

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 | |
| | | | | | 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 |

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

■ 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 55Hz(for 1 min.) in each of X, Y, Z directions for 10 min. | | |
| Shock | Mechanical | 300m/s ² (approx. 30G) in each of X, Y, Z directions 3 times | | |
| | Malfunction | 100m/s ² (approx. 10G) in each of X, Y, Z directions 3 times | | |
| Environment | Ambient temperature | -10 to 55°C, storage: -25 to 65°C | | |
| | Ambient humidity | 35 to 85%RH, storage: 35 to 85%RH | | |
| Approval | | | | |
| Accessory | Bracket | | | |
| Unit weight | Approx. 72g | | | |

※Environment resistance is rated at no freezing or condensation.

(A) Photo electric sensor

(B) Fiber optic sensor

(C) Door/Area sensor

(D) Proximity sensor

(E) Pressure sensor

(F) Rotary encoder

(G) Connector/Socket

(H) Temp. controller

(I) SSR/ Power controller

(J) Counter

(K) Timer

(L) Panel meter

(M) Tacho/ Speed/ Pulse meter

(N) Display unit

(O) Sensor controller

(P) Switching mode power supply

(Q) Stepper motor& Driver&Controller

(R) Graphic/ Logic panel

(S) Field network device

(T) Software

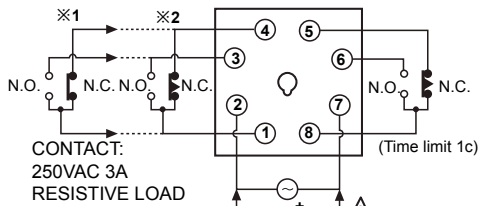
(U) Other

ATS8W / ATS11W Series

■ Connections

○ ATS8W

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

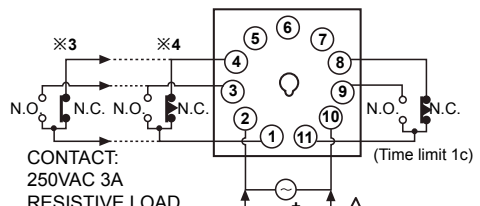


CONTACT:
250VAC 3A
RESISTIVE LOAD

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

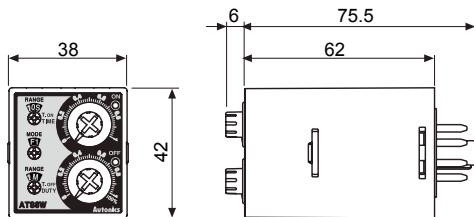


CONTACT:
250VAC 3A
RESISTIVE LOAD

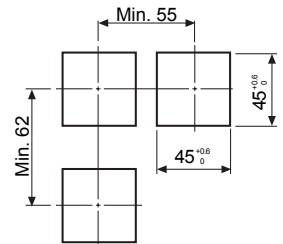
SOURCE:
•100-240VAC 50/60Hz, 24-240VDC
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■ Dimensions

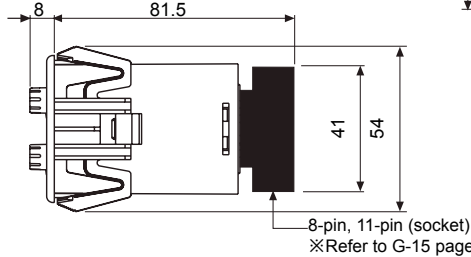
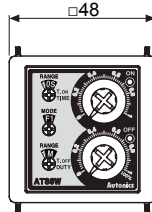
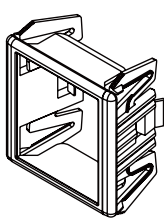
(unit : mm)



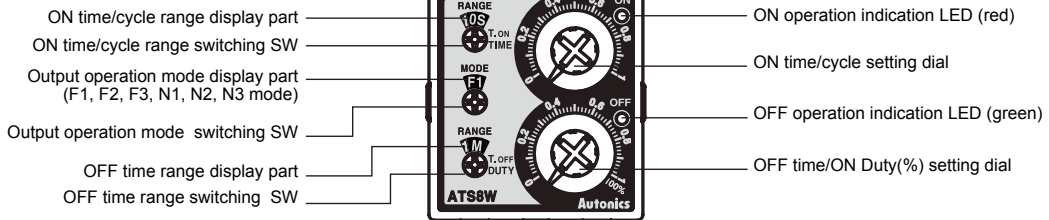
● Panel cut-out



● Bracket



■ 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 Flicker 1 | |
| 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 flicker by setting cycle(TIME) and ON Duty(%). ON time range changes to cycle(TIME) range and OFF time range changes to ON Duty(%).

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- (U) Other

ATS8W / ATS11W Series

■ 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 ② ← ⊖ |
| | Terminal ⑦ ← ⊕ | Terminal ⑩ ← ⊕ |

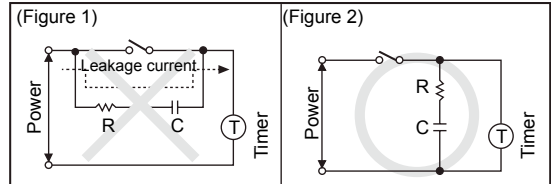
- Turn OFF a power switch and be sure that not to supply induced voltage, residual voltage between timer power terminals. (When wiring power cable parallel with high voltage line, power line, induced voltage may occur between power terminals.)
- For DC power, ripple should be below 10% and power voltage 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 .



- 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.