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 the dedicated socket (PS-M8) width 41mm (for ATS8W)
- Easy mounting and installation/maintenance with
  the dedicated bracket for DIN 48×48mm

⚠ **Please read "Safety Considerations" in operation manual before using.**

▣ Ordering Information

ATS 8 W — 4 1

Time range	1	Time range 1 (0.1 to 1)
	3	Time range 3 (0.3 to 3)
Power supply	1	12VDC
	2	24VAC 50/60Hz, 24VDC
	4	100-240VAC 50/60Hz, 24-240VDC
Time operation	W	Twin (flicker) operation
Number of plug pins	8	8-pin plug type
	11	11-pin plug type
Item	ATS	Compact Analog Timer

※8-pin socket (PG-08, PS-08(N), PS-08) and 11-pin socket (PG-11, PS-11(N)) are sold separately.

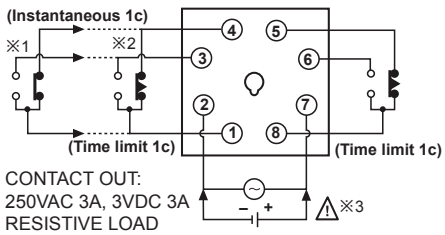
▣ Specifications

Model		**ATS8W-□1**	**ATS11W-□1**	**ATS8W-□3**	**ATS11W-□3**
Function		**ON/OFF Flicker operation**			
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			
Timing 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, 30VDC⎓ 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		Over 100MΩ (at 500VDC megger)			
Dielectric strength		2,000VAC 50/60Hz for 1 minute			
Noise immunity	ATS□W-1□ ATS□W-2□	±500V the square wave noise (pulse width 1μs) by noise simulator			
	ATS□W-4□	±2kV the square wave noise (pulse width 1μs) by noise simulator			
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz (for 1min) in each X, Y, Z direction for 1hour			
	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz (for 1min) in each X, Y, Z direction for 10min			
Shock	Mechanical	300m/s² (approx. 30G) in each X, Y, Z direction 3 times			
	Malfunction	100m/s² (approx. 10G) in each X, Y, Z direction 3 times			
Environment	Ambient temp.	-10 to 55℃, storage: -25 to 65℃			
	Ambient humi.	35 to 85%RH, storage: 35 to 85%RH			
Approval		CE c UL us			
Accessory		Bracket			
Weight※2		Approx. 100g (approx. 75g)			

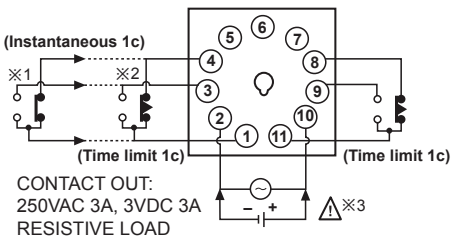
※1: Refer to time specifications for control time setting range by model.
※2: The weight includes packaging. The weight in parenthesis is for unit only.
※Environment resistance is rated at no freezing or condensation.

▣ Connections

◎ ATS8W



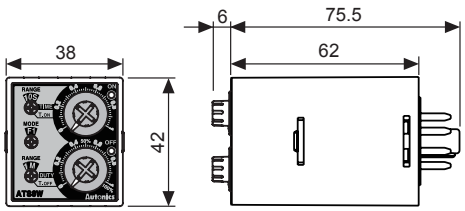
◎ ATS11W



※1: When selecting [F2], [N2] output operation mode.
※2: When selecting [F1], [F3], [N1], [N3] output operation mode.
※3: AC/DC voltage: 100-240VAC 50/60Hz, 24-240VDC
24VAC 50/60Hz, 24VDC
DC voltage: 12VDC

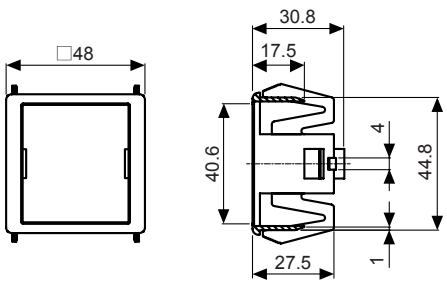
▣ Dimensions

(unit: mm)

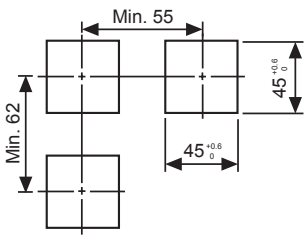


※8-pin socket (PG-08, PS-08(N), PS-08) and 11-pin socket (PG-11, PS-11(N)) are sold separately.
Refer to the '(G)Connectors/Connector Cables/Sensor Distribution Boxes/Sockets'.

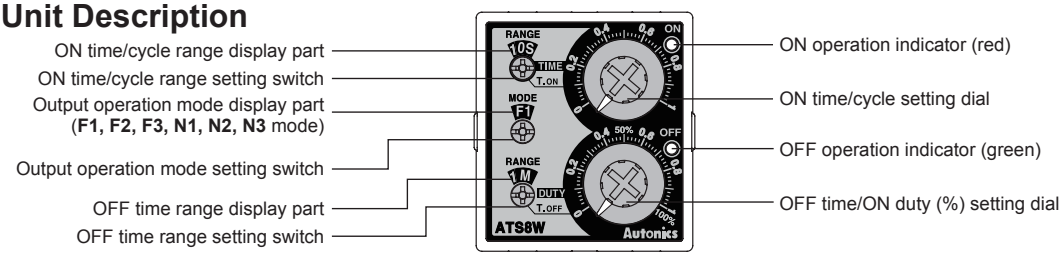
● **Bracket**



●**Panel cut-out**



▣ Unit Description

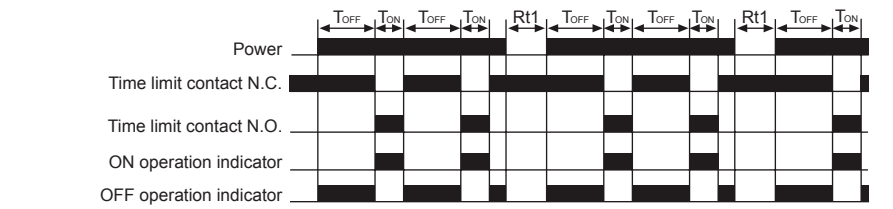
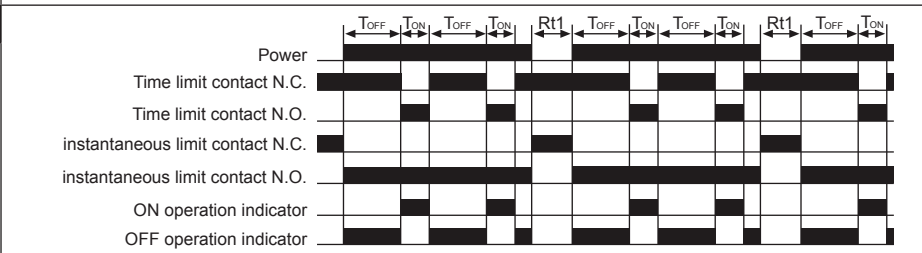
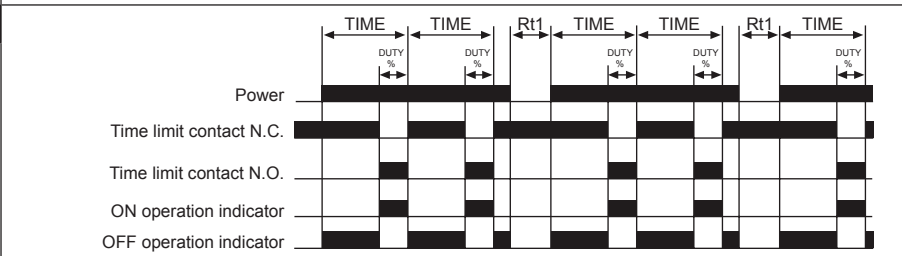
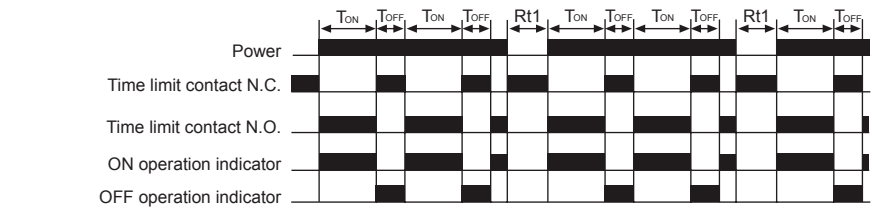
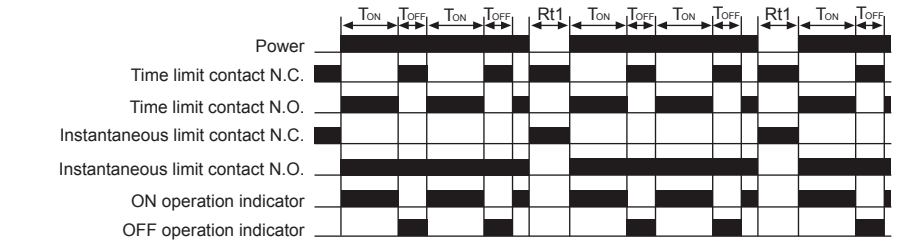
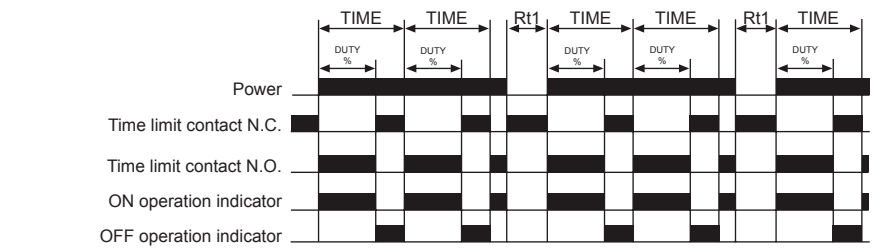


▣ Time Specifications

Model	Time range	Time unit	Time setting range
ATS□W-□1	1S	SEC	0.1 to 1sec
	10S		1 to 10sec
	1M	MIN	0.1 to 1min
	10M		1 to 10min
	1H	HOUR	0.1 to 1hour
	10H		1 to 10hour
ATS□W-□3	1S	SEC	0.3 to 3sec
	10S		3 to 30sec
	1M	MIN	0.3 to 3min
	10M		3 to 30min
	1H	HOUR	0.3 to 3hour
	10H		3 to 30hour

▣ 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]

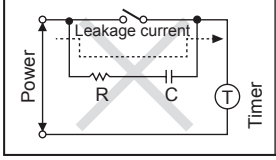
Mode	Time chart
F1 **OFF Start Flicker1**	
F2 **OFF Start Flicker2**	
F3 **OFF Start Flicker3**	
N1 **ON Start Flicker1**	
N2 **ON Start Flicker2**	
N3 **ON Start Flicker3**	

※Setting time should be over 100ms. If not, it may cause abnormal output operation due to under 100ms of setting time.
※[F3], [N3] mode operates flicker by setting cycle (time) and ON duty (%). ON time range changes to cycle (time) range and OFF time range changes to ON duty (%).

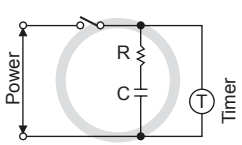
▣ Proper Usage

- Connect DC power input after checking polarity of power.
- 12VDC, 24VDC, 24VAC power supply should be insulated and limited voltage/current or Class 2, SELV power supply device.
- When applying the power to the timer, apply the rated power at the moment by switch, relay, etc. Otherwise it might cause malfunction.
- [F3], [N3] mode operates flicker by setting cycle (time) and ON duty(%). ON time range changes to cycle (time) range and OFF time range changes to ON duty(%).
- When supply the power to the Timer, connection shown in (Figure 1) might cause malfunction due to leakage current through R and C.
  Connect R and C as shown in (Figure 2) to prevent malfunction.

(Figure 1)



(Figure 2)



- It might cause malfunction if changing the setting time, time range or operation mode during operating unit. Change the setting time, time range or operation mode after cut the power off.
- Do not use this unit at below places.
  - Place where there are 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.
- Installation environment
  - Indoors
  - Altitude max. 2,000m
  - Pollution degree 2
  - Installation category II