 10% and power voltage should be within the allowable range.
- Use contact such as switch, relay, etc to supply power voltage at once. If supplying power slowly, its time may be up regardless of set value or power may be not reset.
- Load for control output should be below the rated load capacity.

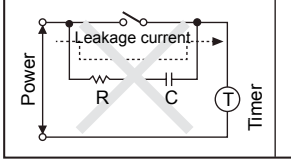
◎ Changing of set time, time range, operation mode

It may cause malfunction when changing set time, time range, or operation mode during timer operation. Turn OFF the power and change set time, time range, or operation mode.

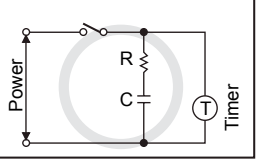
◎ Common

- Be sure that when using a timer at high temperature for a long time, it may cause deterioration for inner parts(electrolytic condenser, etc.).
- When supplying the power to timer, do not wire it as (Figure 1). This wiring causes timer malfunction due to path of peripheral leakage current from resistance and condenser.
  Connect resistance and condenser as (Figure 2) to prevent from timer malfunction by peripheral leakage current .

(Figure 1)



(Figure 2)



- Do not use this unit at below places.
- Place where temperature or humidity is out of the rated specifications.
- Place where there is condensation by temperature changes.
- Place where flammable gas or corrosive gas.
- Place where there are dust, oil or severe vibration or impact.
- Place where strong alkalis or acids are used.
- Place where there are direct ray of the sun.
- Place where strong magnetic field or electric noise are generated.