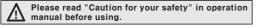
Compact LCD Timer

DIN W48×H24mm, Indication only, LCD Timer

■ Features

Upgraded version of LE7N series

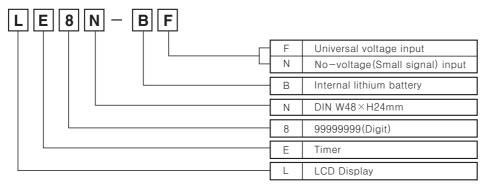
- Compact size indicator
- •Internal lithium battery
- •Screw Terminal type (Terminal protection cover)
- ●LCD Display
- ●Built-in Microprocessor
- •IP66 rated (Front panel only)







Ordering information



Specifications

Series	LE8N-BN	LE8N-BF
Digit	8digits	
Display	LCD Zero Blanking type (Height: 8.7mm)	
Operation method	Count up mode	
Power supply	Internal lithium battery	
Input type	No-voltage input	Universal voltage input
Start input	 Residual voltage: Max. 0.5VDC Impedance at short-circuit: 10kΩ Impedance at open-circuit: 750kΩ 	High: 24-240VAC / 6-240VDC Low: 0-2VAC / 0-2.4VDC
RESET input	No-voltage input	
Min.signal width of RESE	Min. 20ms	
Time range (TS1)	(★1) 9999.59.59(h.m.s), 99999.59.9(h.m), 999999.59(h.m)	
Time range (TS2)	(★1) 9999H59.9(h.m), 99999H59(h.m), 999999H.9(h)	
Time error	±0.01% ±50ms(Repeat error, Time error, Temperature error)	
Battery life cycle	Approx. over 10 years(at 20℃)	
External switch	SW1(Front reset key Lock switch), SW2(Time range selection switch)	
Insulation resistance	Min. 100MΩ (at 500VDC megger)	
Dielectric strength	(★2) 2000VAC 60Hz for 1 minute	
Vibra Mechanical	0.75mm amplitude at frequency of 10 \sim 55Hz in each of X, Y, Z directions for 1 hour	
-tion Malfunction	0.3mm amplitude at frequency of 10 ~ 55Hz in each of X, Y, Z directions for 10 minutes	
Shock Mechanical	Mechanical 300m/s ² (Approx. 30G) in X, Y, Z directions for 3 times	
Malfunction	100m/s ² (Approx. 10G) in X, Y, Z directions for 3 times	
Protection	IP66 (When using waterproof rubber for front panel)	
Ambient Temperature	-10 ~ +55 ℃ (at non-freezing status)	
Storage Temperature	-25 ~ +65 ℃ (at non-freezing status)	
Ambient humidity	35 ~ 85%RH	
Approval	₂ս⁄⁄⁄⁄⁄⁄⁄⁄⁄	
Unit weight	weight Approx. 58g	

(★1) Select TS1, TS2 using inner jump pin(JP1).

(A) Counter

(B) Timer

(C) Temp. controller

(D) Power controller

(E) Panel meter

(F) Tacho/ Speed/ Pulse meter

(G) Display unit

(H) Sensor controller

Switching power supply

(J) Proximity sensor

(K) Photo electric sensor

(L) Pressure sensor

(M) Rotary encoder

(N) Stepping motor & Driver & Controller

(O) Graphic panel

(P) Field network device

(Q) Production stoppage models & replacement

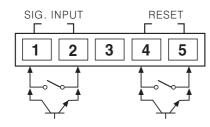
Autonics B-6

^(★2) No-voltage input: Between all terminals and case, Universal voltage input: Between input terminal and reset input terminal, all terminals and case

LE8N SERIES

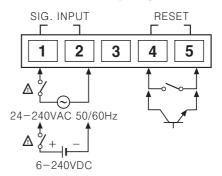
■ Connections

●No-voltage input



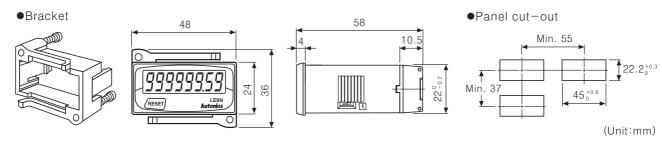
- *Use reliable contacts enough to flow 5μA of current.
- *Terminal 2 and 5 are connected inside. (Non-isolation)

Universal voltage input



*Terminal 1, 2 and 4, 5 are isolated.

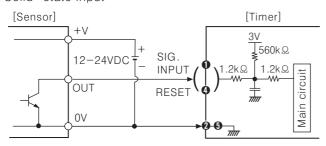
Dimensions



Input connections

○No-voltage input (Standard sensor: NPN open type sensor)

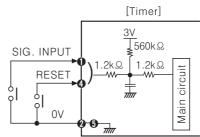
●Solid-state input



- **When power is applied to terminal No
 and ●, input terminal circuit can be broken and a malfunction can occur.

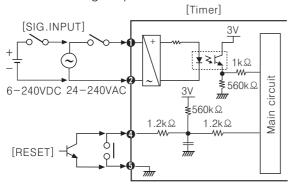
 (NPN output, PNP output, PNP open collector output type sensor cannot be used.)
- **※②** and **⑤** are connected inside.

Contact input



**Please use reliable contacts enough to flow 3VDC 5μA of current.

OUniversal voltage input



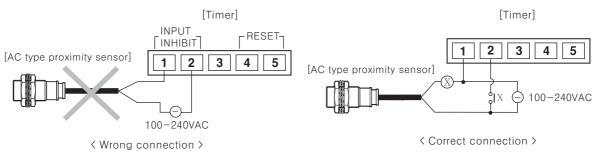
- **AC type proximity sensor cannot be used as the source of count input signals.
- ※Input terminal ♠, ♠ and Reset terminal ♠, ♠ are insulated inside.
- $\slash\hspace{-0.5em}$ It is not possible to reset with AC power or DC power.
- *When relay contact is used as the source of RESET signal, please use reliable contacts enough to flow 3VDC 5μ A of current.

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Compact LCD Timer

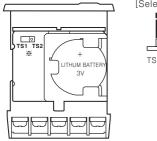
OInput from AC type proximity sensor

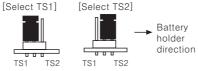
Please add input relay as shown below to prevent malfunction caused by current leakage of the proximity sensor.



■Time specification(TS1, TS2) and time range

•Selection of time specification(TS1, TS2)



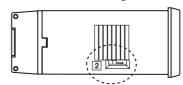


TS1: 9999.59.59(h.m.s) 999999.59.9(h.m) 999999.59(h.m)

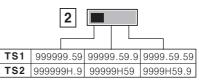
TS2: 9999H59.9(h.m) 999999H59(h.m) 999999H.9(h)

**Please supply RESET signal(Front or external RESET terminal) after change time range during the operation.

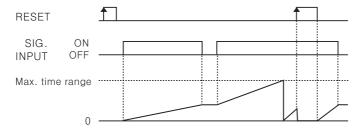
•Selection of time range



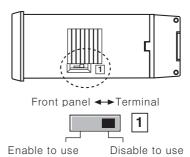
Terminal ← Front panel



■Time operation

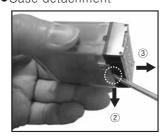


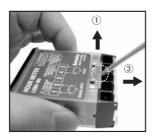
■Enable / Disable front reset key



Case detachment and battery replacement

•Case detachment

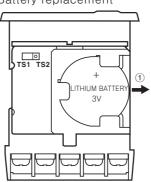




★Hold up Lock part toward ①, ② of the product with the tool and pull toward ③, the case is detached.

⚠ Please be careful of the injury caused by tools.

Battery replacement



- 1)Detach the case.
- 2)Push the battery and detach toward ①.
- 3)Insert new battery with correct alignment of polarity pushing toward opposite of ①.
- *Battery is sold separately.
- *Do not burn up or disassemble the lithium battery.

(A) Counter

(B) Timer

(C) Temp. controller

(D) Power controller

(E) Panel meter

(F) Tacho/ Speed/ Pulse meter

(G) Display unit

(H) Sensor controller

(I) Switching power supply

(J) Proximity sensor

(K) Photo electric sensor

(L) Pressure sensor

(M) Rotary encoder

(N) Stepping motor & Driver & Controller

(O) Graphic panel

(P) Field network device

(Q) Production stoppage models & replacement

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