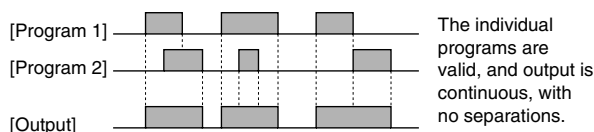


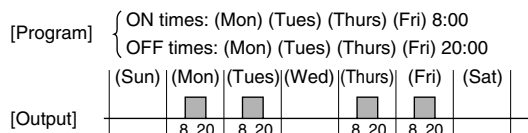
PRECAUTIONS IN USING THE A-TB TIME SWITCHES

Precautions when setting the program

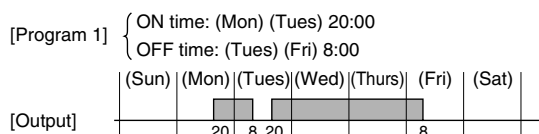
1) If two or more programs are set so that they overlap



2) If the same program is specified for multiple days, specifying multiple days when the ON time is specified the same time setting to be entered for multiple days, at one time.



3) When setting a program that extends over two or more days (multi-day program), setting the ON and OFF times separately for all of the days to which that time applies enables multiple days to be specified at one time.



4) In the pulse setting mode, if a pulse width of 61 or more seconds is set for 23 : 59, the output will be cut off at 0 : 00.00", and operation will not be carried over to subsequent days. If a separate program has been specified for 0 : 00, however, output will be continuous, without interruption.

5) When the "Mode Change" switch is set to the "TIMER1 (2)" mode, no output operation is carried out based on the program; instead, the previous status is maintained. For this reason, the "Mode Change" switch should always be returned to the "TIME" mode when operation has been completed.

6) Entering any one of the settings listed below will cause a setting error, and no writing will be carried out even when the [WRITE] button is pressed. The location in error will flash.

If this happens, correct the setting for the location where the problem has occurred, and press the [WRITE] button again.

- A setting has not been entered for the day, time, minute, or another parameter.
- The day, time, and minute settings entered for the ON and OFF times are exactly the same.
- The number of days is different for the ON and OFF times.

Precautions concerning handling methods and usage

1) Use the time switch in ambient temperatures of -10°C to $+50^{\circ}\text{C}$ 14°F to 122°F .

2) Use the time switch in ambient humidities of 85% R.H. or less.

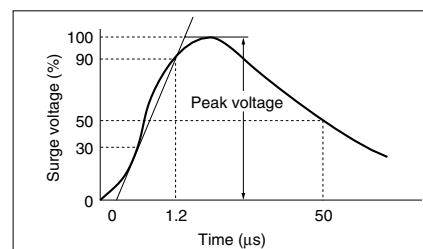
3) Prevent using the time switch in such places where inflammable or corrosive gas is generated, much dust exists, oil is splashed and considerable shock and vibration occur.

4) Since the main body cover is made of polycarbonate resin, prevent contact with organic solvents such as methyl alcohol, benzene and thinner, or strong alkali materials such as ammonia and caustic soda.

5) External surge protection may be required if the following values are exceeded. Otherwise, the internal circuit will be damaged.

Surge waveform

[Unipolar full wave voltage of $\pm(1.2 \times 50) \mu\text{s}$]



6) Provide chattering absorbing circuit to control the circuit in which chattering is a problem.

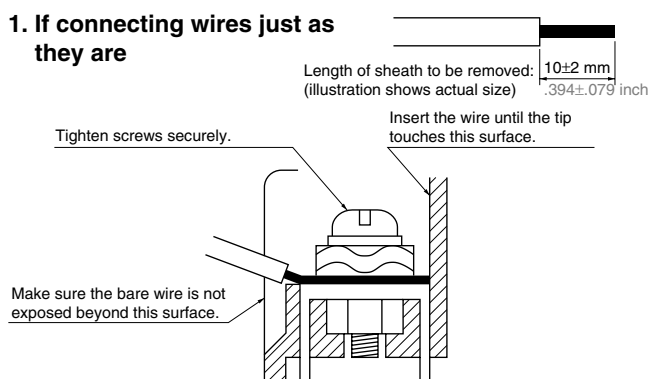
7) Provide circuit breaker, fuse or other protective devices for the side of power supply.

8) The power failure compensation function provides compensation if power is supplied continuously to the time switches. The internal battery is fully charged, but if the battery capacitance has dropped because of natural discharging, or if the battery has discharged completely, there may be times when the switch does not operate immediately when the power is turned on. If this happens, check to make sure that the clock is operating normally immediately after the power is turned on, and then set the clock to the proper time.

Precautions concerning wiring

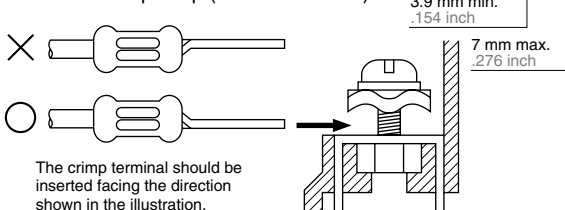
Connections should be made using wiring of $\phi 1$ to $\phi 1.6$, or 1.25 to 2 mm^2 , with a 600V vinyl insulating sheath.

1. If connecting wires just as they are



2. Using crimp terminals

Use a crimp terminal with an insulating tube and an open tip (for M3.5 screws).



PRECAUTIONS IN USING THE A-TB TIME SWITCHES

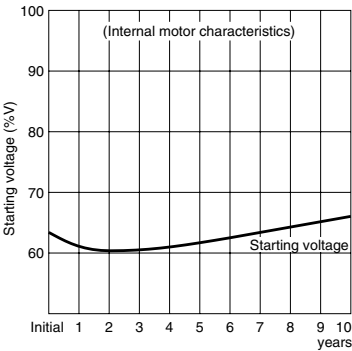
Connection Methods

	When time switches are directly controlled	When the electromagnetic breaker and contactor are used in combination	
		Single-phase	3-phase
If the power supplies for the time switches and the load are separate			
If the same power supply is used for the time switches and the load (Connect a crossover between S2 and COM.)			
Example of connecting the time switches and remote control transmitter breaker (The output from the time switches is a stand-alone circuit, and is applied to 1C.)			

Data

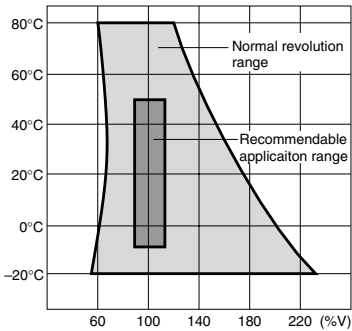
1. Life characteristics

Applied for AC motor type.



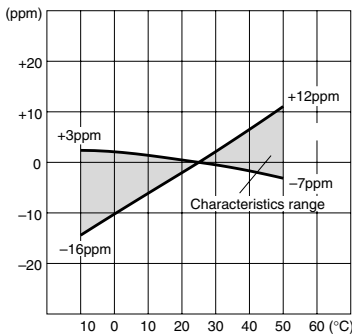
2. Normal motor revolution characteristics

Applied for AC motor type.



3. Temperature characteristics of quartz oscillation accuracy

Applied for quartz power-failure compensation type.



A-TB TIME SWITCHES COMMON OPTIONS

Mounting parts (Unit: mm inch, Tolerance: $\pm 1 \pm .039$)

<ul style="list-style-type: none">Mounting rails (Applicable for DIN and IEC standards) <p>AT8-DLA1 Length: 1 m aluminum</p>	<ul style="list-style-type: none">Fastening plate <p>ATA4806</p>	<ul style="list-style-type: none">Protective cover for DIN 72 size For ATB72 <p>AQM7801</p>
--	--	---