

ATS8W / ATS11W Series

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
- Easy mounting and installation/maintenance with
the 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(N), PS-M8, PG-11, PS-11(N)) 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 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 | 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 | •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 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 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 temperature | -10 to 55°C, storage: -25 to 65°C | | |
| | Ambient humidity | 35 to 85%RH, storage: 35 to 85%RH | | |
| Approval | CE, c, UL | | | |
| Accessory | Bracket | | | |
| Unit weight | Approx. 72g | | | |

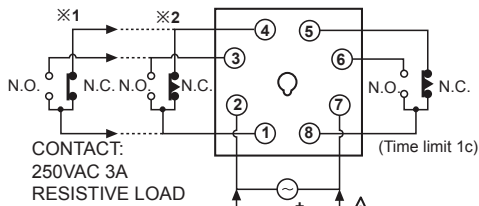
※Environment resistance is rated at no freezing or condensation.

Small Twin Timer

Connections

ATS8W

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

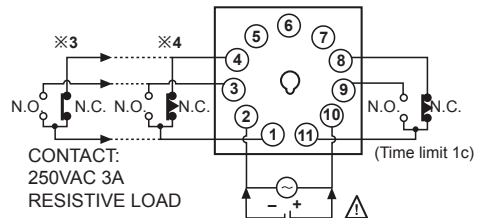


CONTACT:
250VAC 3A
RESISTIVE LOAD

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

ATS11W

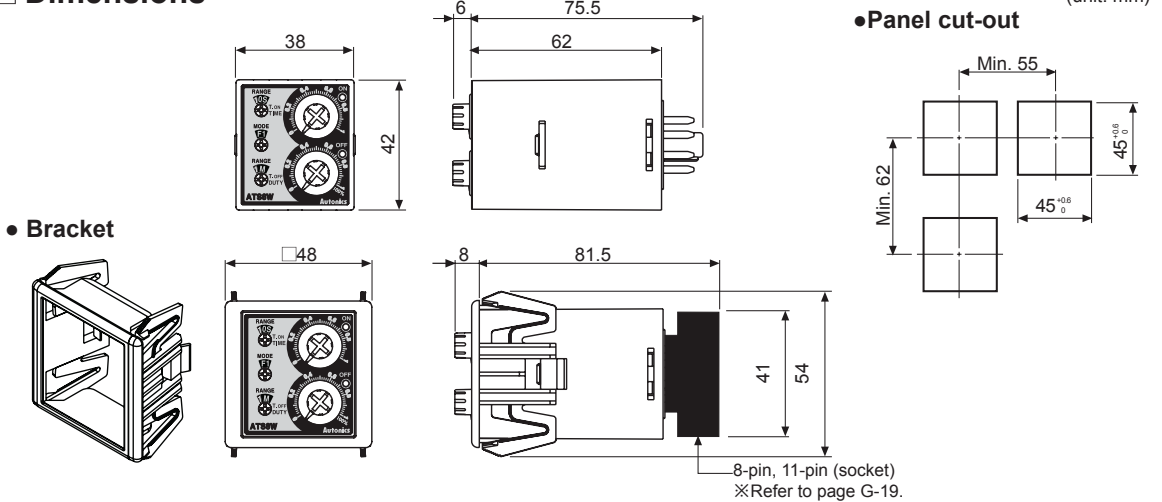
- ※3: When selecting [F2], [N2] output operation mode
- ※4: When selecting [F1], [F3], [N1], [N3] output operation mode



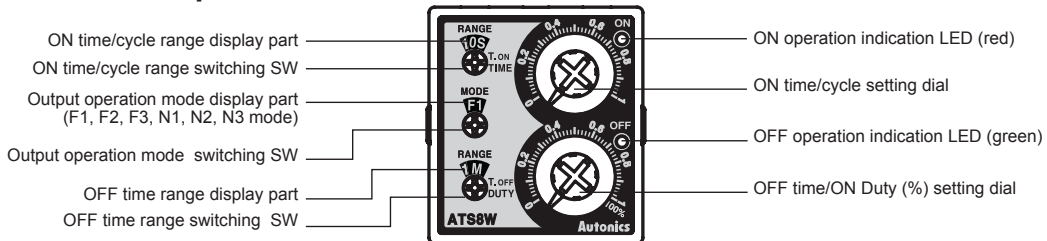
CONTACT:
250VAC 3A
RESISTIVE LOAD

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

Dimensions



Unit 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 |

- (A) Photoelectric Sensors
- (B) Fiber Optic Sensors
- (C) Door/Area Sensors
- (D) Proximity Sensors
- (E) Pressure Sensors
- (F) Rotary Encoders
- (G) Connectors/ Sockets
- (H) Temperature Controllers
- (I) SSRs / Power Controllers
- (J) Counters
- (K) Timers
- (L) Panel Meters
- (M) Tacho / Speed / Pulse Meters
- (N) Display Units
- (O) Sensor Controllers
- (P) Switching Mode Power Supplies
- (Q) Stepper Motors & Drivers & Controllers
- (R) Graphic/ Logic Panels
- (S) Field Network Devices
- (T) Software

ATS8W / ATS11W Series

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 | |
| <p>※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 (%).</p> | |

■ 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 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 ← ⊕ |

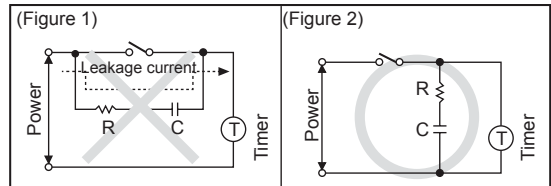
- Turn OFF a power switch and be sure that not to supply induced voltage, residual voltage between timer power terminals. (When wiring power cable parallel with high voltage line, power line, induced voltage may occur between power terminals.)
- For DC power, ripple should be below 10% and power voltage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



- 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 there is flammable gas or corrosive gas.
- Place where there is dust, oil or severe vibration or impact.
- Place where strong alkalis or acids are used.
- Place where there is direct ray of the sun.
- Place where strong magnetic field or electric noise is generated.

| | |
|-----|----------------------------------------|
| (A) | Photoelectric Sensors |
| (B) | Fiber Optic Sensors |
| (C) | Door/Area Sensors |
| (D) | Proximity Sensors |
| (E) | Pressure Sensors |
| (F) | Rotary Encoders |
| (G) | Connectors/ Sockets |
| (H) | Temperature Controllers |
| (I) | SSRs / Power Controllers |
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