TF4A
Digital timer

- Improved Visibility : High brightness white LED applied. 8.5mm height, 5.0mm width of Letters Size.
- Easy input/output status check by white lamp
(reset input/prohibition input/Time value indication/output indication)
- Improved durability and design by applying acrylic window on the front part.
- Space efficient from short body. (63.7mm depth of the rear part in condition of panel attachment)
- Easy-to-set thumbwheel switch applied.
- Input method selection(voltage input/no-voltage input) and add-subtract mode selection with deep switch on the side part Decimal position and time range setting available.
- Power supply voltage : 110 – 240V a.c 50/60 Hz
- 8-pin plug for easy installation/maintenance
- Protection cover for the front part, and for terminal block on the rear part. (optional)

Specification

Power voltage	100 ㅡ 240 V a.c. 50/60 Hz
Voltage fluctuation rate	Power voltage ±10 %
Power consumption	3.2 VA
Display	White 7 segments LED
Character size	Character height (8.5 mm), Character width (5.0 mm)
Timer operation	Power On Start
Return time	500 ms max.
Timer operation error	• Power start : ± 0.01 % ± 0.05 seconds or less • Reset start : ± 0.01 % ± 0.03 seconds or less
Input	• Input method selection by external switch (Voltage input / No voltage input) • RESET, INHIBIT Composed of input • Voltage input : HIGH level (5 V ㅡ 30 V d.c.), LOW level (0 V ㅡ 2 V d.c.), Input resistance (Approx. 4.7 kΩ) • No voltage input : Impedance in case of short circuit (1 kΩ below), Residual voltage in case of short circuit (2 V d.c. below)
Min. Input signal time	20 ms or less (RESET, INHIBIT input)
Control output	• Time limit 1c (SPDT) • SPDT : NC (250 V a.c. 2 A), NO (250 V a.c. 5 A), Resistance load
Relay life time	Electrical (more than 50,000 times), Mechanical (more than 10 million times)
External connection method	8ㅡpin socket
Insulation resistance	100 MΩ or more (500 V d.c. Mega standard)
Dielectric strength	2,000 V a.c. 60 Hz 1 minute (Between the conductive part terminal and the case)
Noise immunity	Square wave noise by noise simulator ± 2,000 V (Pulse width 1 us)
Vibration	• Durability : 10 - 55 Hz (1 minute cycle), Double amplitude 0.75 mm, X · Y · Z 2 hours each direction • Malfunction : 10 - 55 Hz (1 minute cycle), Double amplitude 0.5 mm, X · Y · Z 10 minutes each direction
Ambient temperature &humidity	ㅡ10 ~ 55 °C, 35 ~ 85 % R.H.
Storage temperature	ㅡ20 ~ 65 °C
Weight	Approx. 92 g

Suffix code

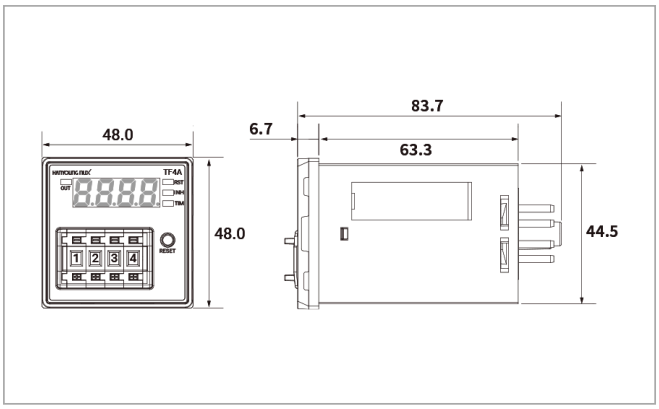
Model	Code	Content
TF4A-	☐	Digital Timer, 48(W) X 48(H) mm
Power supply voltage	A	100 - 240 V a.c. 50/60 Hz

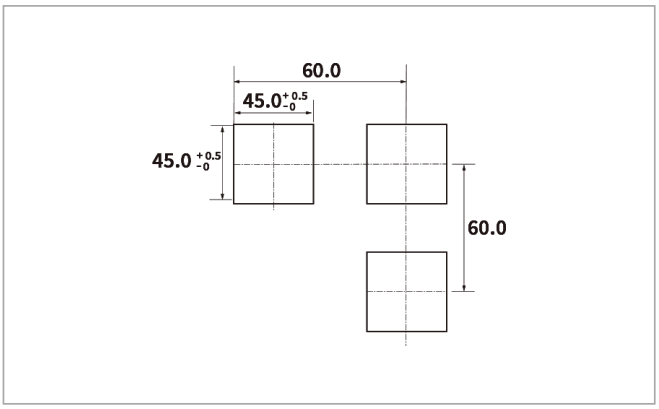
Dimension & panel cutout

[Unit : ㎜]

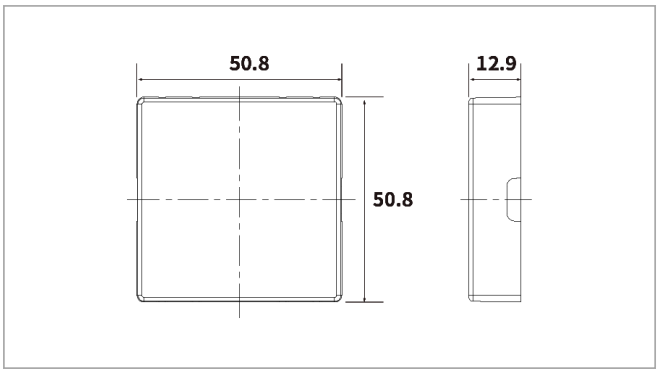
▪ **Dimension**

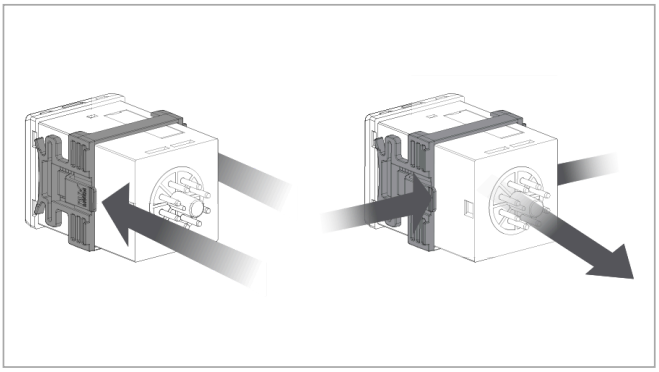
▪ **Panel cutout**



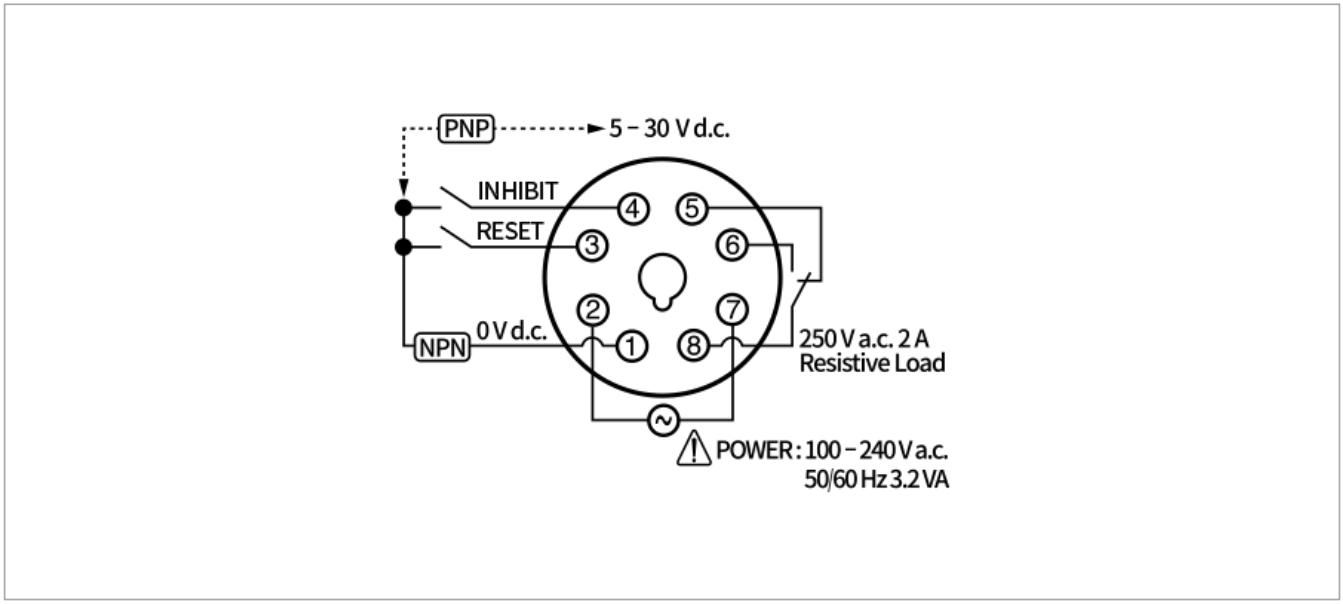


▪ **Front Protective Cover** • Order code : W-SAFETY COVER ▪ **Bracket assembling · disassembling**
48



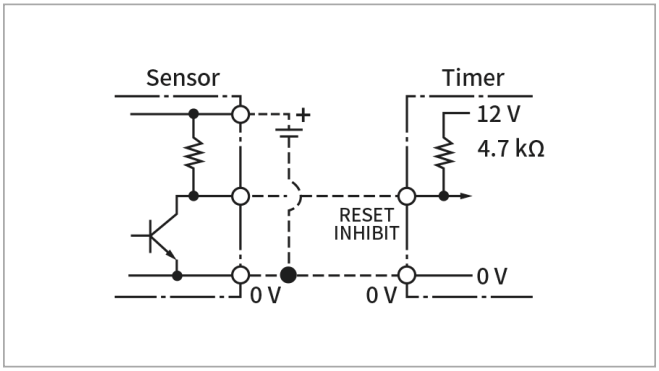


Connection diagram

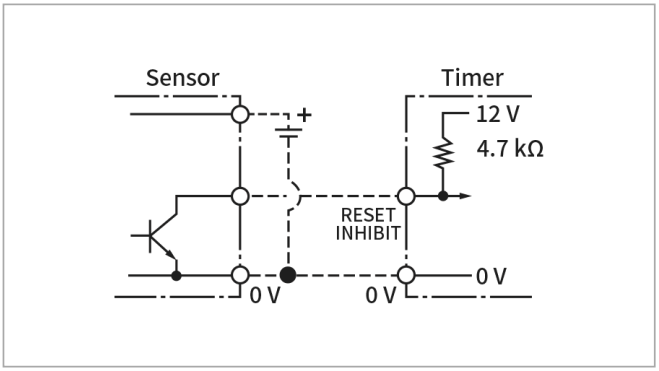


Input wiring method

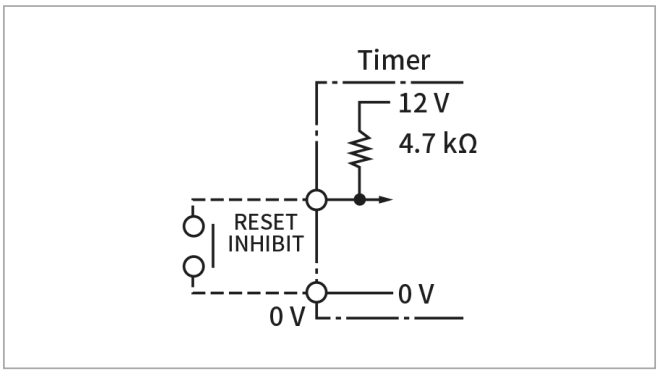
▪ **When selecting with no voltage input (NPN)**



[NPN voltage input]

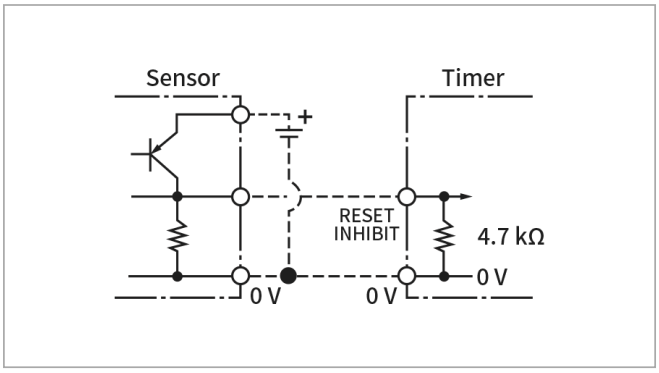


[NPN open collector input]

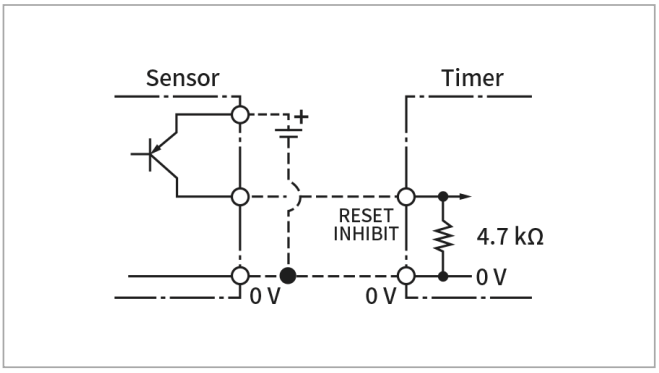


[NPN open collector input]

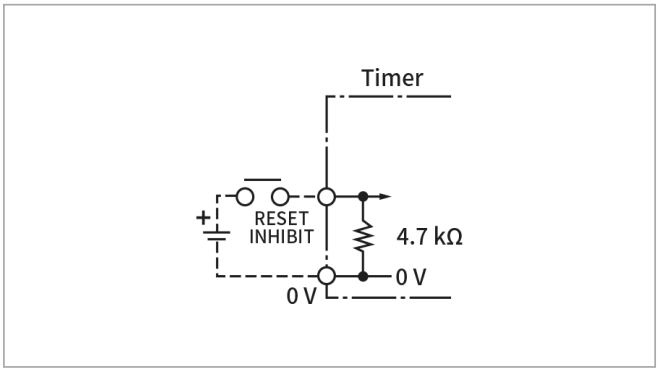
- **When selecting with no voltage input (NPN)**



[NPN voltage input]



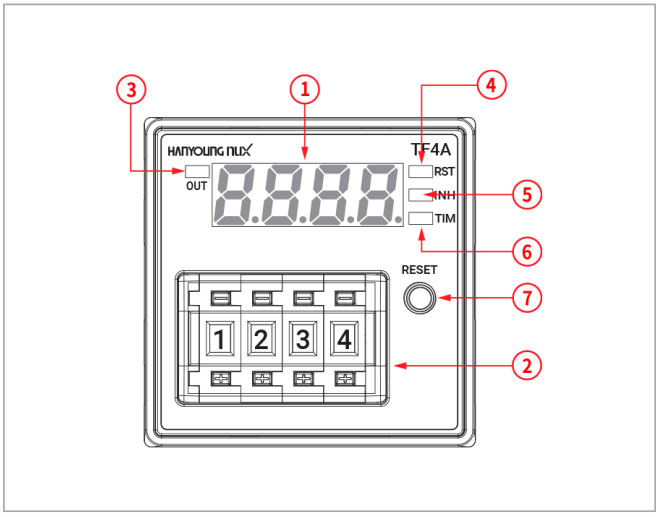
[NPN open collector input]



[NPN open collector input]

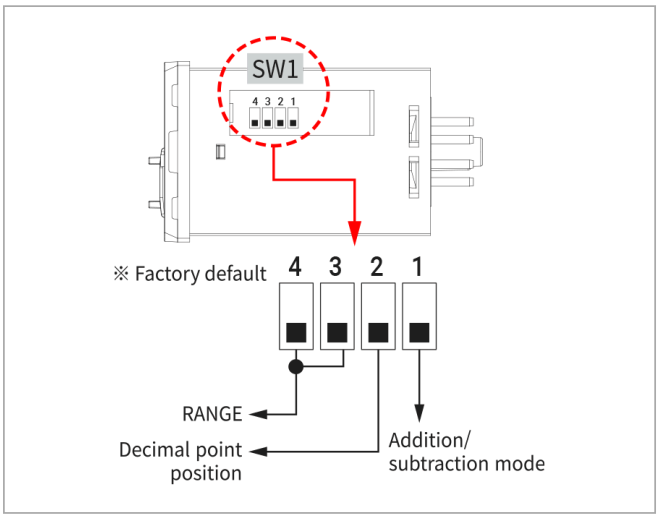
Function and name of each part

- **Front part configuration**



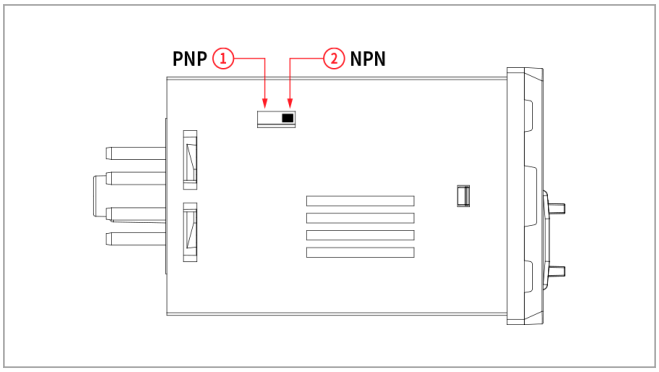
No.	Name	Function
①	PV display	Time value display
②	SV setting	Time value setting switch
③	Output indicator	Lights up during OUT output operation
④	Reset input indicator	Lights up when external RESET signal is applied
⑤	Prohibited input indicator	Lights up when external INHIBIT signal is applied
⑥	Timekeeping indicator	Flashes during timing operation
⑦	Reset－key	Time value and output status initialization

▪ Function switch configuration



SW1	Function			
1	1 ON OFF	Addition mode	1 ON OFF	Subtraction mode
2 ~ 4	4 3 2 ON OFF	9999 sec	4 3 2 ON OFF	999.9 sec
	4 3 2 ON OFF	59 min 59 sec	4 3 2 ON OFF	9 min 59.9 sec
	4 3 2 ON OFF	59 hrs 59 min	4 3 2 ON OFF	999.9 min
	4 3 2 ON OFF	59 hrs 59 min	4 3 2 ON OFF	999.9 min

▪ Input logic selection



1. Shut off the power of TF4A.
2. Select the input switch attached to the side of the case according to the input logic voltage(PNP) or non voltage(NPN) you want to use.
3. If you supply power to TF4A after selection is complete, the timer operates according to the selected voltage (PNP)/non-voltage (NPN) input status.

※ Note)
Change the voltage input and no-voltage input selection after the power is turned off.