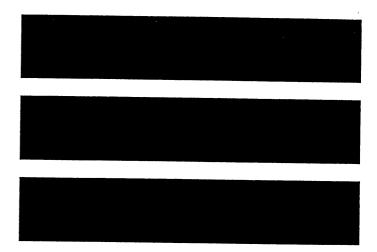
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(3 06)





NAIS is the worldwide brand name of automation products.

Bright and Easy to Read Display

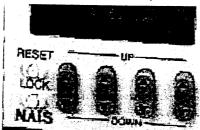
A brand new bright 2-color back light LCD display. The easy-to-read screen in any location makes checking and setting procedures a cinch.



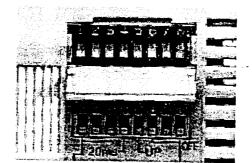
Simple Operation

Seesaw buttons make operating the unit even easier than before.

Set the time at the front panel.

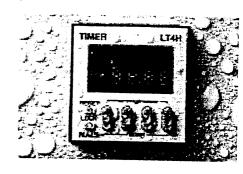


 Set the operation mode and time range at the DIP switches on the side panel.



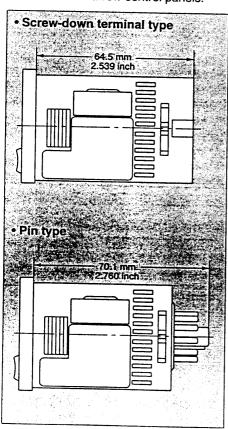
Conforms to 1266s Weather Resistant Standards

The water-proof panel keeps out water and dirt for reliable operation even in poor environments.



Side Body and Compact Size

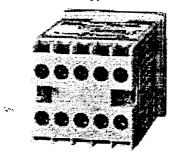
With a short body of only 64.5 mm 2.539 inch (screw-down terminal type) or 70.1 mm 2.760 inch (pin type), it is easy to install in even narrow control panels.



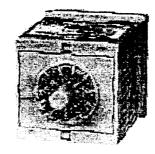
Sacy terminal and PinType are Both Sandard Options

The two terminal types are standard options to support either front panel installation or embedded installation.

Screw terminal type

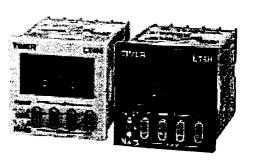


• Pin type



Giengeelde Panel Cover

Also offers a black panel cover to meet your design considerations.



િલ્લુદ ઉદ્વારા સ્લ્યાલાના કર

Conforms with EMC directives (EN50081-2/EN50082-2) and low-voltage directives (VDE0435/Part 2021) for CE certification vital for use in Europe.

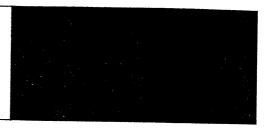


All this at an affordable price to provide you with unmatched cost performance.

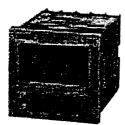
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DIN 48 SIZE DIGITAL TIMER



Compact, Easy-to-read, Easy-to-use... A digital timer made to meet the market's needs.







Pin type

Screw terminal type

Features

1. Bright and Easy-to-Read Display
A brand new bright 2-color back light
LCD display. The easy-to-read screen in
any location makes checking and setting
procedures a cinch.

2. Simple Operation

Seesaw buttons make operating the unit even easier than before.

3. Short Body of only 64.5 mm 2.539 inch (screw terminal type) or 70.1 mm 2.760 inch (pin type)

With a short body, it is easy to install in even narrow control panels.

4. Conforms to IP66's Weather Resistant Standards

The water-proof panel keeps out water and dirt for reliable operation even in poor environments.

5. Screw terminal and Pin Type are Both Standard Options

The two terminal types are standard options to support either front panel installation or embedded installation.

6. Changeable Panel Cover

Also offers a black panel cover to meet your design considerations.

7. Conforms With EMC and Low Voltage Directives

Conforms with EMC directives (EN50081-2/EN50082-2) and low-voltage directives (VDE0435/Part 2021) for CE certification vital for use in Europe.

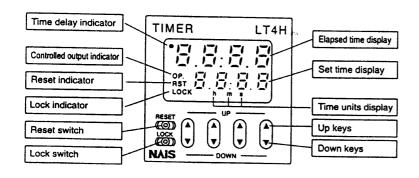
8. Low Price

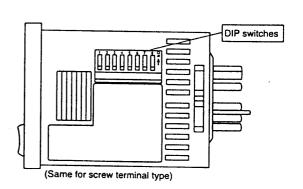
All this at an affordable price to provide you with unmatched cost performance.

Product types

| Time range ··· | Operation mode | Output | Operation voltage | Power down insurance | Terminal | Part No. |
|---|--|--------------|--|----------------------|--------------|---------------|
| | Power ON date(4) | | Relay (1 c) 12-24 V DC Available Transistor (1 a) | 11 pin | LT4H-AC240V | |
| 9.999 s (0.001 s~) 99.99 s (0.01 s~) | Power ON delay (1) Power ON delay (2) | , | | Screw | LT4H-AC240VS | |
| 999.9 s (0.1 s~) Signal | Signal ON delay Signal OFF delay | (1 c) | 12-24 V DC | Available | 11 pin | LT4H-DC24V |
| 9999 s (1 s~) 99 m 59 s (1 s~) | Pulse One-shot | | | | Screw | LT4H-DC24VS |
| 9 min (0.1 m~) Pulse ON-delay | | 100-240 V AC | Available | 11 pin | LT4HT-AC240V | |
| 9 h 59 min (1 m~) 99.9 h (0.1 h~) | Totalizing ON-delay | | 100 240 T AO | | Screw | LT4HT-AC240VS |
| | (8 modes) | (1 a) | 12-24 V DC | | 11 pin | LT4HT-DC24V |
| | | | .227780 | | Screw | LT4HT-DC24VS |

Part names





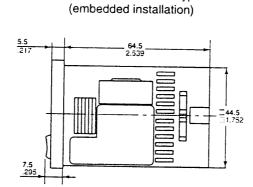
Specifications

| 100 | ltem | | Ralay out | put type | Transis | or output type | | |
|--|-------------------------------|-------------------------|---|---------------------------------------|--|---|--|--|
| | | | AC type | DC type | AC type | DC type | | |
| | Operating | | 100 to 240 V AC | 12 to 24 V DC | 100 to 240 V AC | 12 to 24 V DC | | |
| * 1 | Frequency | | 50/60 Hz common | | 50/60 Hz common | 12 10 24 V DC | | |
| | Power con | | Max. 10 V A | Max. 3 W | Max. 10 V A | May 214 | | |
| | Control capacity (resistive) | | 3 A, 250 |) V AC | | Max. 3 W | | |
| | Time range | 9 | 9.999 s, 99.99 s, 9999 s, 99 min 59 s, 999.9 min, 99 h 59 min, 999.9 h (selected by DIP switch) | | | | | |
| Time counting direction | | | Addition (UP)/Subtraction (DOWN) (2 directions selectable by DIP switch) | | | | | |
| Rating | Operation | mode | A (Power ON delay), A2 (Power ON delay), B (Signal ON delay), C (Signal OFF delay), D (Pulse one-shot), E (Self-hold), F (Flicker), G (Totalizing) (Selectable by DIP switch) | | | | | |
| | Signal, Res | set, Stop input | Min. input signal width: 1 ms, 20 ms (2 directions by selected by DIP switch) | | | | | |
| | Lack input | ola (marikata) | | | nal width: 20 ms | switch) | | |
| | Input signa | , in the second section | Open co | llector input Input impedance | : Max. 1 kΩ; Residual voltage: | 14 | | |
| and the self-self-self-self-self-self-self-self- | input signa | | Or | pen impedance: 100kΩ or less | , Max. energized voltage: 40V | Max. 2 V | | |
| | Indication | Me Lukyryer. | 7-segment LC | D, Elapsed value (backlight re | ed LED), Setting value (backlig | ht vellow LED | | |
| 441 | Power failu method | re memory | | | . 10 ^s overwriting) | TR yellow LLD) | | |
| | Operating t | ime fluctuation | | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | | | |
| | Temperatu | re error | ± (0.005 % + 50 ms) in case of power on start | | | | | |
| Time Voltage error | | or | \pm (0.005 % + 20 ms) in case of reset or input signal start | | | | | |
| | Setting erro |)r | (at fixed power off time) | | | | | |
| | Power off ti | me change | | 100 ms | | | | |
| 7.769 | Contact arr | angement :: | Timed-out 1 Form C Timed-out 1 Form A /Ones called | | | | | |
| ontact. 🐪 | Initial conta | ct resistance | 100 mQ (at 1.4.6 V DC) | | | | | |
| ? 0. /2 /17 57 | Contact ma | terial 🤼 🛴 💮 | Ag alloy/A | | | | | |
| e . | Mechanical | 7. 5. C. | 2.0 × 10 ⁷ ope. (Except for | | _ | | | |
| | Electrical | | 1.0 × 10 ⁵ ope. (At rate | | | rated control voltage) | | |
| | Operating v | oltage range | | 85 to 110 % of rate | d operating voltage | | | |
| | Initial break | down voltage | 2,000 Vrms for 1 min: Between 2,000 Vrms for 1 min: Between 1,000 Vrms for 1 min: Between | input and output | 2,000 Vrms for 1 min: Betw 2,000 Vrms for 1 min: Betw | een live and dead metal parts een input and output | | |
| ectrical = | Initial insula (At 500 V D | tion resistance C) | Between li Min. 100 MΩ: Between in Between c | | Min. 100 MΩ: Betwee Betwee | en live and dead metal parts en input and output | | |
| | Operating v | oltage reset | | Max. | 0.5 s | | | |
| | Temperature | e rise | Max. 65 | ° C (under the flow of nominal | operating current at nominal v | nolte a a \ | | |
| | Vibration | Functional | 10 to 55 Hz | : 1 cycle/min single amplitude | of 0.35 mm .014 inch (10 min on 3 axes) | | | |
| chanical | resistance | Destructive | 10 to 55 h | tz: 1 cycle/min single amplifue | le of 0.75 mm, 030 inch /1 h a | OII 3 axes) | | |
| -nunca, | Shock | Functional | 10 to 55 Hz: 1 cycle/min single amplitude of 0.75 mm .030 inch (1 h on 3 axes) Min. 98 m 321.522 ft./s² (4 times on 3 axes) | | | | | |
| -240 | resistance | Destructive : | | Min. 294 m 964.567 ft. | | | | |
| | | perature | | -10° C to 55° C + | | | | |
| erating | Ambient hur | nidity | | Max. 85 | | | | |
| nditions " | Air pressure | A STORING | | 860 to 1,0 | | | | |
| -2.,20,12 | Ripple rate | | _ | 20 % or less | | 00.671 | | |
| nnection | | | | 11-pin/scre | | 20 % or less | | |
| | nstruction | | | | | | | |

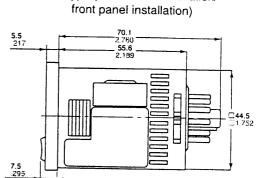
Dimensions (units: mm inch)

• LT4H digital timer

1.890 TIMER LT4H RESET UP UP UDOK A P A C



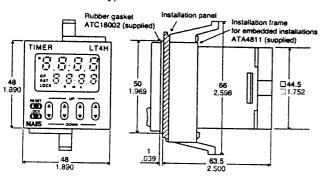
Screw-down terminal type

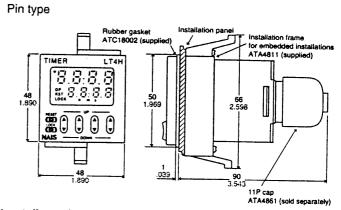


Pin type (embedded installation/

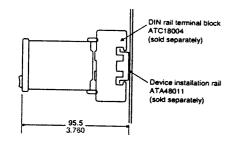
• Dimensions for embedded installation (with adapter installed)

Screw-down terminal type



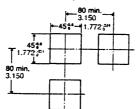


• Dimensions for front panel installations

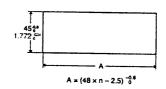


Installation panel cut-out dimensions

The standard panel cut-out dimensions are shown below. Use the installation frame (ATA4811) and rubber gasket (ATC18002).



For connected installations

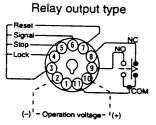


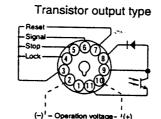
Note 1: The installation panel thickness should be between 1 and 5 mm .039 and .197 inch.

Note 2: For connected installations, the waterproofing ability between the unit and installation panel is lost.

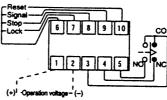
Terminal layout and wiring

• Pin type

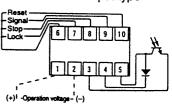




Screw-down terminal type
 Relay output type



Transistor output type



Setting the operation mode, timer range, and time

Setting procedure 1) Setting the operation mode and timer range

Set the operation mode and timer range with the DIP switches on the side of the unit.

DIP switches

| | ltem 1 | DIP switch | | |
|-------------|--|------------------|-------------|--|
| | e | OFF | ON | |
| 2 3 | Operation mode | Refer to table 1 | | |
| 4 | 4 Minimum input reset, signal, and stop signal width | | 1 ms | |
| 5 | Time delay direction | Addition | Subtraction | |
| 6 7 8 | Timer range | Refer to table 2 | | |

Table 1: Setting the operation mode

| DI | P switch h | No. | |
|-----|------------|-----|------------------------|
| 1 | 2 | - 3 | Operation mode |
| ON | ON | ON | A: Power on delay |
| OFF | OFF | OFF | A2: Power on delay |
| ON | OFF | OFF | B: Signal on delay |
| OFF | ON | OFF | C: Signal off delay |
| ON | ON | OFF | D: Pulse One shot |
| OFF | OFF | ON | E: Pulse On delay |
| ON | OFF | ON | F: Signal Flicker |
| OFF | ON | ON | G: Totalizing On delay |

Table 2: Setting the timer range

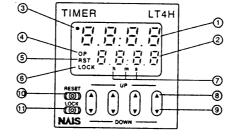
| DI | DIP switch No. | | | |
|-----------|------------------|-----|---|--|
| 6 | 7 | 8 | Timer range | |
| ON | ON | ON | 0.001 s to 9.999 s | |
| OFF | OFF | OFF | 0.01 s to 99.99 s | |
| ON | OFF | OFF | 0.1 s to 999.9 s | |
| OFF | ON | OFF | 1 s to 9999 s | |
| ON | ON | OFF | 0 min 01 s to 99 min 59 s | |
| OFF | OFF | ON | 0.1 min to 999.9 min | |
| ON | OFF | ON | 0 h 01 min to 99 h 59 min | |
| OFF | ON | ON | 0.1 h to 999.9 h | |
| OFF ON | OFF OFF ON | ON | 0.1 min to 999.9 min 0 h 01 min to 99 h 59 min | |

Note: Set the DIP switches before installing the unit.

Setting procedure 2) Setting the time

Set the set time with the keys on the front of the unit. Front display section

- 1 Elapsed time display
- ② Set time display
- 3 Time delay indicator
- 4 Controlled output indicator
- ⑤ Reset indicator
- 6 Lock indicator
- Time units display



- (8) UP keys
 - Changes the corresponding digit of the set time in the addition direction (upwards)
- DOWN keys
 - Changes the corresponding digit of the set time in the subtraction direction (downwards)
- 10 RESET switch Resets the elapsed time and the output
- 11 LOCK switch Locks the operation of all keys on the unit

Changing the set time

- 1. It is possible to change the set time with the up and down keys even during time delay with the timer. However, be aware of the following
- 1) If the set time is changed to less than the elapsed time with the time delay set to the addition direction, time delay will continue until the elapsed time reaches full scale, returns to zero, and then reaches the new set time. If the set time is changed to a time above the elapsed time, the time delay will continue until the elapsed time reaches the new set time.
- 2) If the time delay is set to the subtraction direction, time delay will continue until "0" regardless of the new set time.
- 2. If the set time is changed to "0," the unit will operate differently depending on the operation mode.
- 1) If the operation mode is set to A (power on delay) or A2 (power on delay), the output will turn on when the power supply is turned on. However, the output

will be off while reset is being input. 2) In the other modes, the output turns on when the signal is input. When the operation mode is C (signal off delay), D (one shot), or F (flicker), only when the signal input is on does the output turn on. Also, when the reset is being input, the output is off.

Operation mode T: Set time t1, t2, t3, ta<T Operation type Explanation Time chart · Set the operation mode 2 3 section of the DIP switches ON ON ON (no.'s 1, 2, and 3) on the side of the timer as shown. Clears elapsed time value and starts time delay at power ON. After timer completion, stops at the display of . 12 Power on delay the set value (addition), or stops at "0" OFF MMMMMMM Output ΆΛΛΛ *** (subtraction). (A)ON OFF · Ignores signal input. Reset Stops delay time operation at stop ON. Restarts delay time operation at stop OFF. Set the operation mode 2 section of the DIP switches OFF OFF OFF (no.'s 1, 2, and 3) on the side of the timer as shown. • Elapsed time value does not clear at power ON. (power outage countermeasure function) The output remains ON even after the power is cut and restarted. 11+12=T Power on delay OFF MANAAAAAAAAAA After timer completion, stops at the display of the set value (addition), or stops at "0" (subtraction). ON OFF · Ignores signal input. Stops delay time operation at stop ON. Restarts delay time operation at stop OFF. · Set the operation mode 3 section of the DIP switches ON OFF OFF (no.'s 1, 2, and 3) on the side of the timer as shown. Clears elapsed time value at power ON. • Time delay starts at signal ON and elapsed time value or output resets at signal OFF. t1+t2=T Signal on delay • Instantaneous time delay start at reset OFF MAAAAAAAA and power ON while signal is ON. (B) Stops delay time operation at stop ON. Restarts delay time operation at stop OFF. In order to have the time delay start at power ON or reset at power OFF, short out the signal input beforehand. 759-4-x84; Set the operation mode 2 3 section of the DIP switches ON OFF (no.'s 1, 2, and 3) on the side of the timer as shown. Clears elapsed time value at power ON. Output control ON at signal ON and time delay start at signal OFF. Signal off delay Elapsed time value clears when signal goes ON OFF (c)ON again during time delay. Stops delay time operation at stop ON. ON OFF Restarts delay time operation at stop OFF. Signal

Operation type Explanation Time chart · Set the operation mode 2 3 section of the DIP switches ON ON OFF (no.'s 1, 2, and 3) on the side of the timer as shown. Clears elapsed time value at power ON. ON OFF Time delay starts and output control ON at signal ON. ON OFF Output Pulse On delay Ignores signal input during time delay. ON OFF Reset Stops delay time operation at stop ON. (D)Restarts delay time operation at stop OFF. ON OFF ON OFF Set the operation mode 2 section of the DIP switches OFF OFF ON (no.'s 1, 2, and 3) on the side of the timer as shown. Clears elapsed time value at power ON. • Time delay starts at signal ON. · Ignores signal input during time delay. T=t1+t2 ON OFF Pulse On delay Stops delay time operation at stop ON. Restarts delay time operation at stop OFF. ON OFF Reset In order to have the time delay start at power ON OFF Stop ON or reset at power OFF, short out the signal input beforehand. Signal Set the operation mode 3 section of the DIP switches ON OFF ON (no.'s 1, 2, and 3) on the side of the timer as shown. Clears elapsed time value at power ON. Power supply OFF • Time delay starts at signal ON. Ignores signal input during time delay. T=t1+t2 Signal Flicker Output control reverses, elapsed time value ON OFF clears, and timer delay starts at timer (F) completion. ON . Stop Stops delay time operation at stop ON. Signal Restarts delay time operation at stop OFF. In order to have the time delay start at power ON or reset at power OFF, short out the signal input beforehand. Set the operation mode 1 2 3 section of the DIP switches ON ON (no.'s 1, 2, and 3) on the side of the timer as shown. Elapsed time value does not clear at power ON. (power outage countermeasure function) A CHARLES The output remains ON even after the power T=t1+t2+t3 T>ta Output Totalizing On delay is cut and restarted. Stops delay time operation at stop ON. (G)Restarts delay time operation at stop OFF. Stop ON ; Signa

Precautions during usage

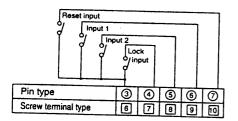
1. Terminal wiring

- 1) When wiring the terminals, refer to the terminal layout and wiring diagrams and be sure to perform the wiring properly without errors.
- 2) For embedded installation applications, the screw-down terminal type is recommended. When using the pin type, use the 11P cap (ATA4861). Do not solder directly to the unit's round pins.

For front panel installation applications, use the 11-pin type DIN rail terminal block (ATC18004).

- 3) After turning the unit off, make sure that any resulting induced voltage or residual voltage is not applied to power supply terminals 2 through 10 (pin type) or 1 and 2 (screw-down terminal type). (If the power supply wire is wired parallel to the high voltage wire or power wire, an induced voltage may be generated between the power supply terminals.) 4) Have the power supply voltage pass through a switch or relay so that it is applied at one time. If the power supply is applied gradually, the counting may malfunction regardless of the settings, the power supply reset may not function, or other such unpredictable occurrence may result.
- 2. Input and output
- 1) Signal input type
- (1) Contact point input

Use highly reliable metal plated contacts. Since the contact point's bounce time leads directly to error in the timer operations, use contacts with as short a bounce time as possible. Also, select a

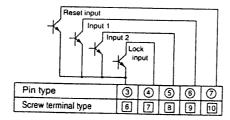


minimum input signal width of 20 ms. (2) Non-contact point input Connect with an open collector. Use transistors whose characteristics satisfy the criteria given below. VCEO = 20 V min.

lc = 20 mA min.

Ісво =6 µА тах.

Also, use transistors with a residual voltage of less than 2 V when the



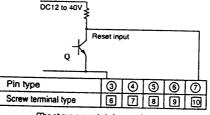
transistor is on.

* The short-circuit impedance should be less than 1 kW.

[When the impedance is 0 W, the current coming from the signal input and stop input terminals is approximately 12 mA, and from the reset input and lock input terminals is approximately 1.5 mA.]

Also, the open-circuit impedance should be more than 100 k Ω .

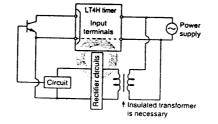
* As shown in the diagram below, from a non-contact point circuit (proximity switches, photoelectric switches, etc.) with a power supply voltage of between 12 and 40 V, the signal can be input without using an open collector transistor. In the case of the diagram below, when the non-contact point transistor Q switches from off to on (when the signal voltage goes from



(The above example is for reset input)

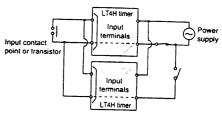
high to low), the signal is input. 2) The input and output specifications change depending on the DIP switch settings. Therefore, before making any connections, be sure to confirm the operation mode and operation conditions currently set.

3) For the power supply of the input device, use a single-phase or doublephase insulated power transformer. The second-phase side must not be



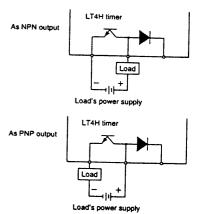
grounded.

4) Since the power supply circuitry does not contain a transformer, be aware that it is not possible for simultaneous input from an input contact point or transistor to a LT4H timer with independent power

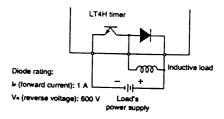


supply operation.

- 5) The input signal is applied by the shorting of each input terminal with the common terminal (terminal 3 for pin types, and terminal 6 for screw-down terminal types). Never connect other terminals or voltages higher than DC 40 V, because it may destroy the internal circuitry.
- 6) Transistor output
- (1) Since the transistor output is insulated from the internal circuitry by a photocoupler, it can be used as an NPN



output or PNP (equal value) output. (2) Use the diode connected to the output transistor's collector for absorbing



the reverse voltage from induced loads. 7) When wiring, use shielded wires or metallic wire tubes, and keep the wire lengths as short as possible.

8) For the load of the controlled output, make sure that it is lower than the rated control capacity.

LT4H Digital Timer

- 9) Turning on and off the power supply while operating in A2* (Power on delay) or G (Integration) will result in a timer error to be generated due to the characteristics of the internal circuitry. Therefore, use the signal input or stop input.
- * Not related to the signal input.
- 10) When controlling the timer by turning on the power supply, use only A (Power on delay) or A2 (Power on delay). Use of other modes in this situation will result in timer errors. When using the other modes, control the timer with the signal input or stop input.

3. Conditions of usage

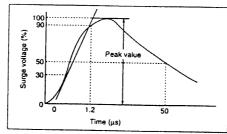
- 1) Avoid locations subject to flammable or corrosive gases, excessive dust, oil, vibrations, or excessive shocks.
- 2) Since the cover of the unit is made of polycarbonate resin, avoid contact with or use in environments containing methyl alcohol, benzene, thinners, and other organic solvents; and ammonia, caustic sodas, and other alkaline substances.
 3) If power supply surges exceed the
- sodas, and other alkaline substances.

 3) If power supply surges exceed the values given below, the internal circuits may become damaged. Be sure to use surge absorbing element to prevent this from happening.

| Operating voltage | Surge voltage (peak value) |
|-------------------|----------------------------|
| AC type | 6,000V |
| DC type | 1,000V |

Surge wave form

[\pm (1.2 × 50) ms uni-polar full wave voltage]



4) Regarding external noise, the values below are considered the noise-resistant voltages. If voltages rise above these values, malfunctions or damage to the internal circuitry may result, so take the necessary precautions.

| | Power supp | Input | |
|---------------------|------------|---------|-----------|
| | AC type | DC type | terminals |
| -Noise ₌voltage₊ | 1,500V | 1,000V | 600V |

Noise wave form (noise simulator)

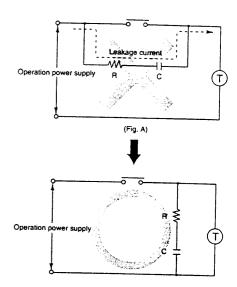
Rise time: 1 ns

Pulse width: 1 ms, 50 ns

Polarity: ±

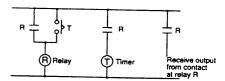
Cycle: 100 cycles/second

5) When connecting the operation power supply, make sure that no leakage current enters the counter. For example, when performing contact protection, if set up like that of diagram A, leaking current will pass through C and R, enter the unit, and cause incorrect operation. Diagram B shows the correct setup.



(Fig. B)

6) Long periods of continuous operation in the count-up completed condition (one month or more) will result in the weakening of the internal electrical components from the generated heat and, therefore, should be avoided. If you do plan to use the unit for such continuous operation, use in conjunction with a relay as shown in the circuit in the diagram below.



4. Self-diagnosis function

If a malfunction occurs, one of the following displays will appear.

| Display | Contents | Output condition | Restoration procedure | Preset values after restoration |
|---------|----------------------------|------------------|--|---------------------------------------|
| Err-00 | Malfunctioning CPU. | | Estatement DEOCT | The values at start-up before the CPU |
| E++-0: | Malfunctioning memory. See | OFF | Enter reset, RESET key, or restart unit. | malfunction occurred. |
| | note. | | or restart drift. | 0 |

5. CE Marking Certification

- 1) EMC directive (89/336/EEC) As a timer unit, the LT4H series conforms to EMC directives. Applicable standards are EN50081-2 and EN50082-2.
- 2) Low voltage directive (73/23/EEC) In order to satisfy VDE0435/Part 2021, be sure to adhere to the following installation conditions and precautions. (1) The timer uses a non-transformer

power supply and the power supply and

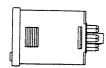
input signal terminals are not insulated.

- When a sensor is connected to the input circuit, install double insulation on the sensor side.
- With contact-point inputting, use double-insulated relays, etc.
- (2) Always connect loads insulated with basic insulation specifications to the output contact points. The timer unit is also insulated with basic insulation specifications. The combination of the two satisfies VDE, which calls for double insulation.
- (3) For the applied power supply, use one protected by an over-current protection device that conforms with EN/IEC standards (i.e. 250 V, 1 A fuse). (4) During installation, always use a terminal block or the appropriate sockets. Do not touch the terminals, or other part of the timer unit while it is on. Before installation or removal of the unit, first verify that no voltage is being applied to any of the terminals. (5) Do not use the timer in a safety circuit. When the unit is being used in a circuit such as a heater circuit, install a

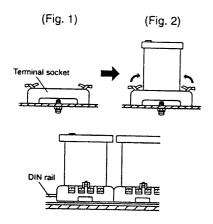
protection circuit on the machine side.

INSTALLATIONS

- 1. Surface mount
- 1) Use the pin type timer.



- 2) Put the terminal socket on the board directly or put it on the DIN rail (Fig. 1)
- 3) Insert the timer into the terminal socket and fix it with clip. (Fig. 2)
- 4) On DIN rail mounting, mount the timer on the DIN rail tightly.



- 5) Pin type is connected with terminal socket ATC18004.
- 6) DIN rail (AT8-DLA1) is also available (1m).

2. Flush mount

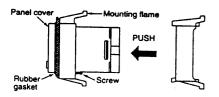
1) Use the built-in screw terminal type for flush mount. (Mounting frame and rubber gasket are provided when timer is shipped.)

When the pin type is used, accessories (AT8-DA4 and ATC18002) are required.

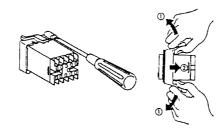
2) Insert the timer into the panel cut and



slide the mounting frame from the back. Push the mounting frame over the timer to tighten the screw. Fasten in place with the screws provided.

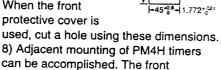


- 3) ⓐ When the water-protected type is used, comfirm the conditions with which timer with rubber gasket and panel are attached tightly.
- **(b)** Mounting without panel cover and rubber gasket will be less water-registant.
- 4) Loosen the screws on the mounting frame, spread the edge of frame and remove it.



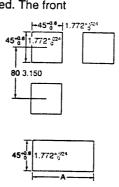
- 5) Refer to the terminal wiring diagram, wire the terminals correctly.
- 6) Panel cutout dimensions
 The standard panel cutout dimensions
 are shown below. (Panel thickness: 1 to
 5mm .039 to .197 inch)
- 7) Although the timers can be mounted adjacent to each other, it is recommended to arrange the mounting holes as shown in the figure to facilitate attaching and

detaching the mounting frame. When the front protective cover is



protective cover cannot be used for this type of mounting. (panel thickness: 1 to 5mm .039 to .197 inch)

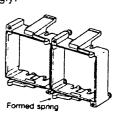
The standard dimension for A when n units (n≤5) are mounted adjacently.

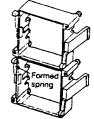


A=(48×n-2.5)% (mm)
A=(1.890×n-2.5)% inch
If six or more units are to be mounted, measure the actual dimensions and cut the panel accordingly.

When lining up the timers horizontally, set the frames in such a position so the formed spring areas are at the top and bottom.

when lining up the timers vertically, set the frames in such a position as the formed spring areas are at the right and left.







mm inch

| Type | Appearance DIN rail socket (11 pin) | Dimensions | Terminal wiring (TOP VIEW) | Mounting hole dimensions |
|------------------|---|--|--|--|
| LT4H (11 pin) | ATC18004 | 2-94.5 2-9.177 217 -40.0 1.575- 51.0 2.008 - 31.0 - 1.220 | Note: Terminal No. on the main body are identifical to those on the terminal socket. | 71.0 2.795 40±0.2 1.575±.008 512 Minimum separation |

on the main body are identifical to those on the terminal socket.

Tolerance: ±1 ±.039

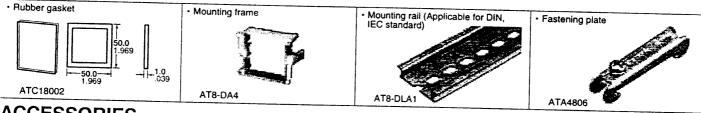
SOCKETS

| Type Screw terminal | Dimensions | Terminal wiring (TOP VIEW) | Mounting hole dimensions |
|---------------------|---|----------------------------|--------------------------|
| LT4H (11 pin) | \$31.5 \$1.240 \$1.240 \$32.5 \$8.315 \$1.280 \$34.6) (1.362) | | |

Note: Terminal No. on the main body are identifical to those on the terminal socket.

Tolerance: ±1 ±.039

MOUNTING PARTS



ACCESSORIES

Panel cover (Black)



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