

Autonics TIMER LE3S SERIES INSTRUCTION MANUAL



Thank you for choosing our Autonics product.
Please read the following safety considerations before use.

■ Safety Considerations

※Please observe all safety considerations for safe and proper product operation to avoid hazards.

※⚠ symbol represents caution due to special circumstances in which hazards may occur.

⚠ Warning Failure to follow these instructions may result in serious injury or death.

⚠ Caution Failure to follow these instructions may result in personal injury or product damage.

⚠ Warning

1. **Fail-safe device must be installed when using the unit with machinery that may cause serious injury or substantial economic loss.** (e.g. nuclear power control, medical equipment, ships, vehicles, railways, aircraft, combustion apparatus, safety equipment, crime/disaster prevention devices, etc.)

Failure to follow this instruction may result in fire, personal injury, or economic loss.

2. **Install on a device panel to use.**

Failure to follow this instruction may result in electric shock or fire.

3. **Do not connect, repair, or inspect the unit while connected to a power source.**

Failure to follow this instruction may result in electric shock or fire.

4. **Check 'Connections' before wiring.**

Failure to follow this instruction may result in fire.

5. **Do not disassemble or modify the unit.**

Failure to follow this instruction may result in electric shock or fire.

⚠ Caution

1. **Use the unit within the rated specifications.**

Failure to follow this instruction may result in fire or product damage.

2. **Use dry cloth to clean the unit, and do not use water or organic solvent.**

Failure to follow this instruction may result in electric shock or fire.

3. **Do not use the unit in the place where flammable/explosive/corrosive gas, humidity, direct sunlight, radiant heat, vibration, impact, or salinity may be present.**

Failure to follow this instruction may result in fire or explosion.

4. **Keep metal chip, dust, and wire residue from flowing into the unit.**

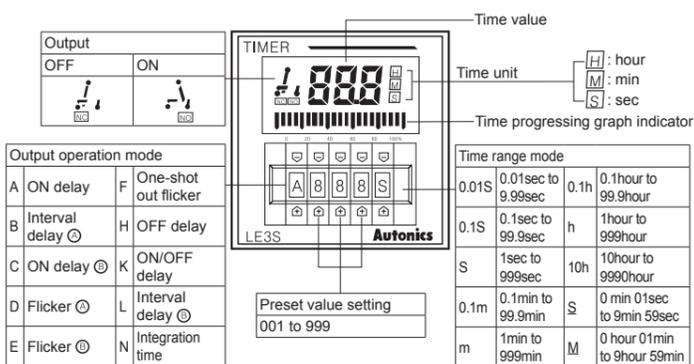
Failure to follow this instruction may result in fire or product damage.

■ Ordering Information

LE	3	S	Output	No mark	Time-limit SPDT (1c)
			Size	A	Time-limit DPDT (2c)
			Digit	B	Time-limit SPDT (1c), Instantaneous SPDT (1c)
			Item	S	DIN W48×H48mm
				3	999 (3-digit)
				LE	LCD timer (digital switch type)

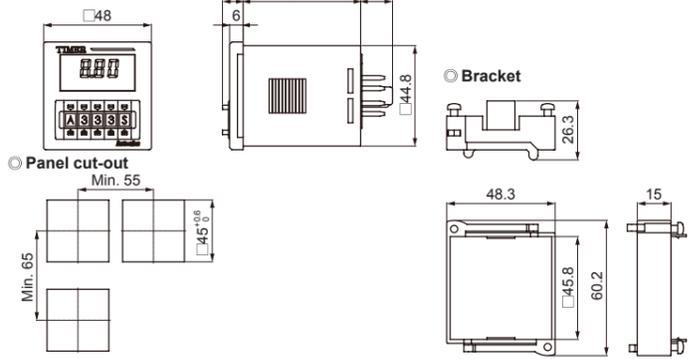
※8-pin socket (PG-08, PS-08(N)) is sold separately.

■ Front Panel Identification



※The above specifications are subject to change and some models may be discontinued without notice.
※Be sure to follow cautions written in the instruction manual and the technical descriptions (catalog, homepage).

■ Dimensions

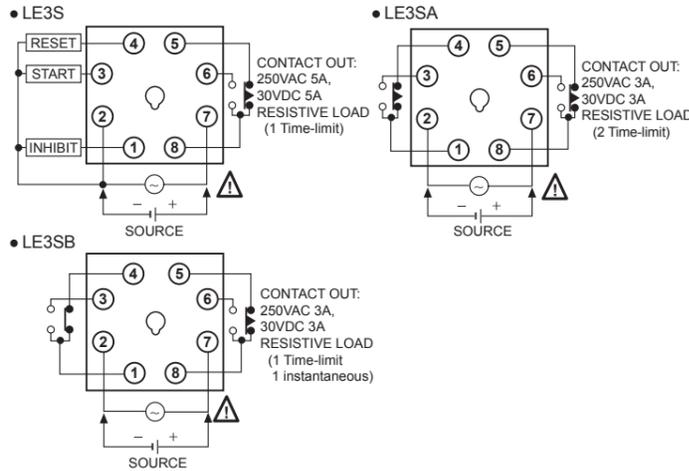


■ Specifications

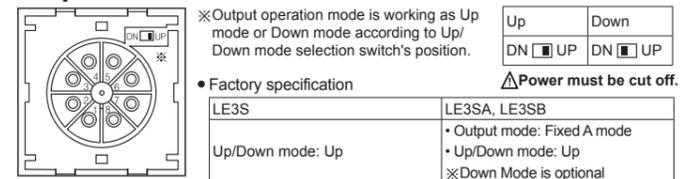
Model	LE3S	LE3SA	LE3SB
Function	Multi time and operating	Multi time, Power ON Delay operation	
Display method	LCD display (character size: W4×H8mm)		
Power supply	24-240VAC~ 50/60Hz, 24-240VDC= universal		
Allowable voltage range	90 to 110% of rated voltage		
Power consumption	Max. 2.5VA (240VAC~ 50/60Hz) Max. 1W (240VDC=)	Max. 3.3VA (240VAC~ 50/60Hz) Max. 1.5W (240VDC=)	
Return time	Max. 0.2sec	Max. 0.1sec	
Min. input signal width	START: Approx. 20ms INHIBIT: — RESET: —	—	—
Input	START: • No-voltage input Impedance at short-circuit: max. 1kΩ Residual voltage: max. 0.5VDC Impedance at open-circuit: min. 100kΩ INHIBIT: — RESET: —	—	—
Time operation	Signal ON Start	Power ON Start	
Control output	Type: Time-limit SPDT(1c)	Time-limit DPDT(2c)	Time-limit SPDT(1c), Instantaneous SPDT(1c)
Capacity	250VAC~ 5A, 30VDC= 5A resistive load	250VAC~ 3A, 30VDC= 3A resistive load	
Relay life cycle	Mechanical: Min. 10,000,000 operations Electrical: Min. 100,000 operations (250VAC 5A resistive load)	Min. 100,000 operations (250VAC 3A resistive load)	
Output mode	A, B, C, D, E, F, H, K, L, N		
Repeat error	Power Start: max. ±0.01% ±0.05sec Signal Start: max. ±0.005% ±0.03sec	Max. ±0.01% ±0.05sec	
Temperature error	Over 100MΩ (at 500VDC megger)		
Insulation resistance	2000VAC 50/60Hz for 1 minute		
Dielectric strength	±2kV the square wave noise (pulse width: 1μs) by the noise simulator		
Noise immunity	0.75mm amplitude at frequency of 10 to 55Hz in each X, Y, Z direction for 1hour 0.5mm amplitude at frequency of 10 to 55Hz in each X, Y, Z direction for 10 minutes		
Vibration	Mechanical: 300m/s ² (approx. 30G) in X, Y, Z direction for 3 times Malfunction: 100m/s ² (approx. 10G) in X, Y, Z direction for 3 times		
Shock	Ambient temp.: -10 to 55°C, storage: -25 to 65°C Ambient humi.: 35 to 85%RH		
Unit weight	Approx. 100g	Approx. 105g	

※Environment resistance is rated at no freezing or condensation.

■ Connections



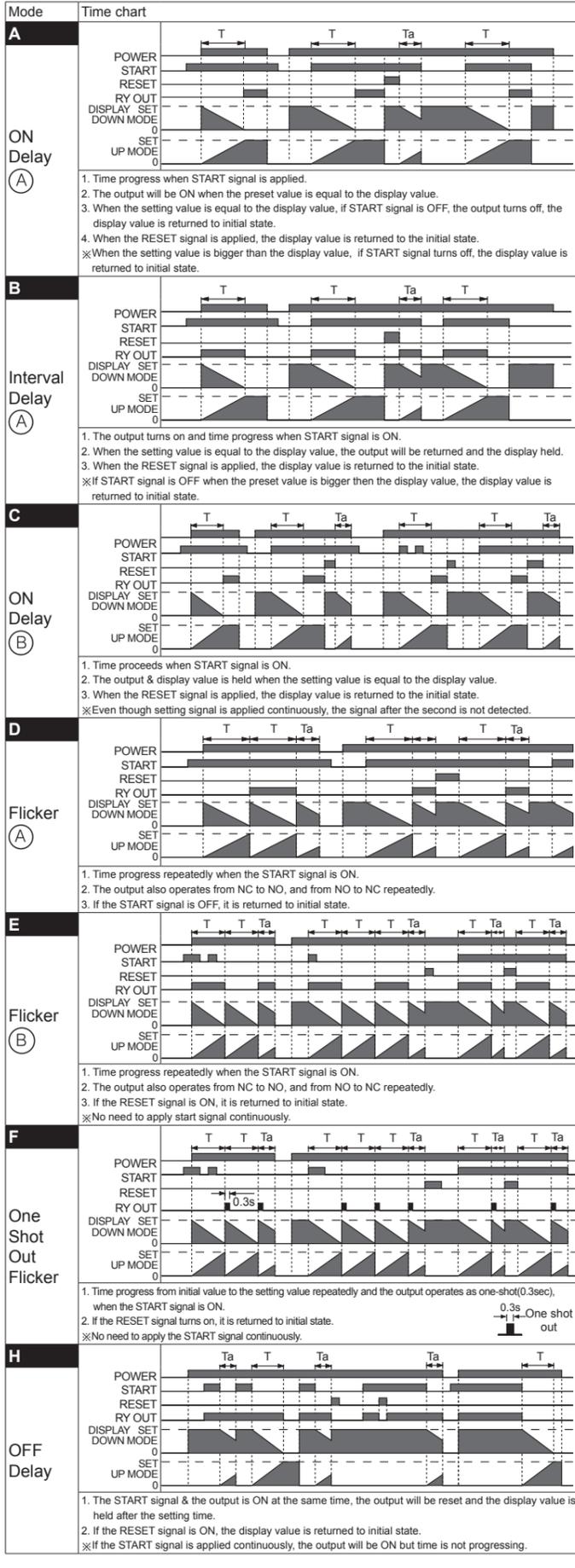
■ Up/Down Mode



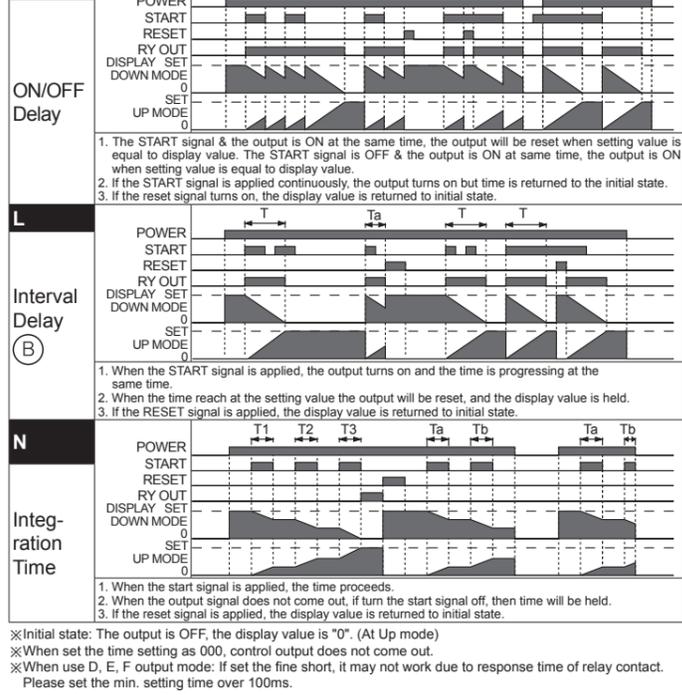
■ Output Operation Mode

• LE3S

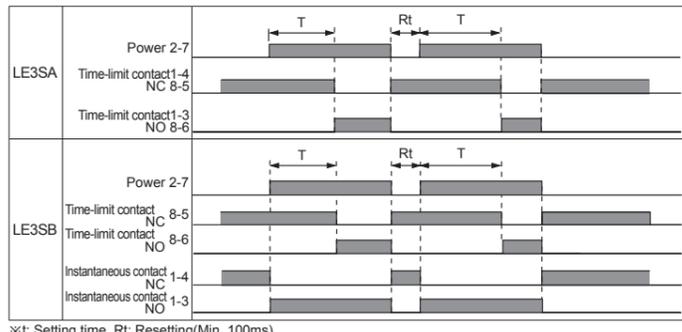
• This product has 10 output mode from A to N by digital switch in front.
T=Preset value, T>Ta, T=T1+T2+T3, T>Ta+Tb



K

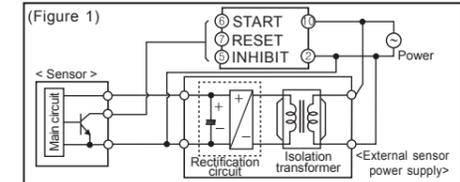


• LE3SA, LE3SB



■ Cautions during Use

- Follow instructions in 'Cautions during Use'. Otherwise, it may cause unexpected accidents.
- When supplying or turning off the power, use a switch or etc. to avoid chattering.
- Install a power switch or circuit breaker in the easily accessible place for supplying or disconnecting the power.
- In order to block peripheral current, use isolation transformer which of secondary part is not grounded as (Figure 1) to supply power to the external input device.



- Do not connect two or more timers with only one input contact or transistor simultaneously.
- Keep away from high voltage lines or power lines to prevent inductive noise.
In case installing power line and input signal line closely, use line filter or varistor at power line and shielded wire at input signal line.
Do not use near the equipment which generates strong magnetic force or high frequency noise.
- Change setting time, time range, operation mode or etc. after turning off the power of the timer.
- This unit may be used in the following environments.
 - ①Indoors (in the environment condition rated in 'Specifications')
 - ②Altitude max. 2,000m
 - ③Pollution degree 2
 - ④Installation category II

■ Main Products

- Photoelectric Sensors
- Fiber Optic Sensors
- Door Sensors
- Door Side Sensors
- Area Sensors
- Proximity Sensors
- Pressure Sensors
- Rotary Encoders
- Connector/Sockets
- Switching Mode Power Supplies
- Control Switches/Lamps/Buzzers
- I/O Terminal Blocks & Cables
- Stepper Motors/Drivers/Motion Controllers
- Graphic/Logic Panels
- Field Network Devices
- Laser Marking System (Fiber, Co., Nd: YAG)
- Laser Welding/Cutting System
- Temperature Controllers
- Temperature/Humidity Transducers
- SRs/Power Controllers
- Counters
- Timers
- Panel Meters
- Tachometers/Pulse (Rate) Meters
- Display Units
- Sensor Controllers

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