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)

Please read "Caution for your safety" in operation manual before using.

▣Ordering information

L E 8 N - B F

F	Universal voltage input
N	No-voltage(Small signal) input
B	Internal lithium battery
N	DIN W48×H24mm
8	99999999(Digit)
E	Timer
L	LCD Display

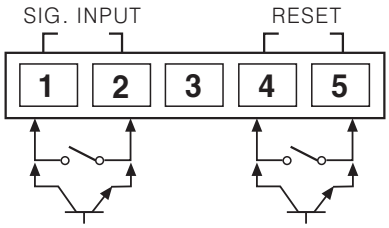
▣Specifications

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		• Impedance at short-circuit : 10kΩ(ON), residual voltage : Max. 0.5V • Impedance at open-circuit : 500kΩ(OFF)	High : 24-240VAC / 6-240VDC Low : 0-2VAC / 0-2.4VDC
RESET input		No-voltage input	
Min.signal width of RESET		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%(Time error, Temperature error)	
Battery life cycle		Approx. over 10 years(at 20℃)	
External switch		SW1(Front reset key for Lock), SW2(Selectable time switch)	
Insulation resistance		Min. 100MΩ(at 500VDC mega)	
Dielectric strength		(★2) 2000VAC 60Hz for 1 minute	
Vibration	Mechanical	0.75mm amplitude at frequency of 10 ~ 55Hz in each of X, Y, Z directions for 1 hour	
	Malfunction	0.3mm amplitude at frequency of 10 ~ 55Hz in each of X, Y, Z directions for 10 minutes	
Shock	Mechanical	300m/s² (Approx. 30G) in X, Y, Z directions for 3 times	
	Malfunction	100m/s² (Approx. 10G) in X, Y, Z directions for 3 times	
Ambient Temperature		-10 ~ +55℃(at non-freezing status)	
Storage Temperature		-25 ~ +65℃(at non-freezing status)	
Ambient humidity		35 ~ 85%RH	
Approval		CE cULus	
Unit weight		Approx. 58g	

(★1) Select TS1, TS2 using inner jump pin(JP1).
(★2) No-voltage input: Between all terminals and case, Universal voltage input: Between input terminal and reset input terminal, all terminals and case

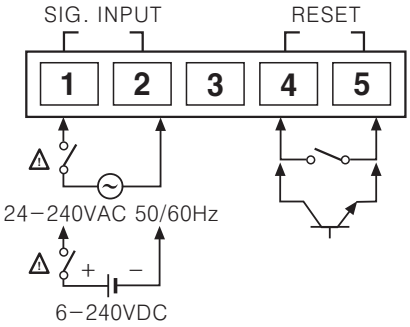
▣Connections

●No-voltage input



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

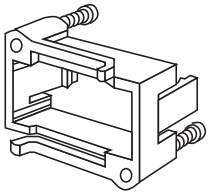
●Universal voltage input

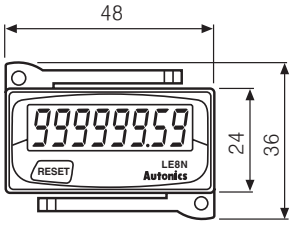


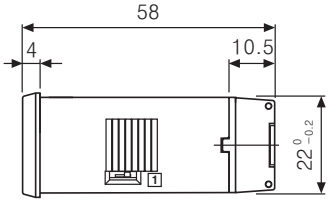
※Terminal 1, 2 and 4, 5 are isolated.

▣Dimensions

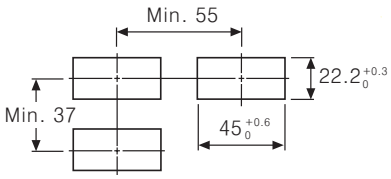
●Bracket







●Panel cut-out

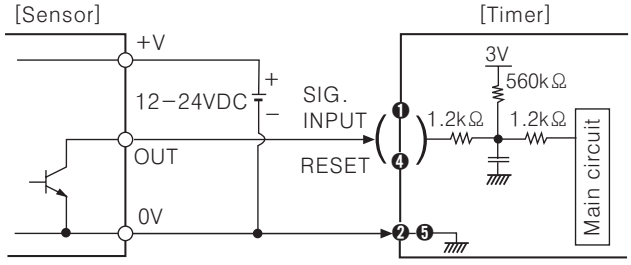


(Unit:mm)

▣Input connections

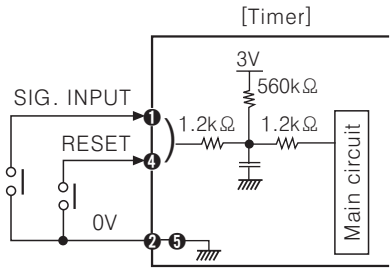
◎No-voltage input (Standard sensor: NPN open type sensor)

●Solid-state input



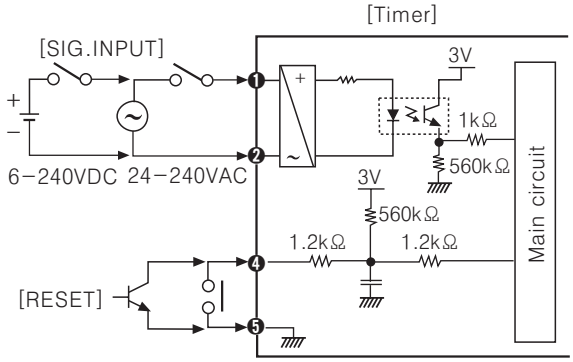
※When power is applied to terminal No ❶ and ❹, input terminal circuit can be broken and a malfunction can occur.
(NPN output, PNP output, PNP open collector output type sensor cannot be used.)
※❷ and ❺ are connected inside.

●Contact input



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

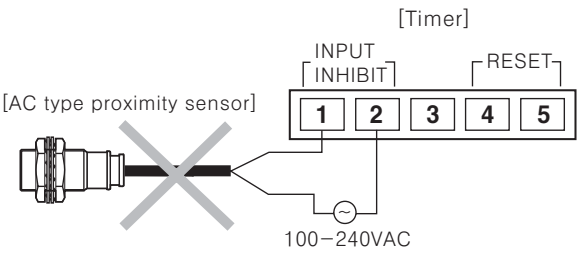
◎Universal voltage input



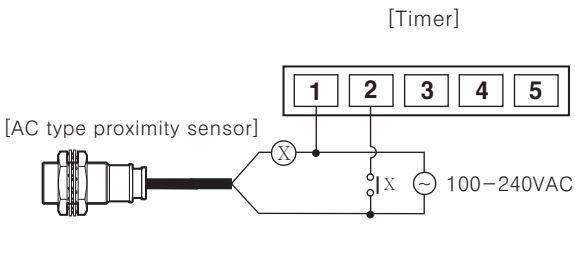
※AC type proximity sensor cannot be used as the source of count input signals.
※Input terminal ❶, ❷ and Reset terminal ❹, ❺ are insulated inside.
※It is not possible to reset with AC power or DC power.
※When relay contact is used as the source of RESET signal, please use reliable contacts enough to flow 3VDC 5㎂ of current.

◎Input from AC type proximity sensor

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



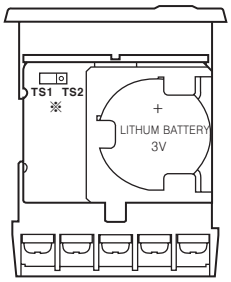
〈 Wrong connection 〉

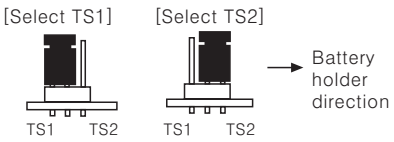


〈 Correct connection 〉

▣Time specification(TS1, TS2) and time range

●Selection of time specification(TS1, TS2)



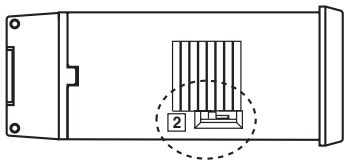


TS1 : 9999.59.59(h.m.s)
99999.59.9(h.m)
999999.59(h.m)

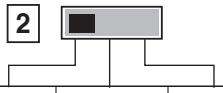
TS2 : 9999H59.9(h.m)
99999H59(h.m)
999999H.9(h)

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

●Selection of time range

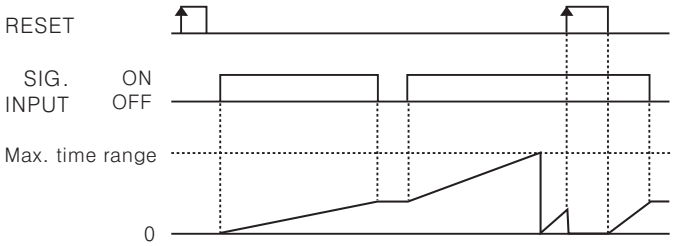


Terminal ◀▶ Front panel

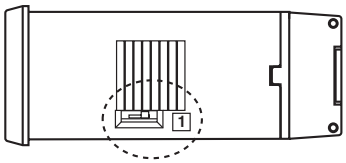


TS1	999999.59	99999.59.9	9999.59.59
TS2	999999H.9	99999H59	9999H59.9

▣Time operation



▣Enable / Disable front reset key

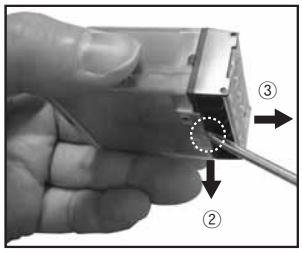


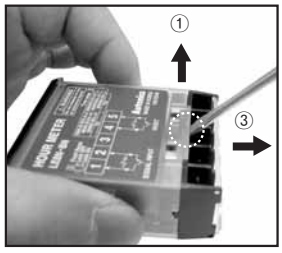
Front panel ◀▶ Terminal

Enable to use Disable to use

▣Case detachment and battery replacement

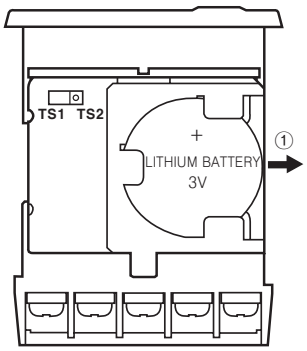
●Case detachment





※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.