

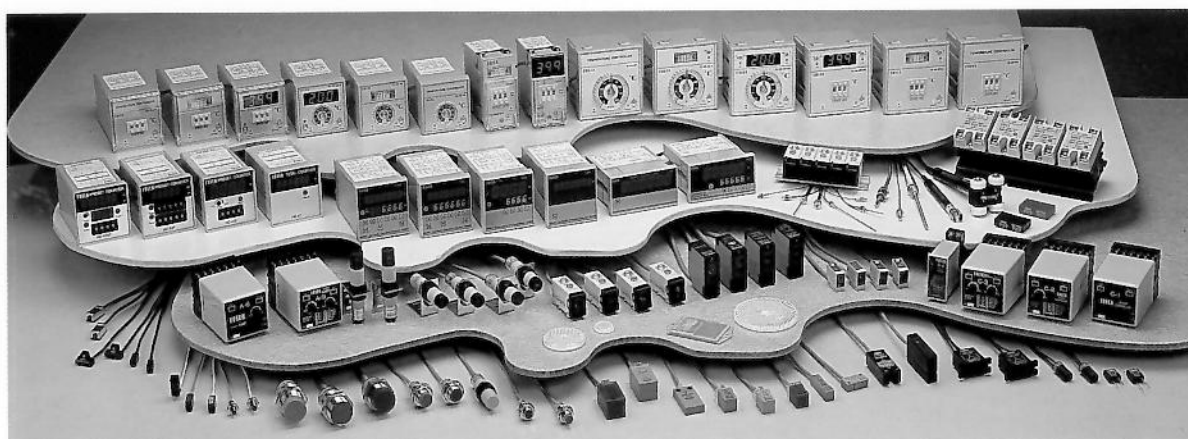
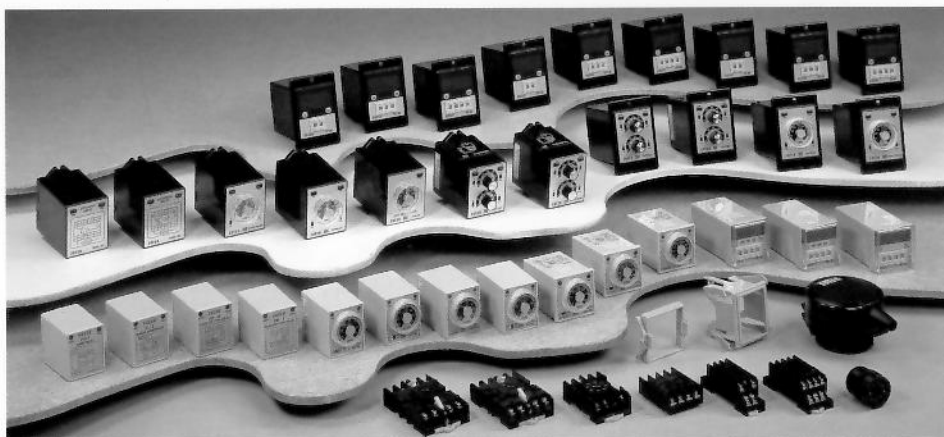
# FOTEK

## TIMER



陽明電機股份有限公司  
自動化控制器材專業製造廠

# FOTEK CONTROLS



## 陽明電機股份有限公司 FOTEK CONTROLS CO.,LTD.

成立1985年

Established 1985

### 主要產品

### Main product

- 計時器
- 計數器
- 轉速表
- 線速表
- 電壓表
- 電流表
- 光電開關
- 近接開關
- 磁簧開關
- 固態繼電器
- 溫度控制器
- 液位控制器
- 欠逆相保護器
- 馬達起動器

- Timer
- Counter
- Tachometer
- Line Speed Meter
- Voltage Meter
- Current Meter
- Photo Sensor
- Proximity Sensor
- Reed Sensor
- Solid State Relay
- Temperature Controller
- Floatless Level Relay
- Phase Relay
- Y-△Starter

### 經營理念：

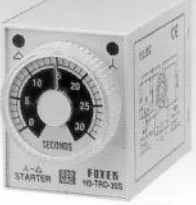
- 追求永續經營
- 客戶是永遠的朋友
- 堅持品質、追求至善
- 不斷研發生產  
物超所值的產品
- 責任、務實、創新、  
邁向未來

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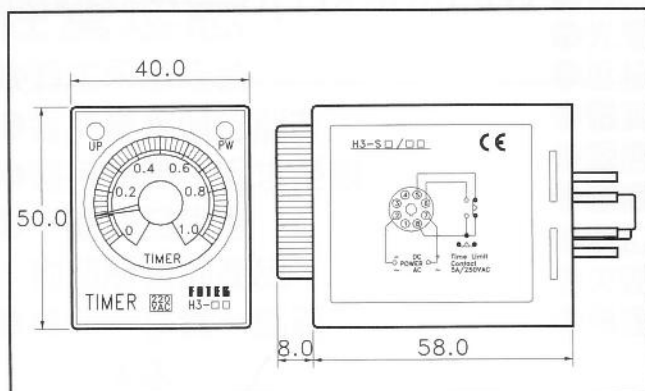
# H3 series ON DELAY TIMER/FLICKER/Y- $\Delta$ STARTER

| Type   | Multi-Range ON Delay Timer                                                                                              | Single-Range ON Delay Timer                                                       | Multi-Range Flicker                                                                | Y- $\Delta$ Starter                                                                 |
|--------|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Model  | H3-M□                                                                                                                   | H3-□□                                                                             | H3-FK-M3                                                                           | H3-TRD-30S                                                                          |
| Figure |                                        |  |  |  |
| Range  | M1:1S/10S/1M/10M<br>M3:3S/30S/3M/30M<br>M6:6S/60S/6M/60M<br>M1H:1M/10M/1H/10H<br>M3H:3M/30M/3H/30H<br>M6H:6M/60M/6H/60H | 1S/3S/6S/10S<br>30S/60S/3M/6M<br>10M/30M/60M<br>3H/6H/10H/100H                    | 3S/30S/3M/30M                                                                      | 30S<br>Change Time:0.2S<br>0.1~0.5S is Available<br>ON Demanded                     |
| Weight | 155g                                                                                                                    | 155g                                                                              | 140g                                                                               | 105g                                                                                |

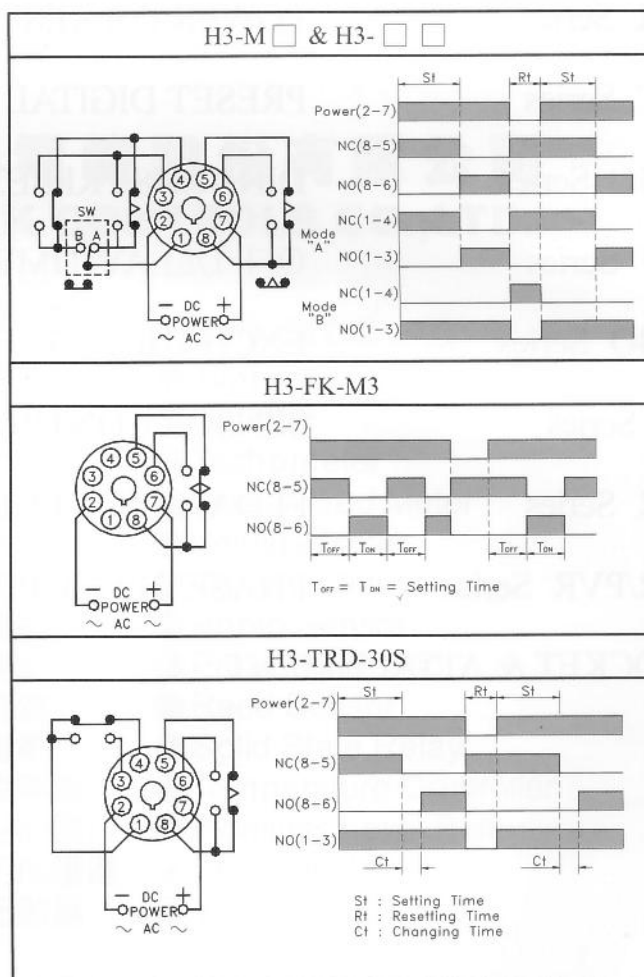
## Specification

|                     |                                                   |
|---------------------|---------------------------------------------------|
| Power Supply        | 12 or 24 VAC/DC or 110V or 230V or 380VAC 50/60Hz |
| Wattage Consump.    | 3VA max.                                          |
| Control Output      | Relay                                             |
| Contact Rated       | 10A                                               |
| Repetivity          | 0.2% of F.S max.                                  |
| Setting Accuracy    | 5% of F.S max.                                    |
| Reset Time          | 0.1S max.                                         |
| Insulation Strength | 100M $\Omega$ /500VDC                             |
| Dielectric Strength | 2.5KV/1 min.                                      |
| Circumstance        | -20 $^{\circ}$ ~ +60 $^{\circ}$ C , 35~85%RH      |
| Life of Relay       | 20 X 10 <sup>6</sup> Times                        |

## Dimension



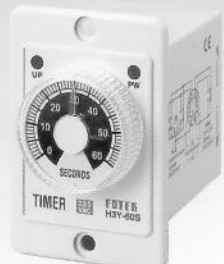
## Connection & Timing Diagram



# Panel Type POWER ON DELAY TIMER



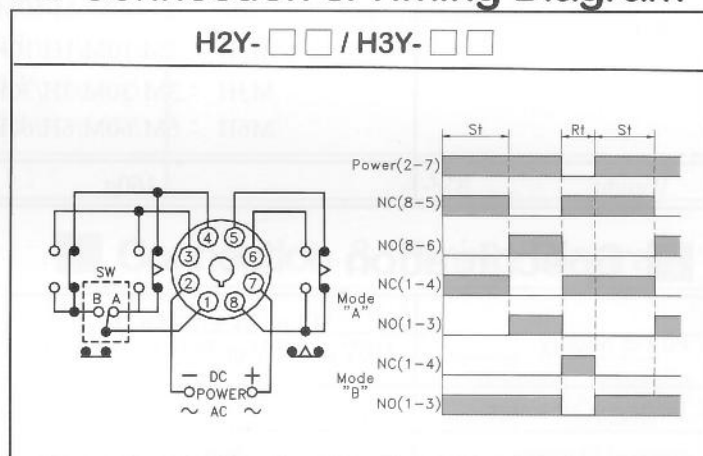
## H2Y/H3Y series

|         |                                                                                   |                                                                                     |
|---------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Outline | STPY                                                                              | H3                                                                                  |
| Model   | H2Y-□□                                                                            | H3Y-□□                                                                              |
| Figure  |  |  |
| Range   | 1S, 3S, 6S, 10S, 30S, 60S, 3M, 6M, 10M, 30M, 60M, 3H, 10H, 30H, 60H               |                                                                                     |
| Wight   | 165g                                                                              | 160g                                                                                |

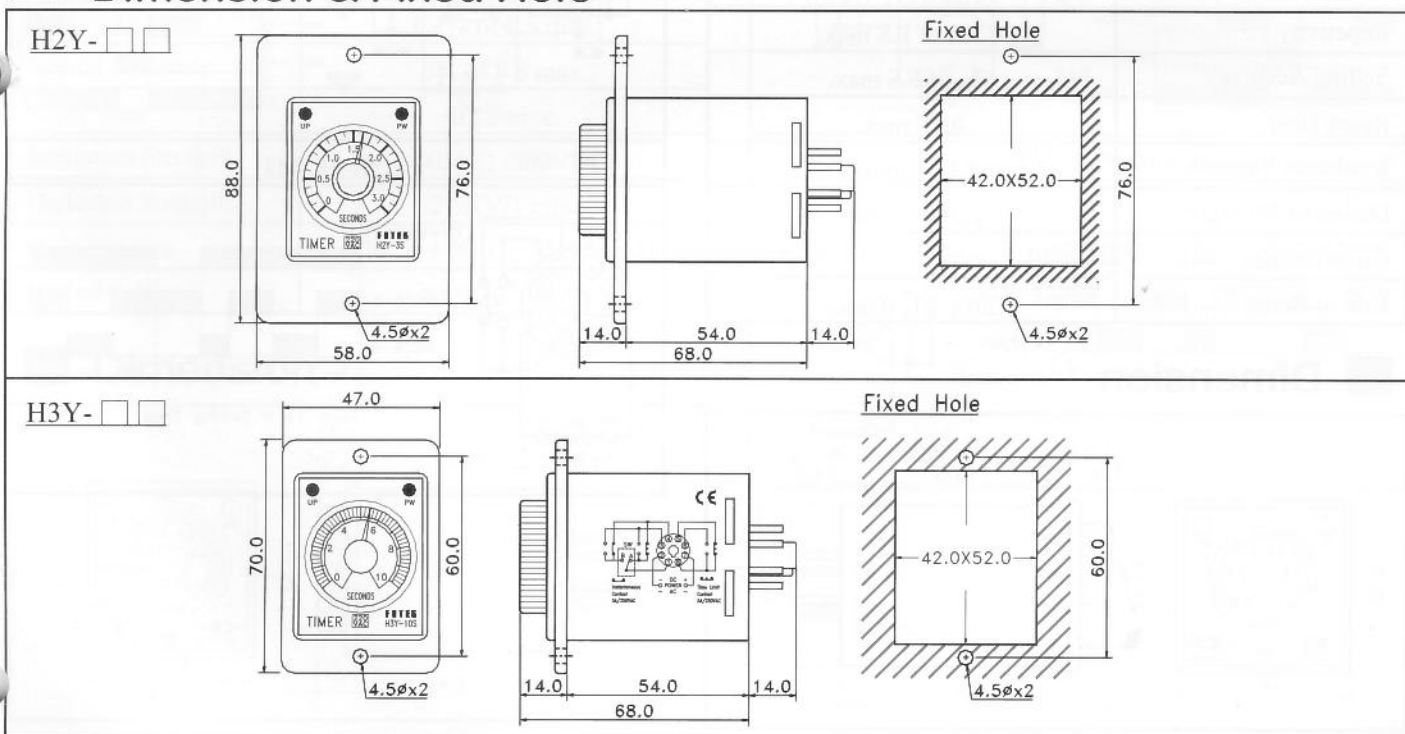
### Specification

|                     |                                            |
|---------------------|--------------------------------------------|
| Power Supply        | 12 or 24 VAC/DC or 230V or 380 VAC 50/60Hz |
| Wattage Consump.    | 3VA max                                    |
| Control Output      | Relay                                      |
| Contact Rated       | 10A                                        |
| Repetivity          | 0.2% of F.S max.                           |
| Setting Accuracy    | 5% of F.S max.                             |
| Reset Time          | 0.1S max.                                  |
| Insulation Strength | 100M $\Omega$ /500VDC                      |
| Dielectric Strength | 2.5KV/1 min.                               |
| Circumstance        | -20 $^{\circ}$ ~+60 $^{\circ}$ C, 35~85%RH |
| Life of Relay       | 20 X 10 <sup>6</sup> Times                 |

### Connection & Timing Diagram



### Dimension & Fixed Hole



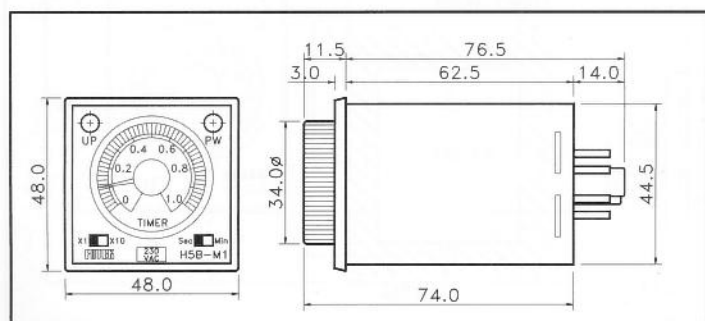


| Type   | Multi-Range ON Delay Timer                                                                                                          | Multi-Range Flicker |
|--------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Model  | H5B-M <input type="checkbox"/>                                                                                                      | H5B-FK-M3           |
| Figure |                                                                                                                                     |                     |
| Range  | M1 : 1S/10S/1M/10M<br>M3 : 3S/30S/3M/30M<br>M6 : 6S/60S/6M/60M<br>M1H : 1M/10M/1H/10H<br>M3H : 3M/30M/3H/30H<br>M6H : 6M/60M/6H/60H | 3S/30S/3M/30M       |
| Weight | 160g                                                                                                                                | 150g                |

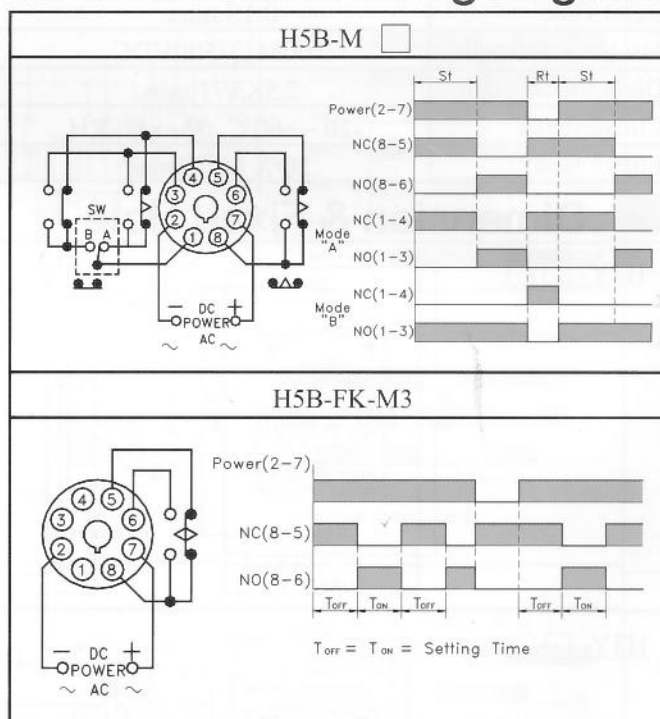
## Specification

|                     |                                                   |
|---------------------|---------------------------------------------------|
| Power Supply        | 12 or 24 VAC/DC or 110V or 230V or 380VAC 50/60Hz |
| Wattage Consump.    | 3VA max.                                          |
| Control Output      | Relay                                             |
| Contact Rated       | 10A                                               |
| Repetivity          | 0.2% of F.S max.                                  |
| Setting Accuracy    | 5% of F.S max.                                    |
| Reset Time          | 0.1S max.                                         |
| Insulation Strength | 100M $\Omega$ /500VDC                             |
| Dielectric Strength | 2.5KV/1 min.                                      |
| Circumstance        | -20° ~ +60 °C , 35~85%RH                          |
| Life of Relay       | 20X 10 <sup>6</sup> Times                         |

## Dimension



## Connection & Timing Diagram



# DIN 48X48 FREE POWER ON DELAY TIMER/FLICKER



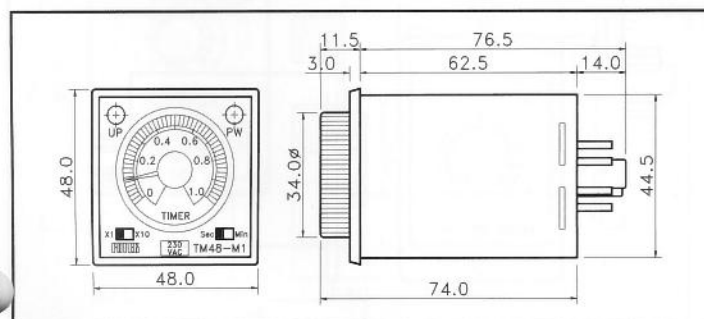
**TM48**  
series

| Type   | Multi-Range ON Delay Timer                                                                                                          | Multi-Range Flicker                                                                 |
|--------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Model  | TM48-M <input type="checkbox"/>                                                                                                     | TM48-FK-M3                                                                          |
| Figure |                                                    |  |
| Range  | M1 : 1S/10S/1M/10M<br>M3 : 3S/30S/3M/30M<br>M6 : 6S/60S/6M/60M<br>M1H : 1M/10M/1H/10H<br>M3H : 3M/30M/3H/30H<br>M6H : 6M/60M/6H/60H | 3S/30S/3M/30M                                                                       |
| Weight | 145g                                                                                                                                | 135g                                                                                |

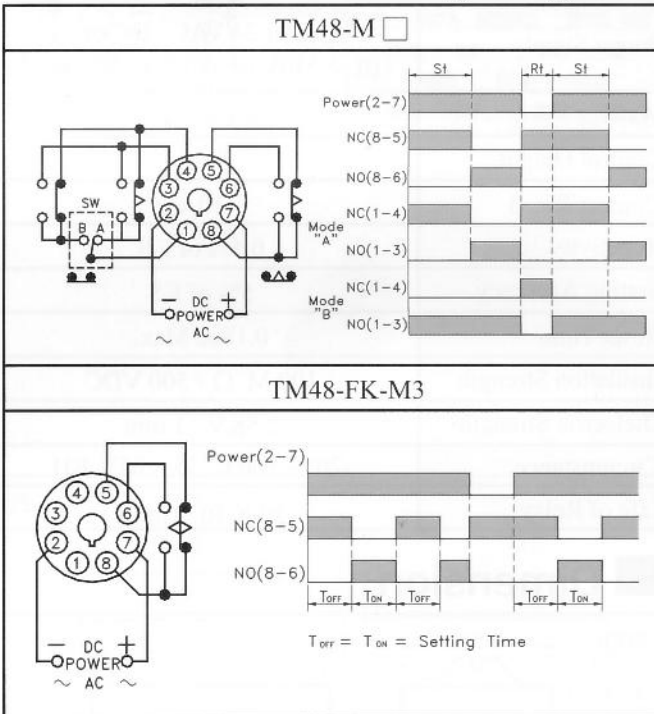
## Specification

|                     |                            |
|---------------------|----------------------------|
| Power Supply        | 24 ~ 250 VAC/DC<br>50/60Hz |
| Wattage Consump.    | 3VA max.                   |
| Control Output      | Relay                      |
| Contact Rated       | 10A                        |
| Repetivity          | 0.2% of F.S max.           |
| Setting Accuracy    | 5% of F.S max.             |
| Reset Time          | 0.1S max.                  |
| Insulation Strength | 100M $\Omega$ /500VDC      |
| Dielectric Strength | 2.5KV/1 min.               |
| Circumstance        | -20° ~ +60 °C , 35~85%RH   |
| Life of Relay       | 20 X 10 <sup>6</sup> Times |

## Dimension



## Connection & Timing Diagram

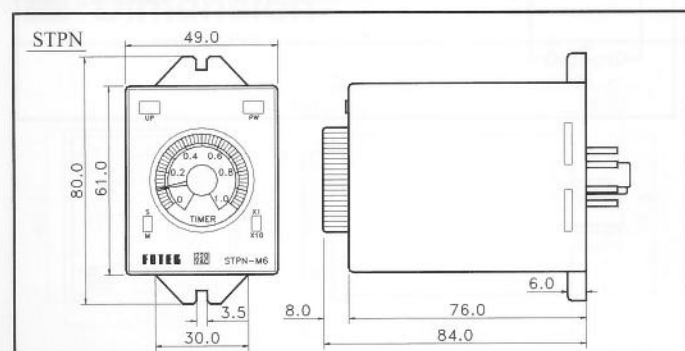


| Type   | Multi-Range ON Delay Timer                                                                                                                                              |                                                                                   | Multi-Range Flicker                                                                |                                                                                     |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Model  | STPN-M <input type="checkbox"/>                                                                                                                                         | STPY-M <input type="checkbox"/>                                                   | STPN-FK-M3                                                                         | STPY-FK-M3                                                                          |
| Figure |                                                                                        |  |  |  |
| Range  | M1 : 1S / 10S / 1M / 10M<br>M3 : 3S / 30S / 3M / 30M<br>M6 : 6S / 60S / 6M / 60M<br>M1H : 1M / 10M / 1H / 10H<br>M3H : 3M / 30M / 3H / 30H<br>M6H : 6M / 60M / 6H / 60H |                                                                                   | 3S/30S/3M/30M                                                                      |                                                                                     |
| Weight | 190g                                                                                                                                                                    | 195g                                                                              | 185g                                                                               | 190g                                                                                |

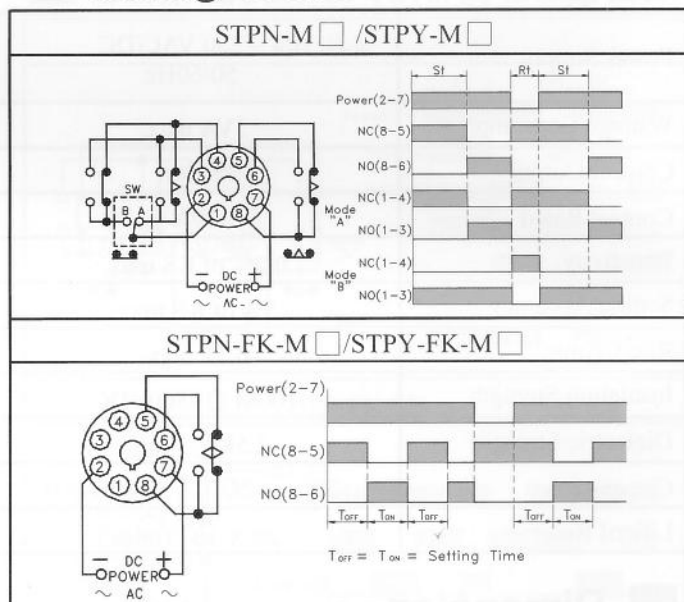
## Specification

|                     |                                                          |
|---------------------|----------------------------------------------------------|
| Power Supply        | 12 or 24 VAC / DC or<br>110 or 230V or 380VAC 50 / 60 Hz |
| Wattage             | 3 VA max.                                                |
| Control Output      | Relay                                                    |
| Contact Rated       | 10A                                                      |
| Repetivity          | 0.5% of F.S                                              |
| Setting Accuracy    | 5% of F.S                                                |
| Reset Time          | 0.1Sec Max.                                              |
| Insulation Strength | 100 M $\Omega$ / 500 VDC                                 |
| Dielectric Strength | 2.5KV / 1 min                                            |
| Circumstance        | -20° ~ +60°C, 35 ~ 85% RH                                |
| Life of Relay       | 20 X 10 <sup>6</sup> Times                               |

## Dimension



## Timing Chart







# TWIN TIMER & DEFROSTING TIMER

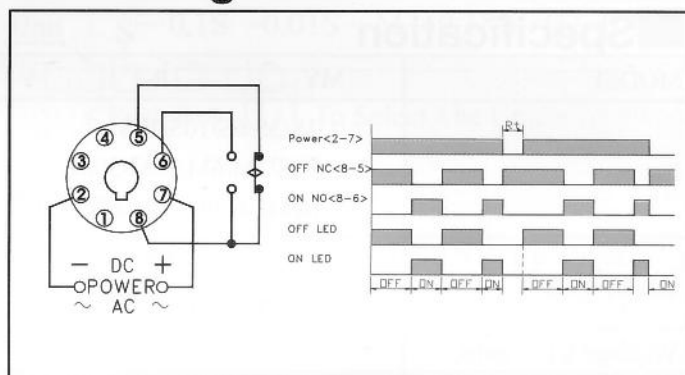
## TDV & TDF series

| Type   | Multi-Range Twin Timer                                                                 |                                                                                   | Multi-Range Defrosting Timer                                                       |                                                                                     |
|--------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Model  | TDVN-M <input type="checkbox"/>                                                        | TDVY-M <input type="checkbox"/>                                                   | TDFN-12H                                                                           | TDFY-12H                                                                            |
| Figure |       |  |  |  |
| Range  | M3 = 3S/30S/3M/30M<br>M6 = 6S/60S/6M/60M<br>M3H = 3M/30M/3H/30H<br>M6H = 6M/60M/6H/60H |                                                                                   | Cooling : 12H<br>Defrosting : 30M                                                  |                                                                                     |
| Weight | 190g                                                                                   | 195g                                                                              | 190g                                                                               | 195g                                                                                |

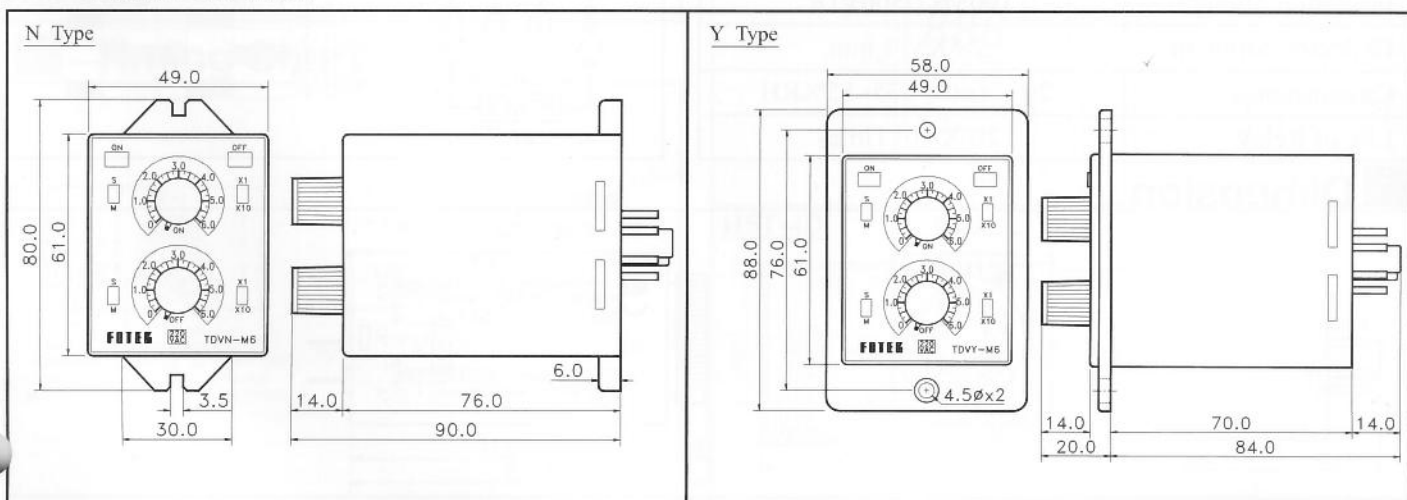
### Specification

|                     |                                                   |
|---------------------|---------------------------------------------------|
| Power Supply        | 12 or 24 VAC/DC<br>110V or 230V or 380VAC 50/60Hz |
| Wattage             | 3VA max.                                          |
| Control Output      | Relay                                             |
| Contact Rated       | 10A                                               |
| Repetivity          | 0.5% of F.S                                       |
| Setting Accuracy    | 5% of F.S                                         |
| Reset Time          | 0.1 Sec Max.                                      |
| Insulation Strength | 100M $\Omega$ /500VDC                             |
| Dielectric Strength | 2.5KV/1 min.                                      |
| Circumstance        | -20° ~+60 °C , 35~85%RH                           |
| Life of Relay       | 20 X 10 <sup>6</sup> Times                        |

### Timing Chart



### Dimension



☆High Repetivity : 0.2% of F.S. Max.

☆Reset Time : 0.1S Max.

☆Setting Accuracy : 5 % of F.S. Max.

☆CE Approved : EMC , ESD & LVD

☆Guiding of Model :

**MY - 10S - 2P - 220V**

①

②

③

④

① : Series

② : Range

③ : Contact Poles

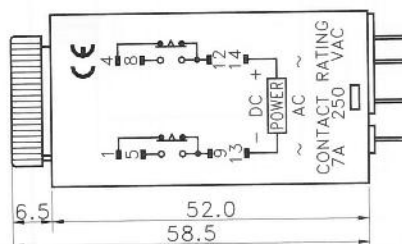
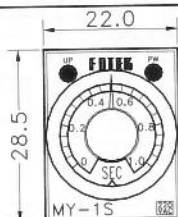
④ : Operating Voltage



## Specification

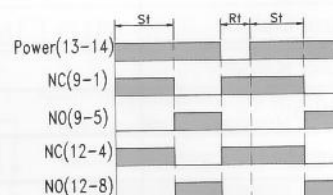
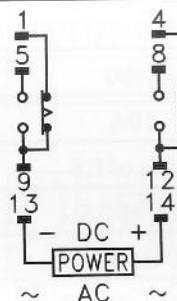
| MODEL               | MY-□□-□P-□□□V                                              |
|---------------------|------------------------------------------------------------|
| Range               | 1S/3S/6S/10S/30S<br>60S/3M/6M/10M/30M<br>60M/3H/6H/10H/30H |
| Power Supply        | 12 or 24 VDC<br>110V or 220VAC 50/60Hz                     |
| Wattage Consump.    | 3VA max.                                                   |
| Control Output      | Relay                                                      |
| Contact Rated       | 7A/250VAC                                                  |
| Repetivity          | 0.2% of F.S max.                                           |
| Setting Accuracy    | 5% of F.S max.                                             |
| Reset Time          | 0.1S max.                                                  |
| Insulation Strength | 100MΩ/500VDC                                               |
| Dielectric Strength | 2.5KV/1 min.                                               |
| Circumstance        | -20°~+60°C, 35~85%RH                                       |
| Life of Relay       | 20 X 10 <sup>6</sup> Times                                 |

## Dimension

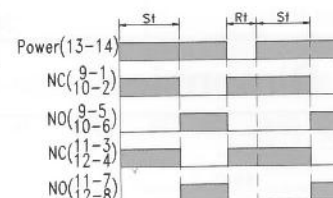
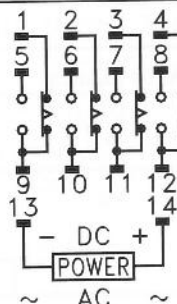


## Wiring Chart Connection & Timing

MY-□□-2P-□□□V



MY-□□-4P-□□□V



# DIGITAL POWER ON DELAY TIMER

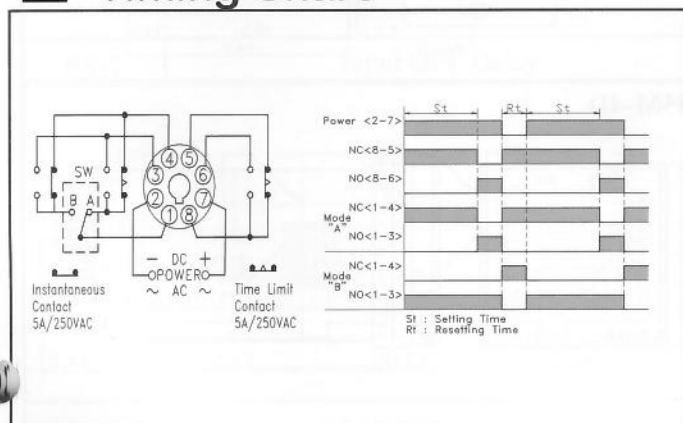
## SY/H5T series

|         |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Outline | 50 x 60                                                                           |                                                                                   |                                                                                    | 48 x 48                                                                             |
| Model   | SY-2D                                                                             | SY-3D                                                                             | SY-4D                                                                              | H5T-4D                                                                              |
| Figure  |  |  |  |  |
| Range   | 0~99                                                                              | 0~999                                                                             | 0~9999                                                                             | 0~9999                                                                              |
| Display | 0.56" Red LED                                                                     | 0.56" Red LED                                                                     | 0.4" Red LED                                                                       | 0.36" Red LED                                                                       |
| Weight  | 145g                                                                              | 150g                                                                              | 155g                                                                               | 160g                                                                                |
| Unit    | S, 0.1S, 0.01S, M, 0.1M, H or 0.1H Selectable                                     |                                                                                   |                                                                                    |                                                                                     |

## Specification

|                     |                                        |
|---------------------|----------------------------------------|
| Power Supply        | 12V or 24VDC/AC or 90~250 VAC 50/60 Hz |
| Wattage             | 5VA max.                               |
| Control Output      | A Two Limit Contact                    |
|                     | B Limit & Instantaneous                |
| Output Method       | Relay 10A                              |
| Control Method      | Power ON Delay                         |
| Timing Method       | UP or Down Selectable                  |
| Repetivity          | 0.1% of F.S                            |
| Setting Accuracy    | 0.05% of F.S                           |
| Reset Time          | 0.1S max.                              |
| Reset Method        | Power OFF Reset                        |
| Insulation Strength | 100 M $\Omega$ / 500 VDC               |
| Dielectric Strength | 2.5KV / 1 min                          |
| Circumstance        | -20° ~ +60°C, 35 ~ 85% RH              |
| Life of Relay       | 20 X 10 <sup>6</sup> Times             |

## Timing Chart



## Illumination

Unit : S → 0.1S → 0.01S → M → 0.1M → H → 0.1H

< Push Key  To Select The Unit >

## Slide Switch

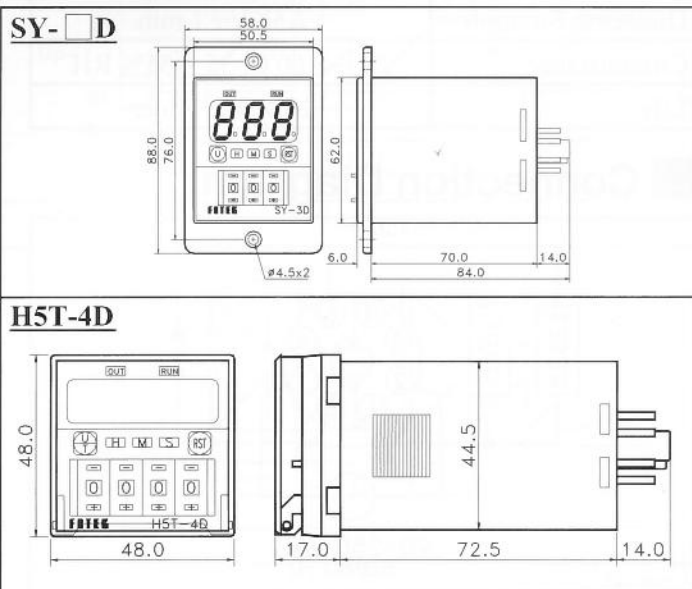
LK : To Lock Unit Selecting N : Up Timer

UL : To Unlock Unit Selecting R : Down Timer

A : Time Limit Contact

B : Instantaneous Contact

## Dimension Chart



# STP-□D/H5M series

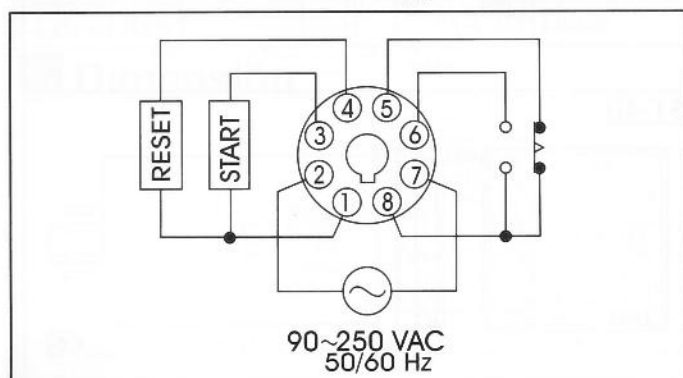
# MULTI-FUNCTION DIGITAL TIMER

|         |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Outline | 50 x 60                                                                           |                                                                                   |                                                                                    | 48 x 48                                                                             |
| Model   | STP-2D                                                                            | STP-3D                                                                            | STP-4D                                                                             | H5M-4D                                                                              |
| Figure  |  |  |  |  |
| Range   | 0~99                                                                              | 0~999                                                                             | 0~9999                                                                             |                                                                                     |
| Display | 0.56" Red LED                                                                     | 0.56" Red LED                                                                     | 0.4" Red LED                                                                       | 0.36" Red LED                                                                       |
| Weight  | 150g                                                                              | 155g                                                                              | 160g                                                                               | 155g                                                                                |
| Unit    | S→0.1S→0.01S→M→0.1M→H→0.1H                                                        |                                                                                   |                                                                                    | Selectable                                                                          |

## Specification

|                     |                            |
|---------------------|----------------------------|
| Power Supply        | 90~250 VAC 50/60 Hz        |
| Wattage             | 5VA max.                   |
| Memory Method       | EEPROM.                    |
| Timing Method       | UP or Down Selecting       |
| Time Input          | Hi > 6V, Lo < 2V           |
| Reset Input         | Hi > 6V, Lo < 2V           |
| Output Method       | Relay, 10A                 |
| Output Control      | N / R Selectable           |
| Control Method      | 10 mode                    |
| DC Output           | 60 mA / 12 VDC             |
| Delay Timer<t>      | 0.1~9.9 S                  |
| Insultion Strength  | 100 MΩ / 500 VDC           |
| Dielectric Strength | 2.5KV / 1 min.             |
| Circumstance        | -20° ~ +60°C, 35 ~ 85% RH  |
| Life                | 20 X 10 <sup>6</sup> Timer |

## Connection Diagram



## Illumination

Unit : S→0.1S→0.01S→M→0.1M→H→0.1H

< Push  &  Key To Select The Unit >

### Slide Switch

"N" : Manual Reset

"R" : Auto Reset

"LK" : To Lock Unit Selection

"UL" : To Unlock Unit Selection

### Inside DIP Switch

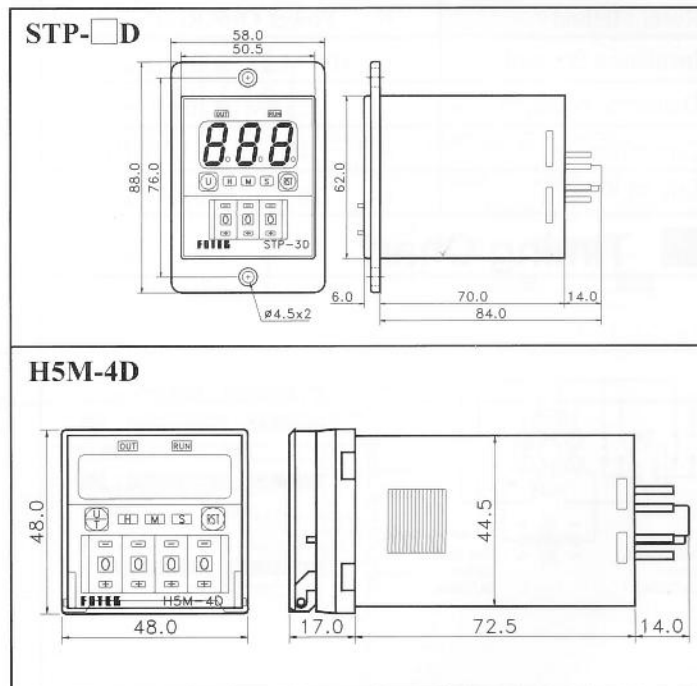
No.1 : ON=Memory

: OFF=Non-Memory

No.2 : ON=Down Timing

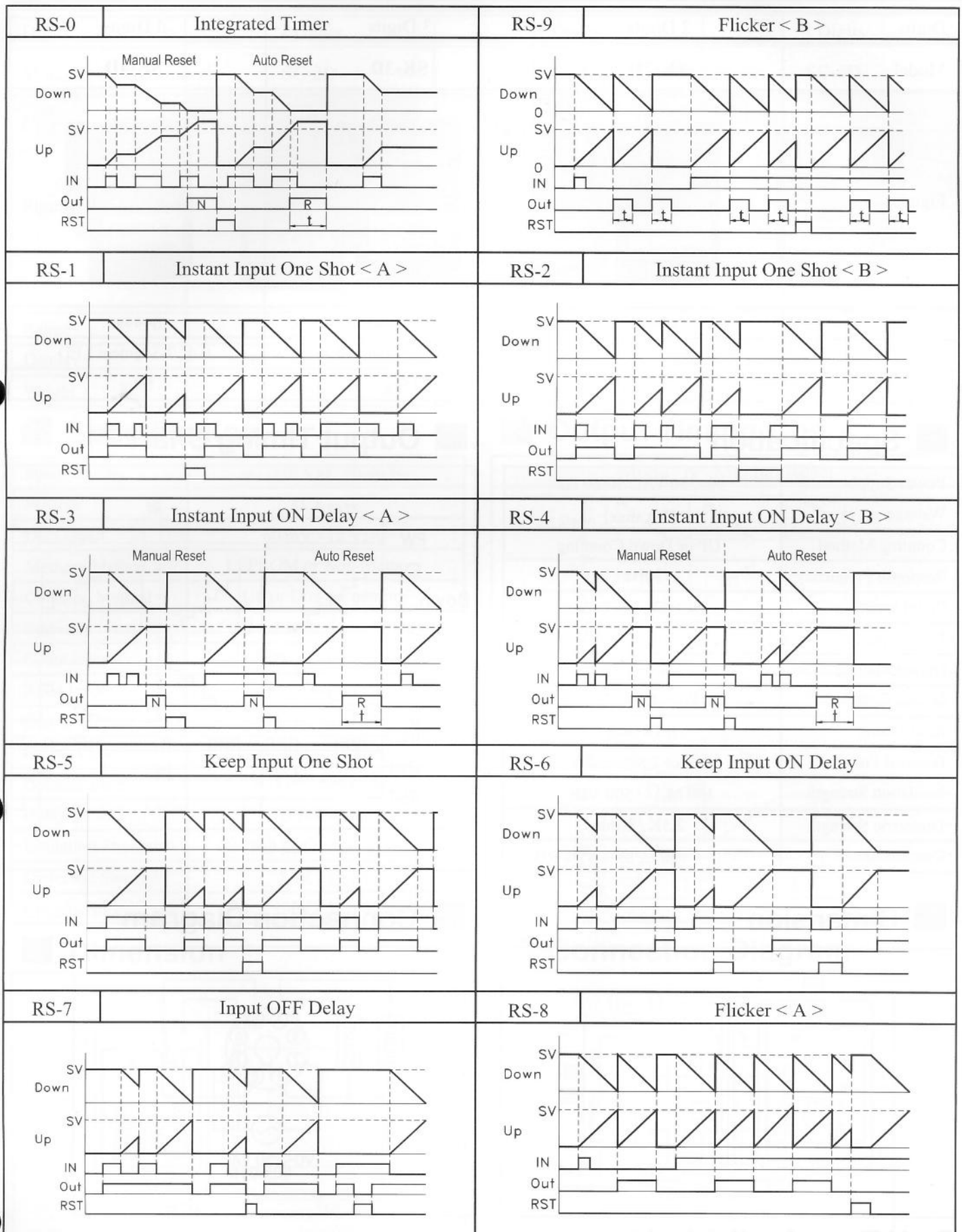
: OFF=UP Timing

## Dimension





# STP-□D/H5M series



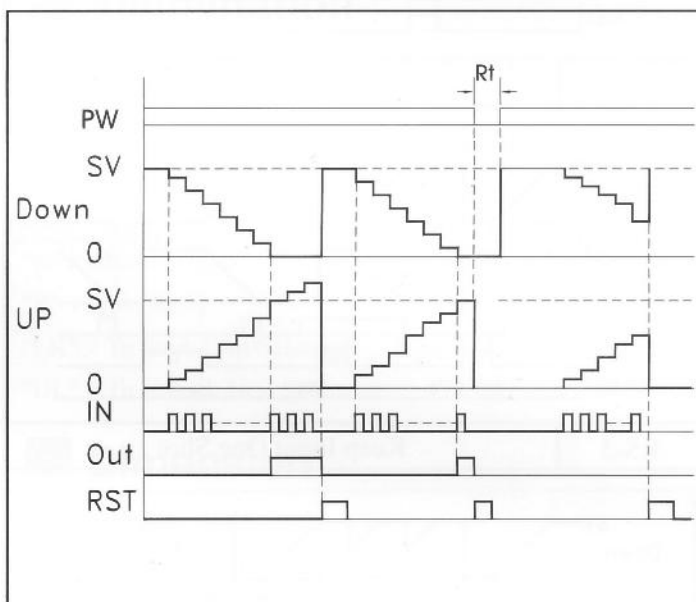


| Digits  | 2 Digits                                                                          | 3 Digits                                                                           | 4 Digits                                                                            |
|---------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Model   | SK-2D                                                                             | SK-3D                                                                              | SK-4D                                                                               |
| Figure  |  |  |  |
| Range   | 0~99                                                                              | 0~999                                                                              | 0~9999                                                                              |
| Display | 0.56" 7-Segment LED                                                               | 0.56" 7-Segment LED                                                                | 0.4" 7-Segment LED                                                                  |
| Weight  | 150g                                                                              | 155g                                                                               | 160g                                                                                |

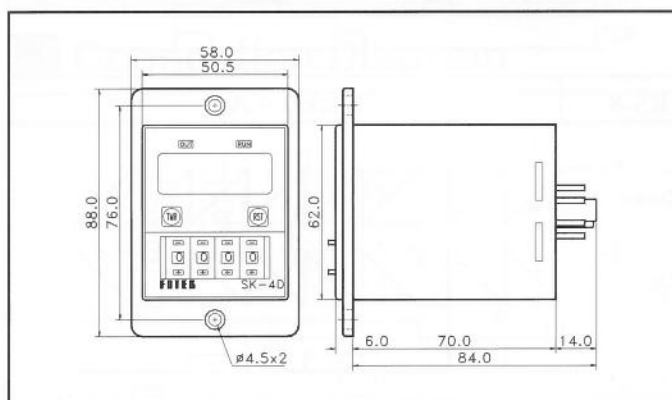
## Specification

|                     |                           |
|---------------------|---------------------------|
| Power Supply        | 90~250 VAC 50/60 Hz       |
| Wattage             | 5VA max.                  |
| Counting Method     | UP or Down Counting       |
| Response Frequency  | 30Hz                      |
| Count Input         | Hi > 6V, Lo < 2V          |
| Reset Input         | Hi > 6V, Lo < 2V          |
| Output Method       | Relay                     |
| Output Control      | Power ON Reset            |
| Reset Time          | 0.1S max                  |
| Decimal Point       | 0, 1 or 2 Selectable      |
| Insulation Strength | 100 M $\Omega$ / 500 VDC  |
| Dielectric Strength | 2.5K / 1 min.             |
| Circumstance        | -20° ~ +60°C, 35 ~ 85% RH |

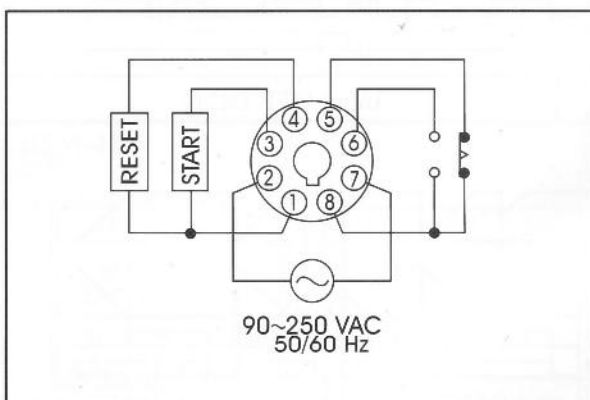
## Output Timing Chart



## Dimension



## Connection Diagram



Ps.N Type Available Aiso

# PRESET DIGITAL COUNTER

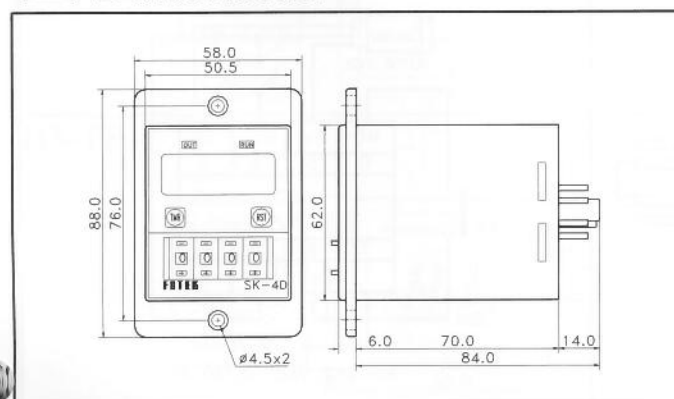
**SC**  
series

| Digits  | 2 Digits                                                                          | 3 Digits                                                                          | 4 Digits                                                                            |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Model   | SC-2D                                                                             | SC-3D                                                                             | SC-4D                                                                               |
| Figure  |  |  |  |
| Range   | 0~99                                                                              | 0~999                                                                             | 0~9999                                                                              |
| Display | 0.56" 7-Segment LED                                                               | 0.56" 7-Segment LED                                                               | 0.4" 7-Segment LED                                                                  |
| Weight  | 155g                                                                              | 160g                                                                              | 165g                                                                                |

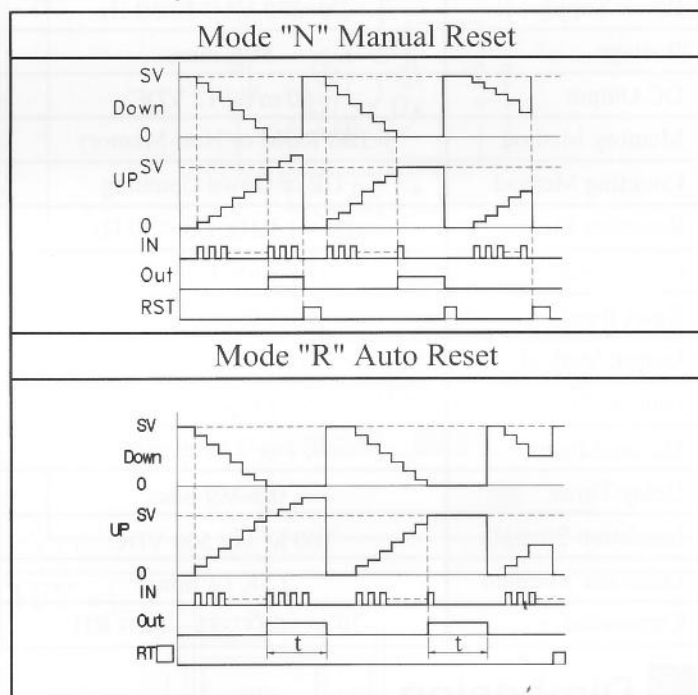
## Specification

|                     |                           |
|---------------------|---------------------------|
| Power Supply        | 90~250 VAC 50/60 Hz       |
| Wattage             | 5VA max.                  |
| DC Output           | 60 mV / 12 VDC            |
| Memory Method       | EEPROM or Non-Memory      |
| Counting Method     | UP or Down Counting       |
| Response Freq.      | Hi > 1 KHz, Lo < 30 Hz    |
| Count Input         | Hi > 6V, Lo < 2V          |
| Reset Input         | Hi > 6V, Lo < 2V          |
| Output Method       | Relay, 1a / 10A           |
| Output Control      | N or R Selectable         |
| Decimal Point       | 0, 1 or 2 Selectable      |
| Delay Timer         | 0.1~9.9 Sec               |
| Insulation Strength | 100 M $\Omega$ / 500 VDC  |
| Dielectric Strength | 2.5K / 1 min.             |
| Circumstance        | -20° ~ +60°C, 35 ~ 85% RH |

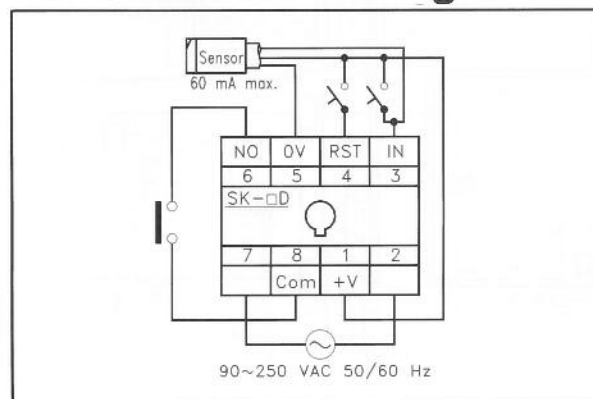
## Dimension



## Output Timing Chart



## Connection Diagram



PS.N Type Available Also

- ☆ DIN 48X48
- ☆ Up Counter or Down Counter Selectable.
- ☆ Decimal Point Selectable.
- ☆ Response Frequency :  $Hi < 1K\ Hz$  ,  $Lo < 30\ Hz$   
Selectable.
- ☆ Output Control : Manual Reset or Auto Reset  
Selectable.
- ☆ Output Delay Time :  $0.1S \sim 9.9\ S$
- ☆ DC Output :  $60\ mA / 12\ VDC$
- ☆ Switching Power Supply :  $90 \sim 250\ VAC$  ,  $50 / 60\ Hz$

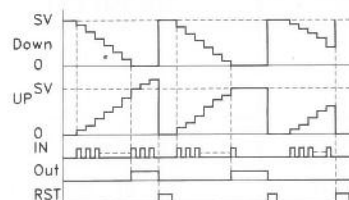


## Specification

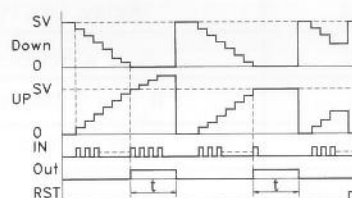
|                     |                                                     |
|---------------------|-----------------------------------------------------|
| Model               | H5C - 4D                                            |
| Power Supply        | 90~250 VAC 50/60 Hz                                 |
| Wattage             | 5VA max.                                            |
| DC Output           | 60 mV / 12 VDC                                      |
| Memory Method       | EEPROM or Non-Memory                                |
| Counting Method     | UP or Down Counting                                 |
| Response Freq.      | $Hi < 1\ KHz$ , $Lo < 30\ Hz$                       |
| Count Input         | $Hi > 6V$ , $Lo < 2V$                               |
| Reset Input         | $Hi > 6V$ , $Lo < 2V$                               |
| Output Method       | Relay, 1a / 10A                                     |
| Output Control      | N or R Selectable                                   |
| Decimal Point       | 0, 1 or 2 Selectable                                |
| Delay Timer         | 0.1~9.9 Sec                                         |
| Insulation Strength | $100\ M\ \Omega / 500\ VDC$                         |
| Dielectric Strength | $2.5K / 1\ min.$                                    |
| Circumstance        | $-20^{\circ} \sim +60^{\circ}C$ , $35 \sim 85\% RH$ |

## Output Timing Chart

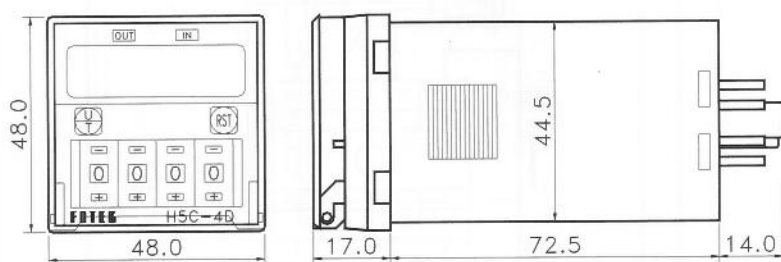
Mode "N" Manual Reset



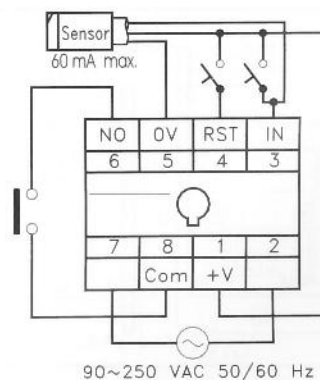
Mode "R" Auto Reset



## Dimension



## Connection Diagram



# OFF DELAY TIMER



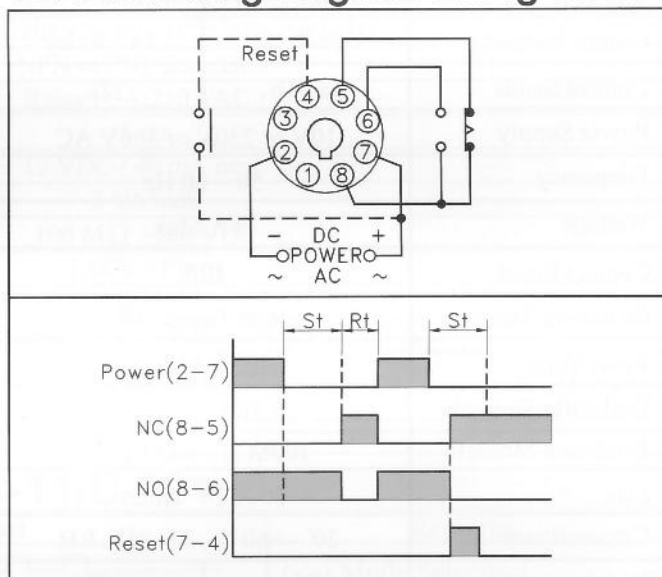
**TF**  
series

| Outline       | 50x60                     | 40x50      | 48x48       |
|---------------|---------------------------|------------|-------------|
| Model         | TFN - □□                  | H3-TF - □□ | H5B-TF - □□ |
| Figure        |                           |            |             |
| Range         | 3S, 6S, 10S, 30S, 60S, 3M |            |             |
| Contact Rated | 5A/250VAC                 | 1A/250VAC  | 5A/250VAC   |
| Weight        |                           |            |             |

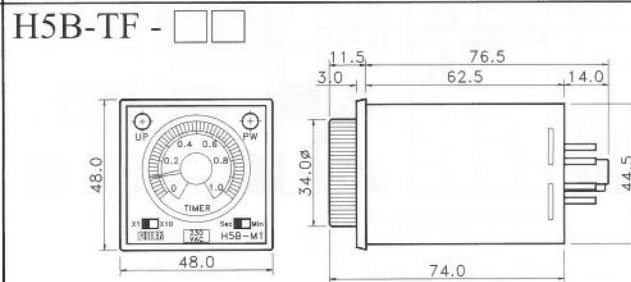
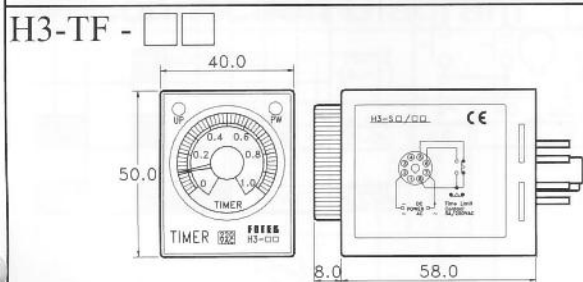
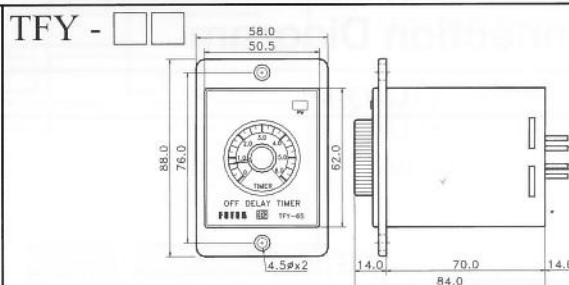
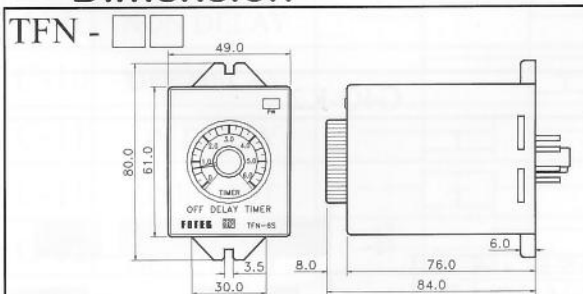
## Specification

| Item                | Data                                                  |
|---------------------|-------------------------------------------------------|
| Power Supply        | 12V or 24 VAC/DC or<br>110V or 230V or 380VAC 50/60Hz |
| Wattage             | 3VA max.                                              |
| Control Output      | Relay < 1C >                                          |
| Repetitive          | 0.5% of F.S.                                          |
| Setting Accuracy    | 5.0% of F.S.                                          |
| Reset Time          | 0.1sec Max.                                           |
| Insulation Strength | 100M $\Omega$ / 500 VDC                               |
| Dielectric Strength | 2.5 KV / 1 Min.                                       |
| Life of Relay       | 20 X 10 <sup>5</sup> Times                            |
| Circumstance        | -20°C~+60°C, 35~85%RH                                 |

## Connecting Diagram/Timing Chart



## Dimension



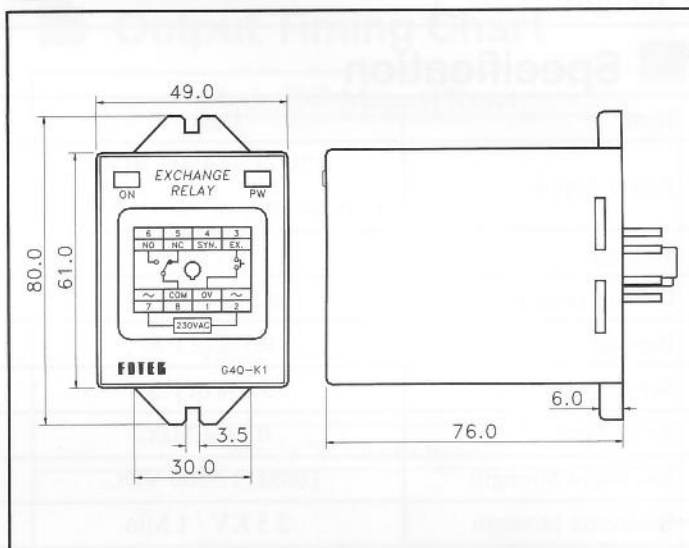
- ☆ G4Q-K1, One Relay NO/NC  
Exchange by Ex. Input.
- ☆ G4Q-K2, Two Relay NO  
Exchange by Ex. Input.



## Specification

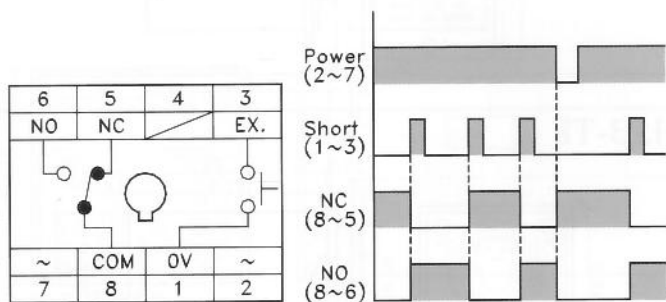
| Model               | G4Q-K1                     | G4Q-K2    |
|---------------------|----------------------------|-----------|
| Output Method       | One Relay                  | Two Relay |
| Control Status      | 1a / 1b                    | 2a        |
| Power Supply        | 110V or 230V or 380V AC    |           |
| Frequency           | 50 ~ 60 Hz                 |           |
| Wattage             | 3VA Max.                   |           |
| Contact Rated       | 10A                        |           |
| Switching Times     | 3600 Times / Hr            |           |
| Reset Time          | 0.1S Max.                  |           |
| Dielectric Strength | 2.5KV / 1 min.             |           |
| Insulation Strength | 100M $\Omega$ / 500 VDC    |           |
| Life                | 20 X 10 <sup>6</sup> Times |           |
| Circumstance        | -20° ~ +60°C ; 35~85% RH   |           |
| Weight              | 175g                       | 185g      |

## Dimension

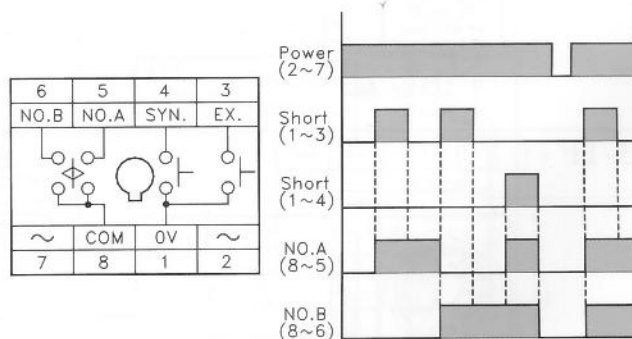


## Connection Diagram

G4Q-K1



G4Q-K2





# SENSOR CONTROLLER

**C**  
series

- ★ High Compact, High Reliability & Low Cost Sensor Controller.
- ★ Input NPN or PNP Selectable  
( A : NPN B : PNP )
- ★ Suited for Proximity Sensor or Photo Sensor
- ★ C-6 : Standard Controller  
C-10 : OFF DELAY Controller.  
C-11 : ON DELAY or ONE SHOT Controller.  
C-12 : ON+OFF DELAY Controller (Twin Timer).



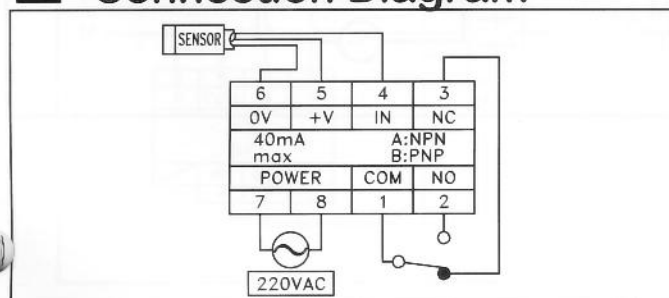
## Specification

| Model                 | C - 6                                    | C - 10                | C - 11               | C - 12               |
|-----------------------|------------------------------------------|-----------------------|----------------------|----------------------|
| Timer                 | Non                                      | OFF DELAY             | ON DELAY or ONE SHOT | ON DELAY + OFF DELAY |
| Range of Timer        |                                          | 0 ~ 10 Sec Adjustable |                      |                      |
| Power Supply          | 110V or 220V or 380VAC $\pm$ 20% 50/60Hz |                       |                      |                      |
| Input Method          | NPN or PNP Selectable                    |                       |                      |                      |
| Output Method         | Relay ( 5A/250 VAC )                     |                       |                      |                      |
| Response Time         | 15 ms                                    | 1 ms                  |                      |                      |
| DC Power Output       | 12 VDC / 40 mA max.                      |                       |                      |                      |
| Current Consumption   | 3 VA max                                 |                       |                      |                      |
| Insulation Resistance | 100 M $\Omega$ / 500 VDC                 |                       |                      |                      |
| Dielectric Strength   | 2.5KV / 1 min.                           |                       |                      |                      |
| Protection Class      | IP-65                                    |                       |                      |                      |
| Operating Temp./Hum.  | -20°C ~ +60°C ; 35% ~ 85% RH             |                       |                      |                      |
| Housing Material      | Intensive ABS                            |                       |                      |                      |
| Socket                | PF-085A                                  |                       |                      |                      |
| Weight                |                                          |                       |                      |                      |

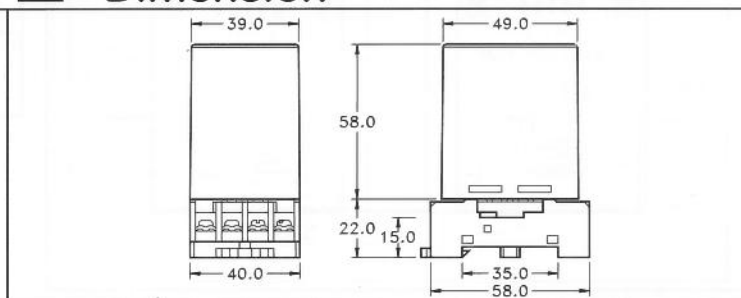
## Function of Timer < C-6/C-10/C-11/C-12 >

| Model | Timer              | Output Timing Chart | Remarks                                              |
|-------|--------------------|---------------------|------------------------------------------------------|
|       | PNP INPUT          |                     | (一) Mode Selecting<br>"A" NPN INPUT<br>"B" PNP INPUT |
| C-6   | NON DELAY          |                     |                                                      |
| C-10  | OFF DELAY          |                     | (二) Range of Timer<br>0.01S ~ 10.0S<br>Adjustable    |
| C-11  | ON DELAY           |                     |                                                      |
| C-11  | ONE SHOT           |                     |                                                      |
| C-12  | ON DELAY+OFF DELAY |                     |                                                      |

## Connection Diagram



## Dimension

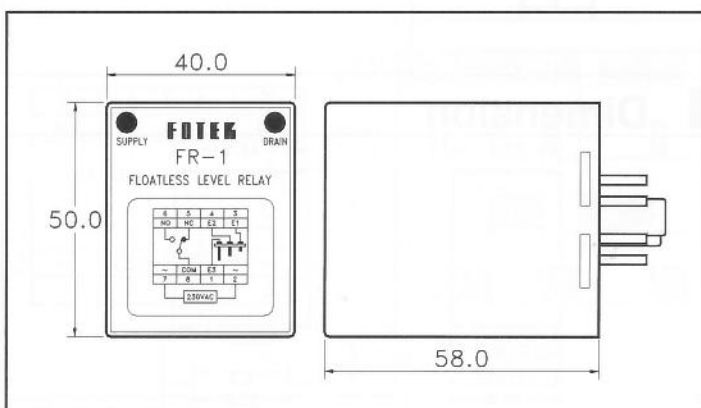


| Type             | Standard                                                                          | Long Distance                                                                     | High Sensitivity                                                                   | Two Wires                                                                           |
|------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Model            | FR-1                                                                              | FR-1L                                                                             | FR-1H                                                                              | FR-2                                                                                |
| Figure           |  |  |  |  |
| ON Resistance    | < 30K $\Omega$                                                                    | < 4K $\Omega$                                                                     | < 70K $\Omega$                                                                     | < 30K $\Omega$                                                                      |
| OFF Resistance   | > 60K $\Omega$                                                                    | > 15K $\Omega$                                                                    | > 300K $\Omega$                                                                    | > 60K $\Omega$                                                                      |
| Length of Cable  | < 1000M                                                                           | < 4000M                                                                           | < 50M                                                                              | < 800M                                                                              |
| Weight < Appr. > | 130g                                                                              | 130g                                                                              | 130g                                                                               | 145g                                                                                |

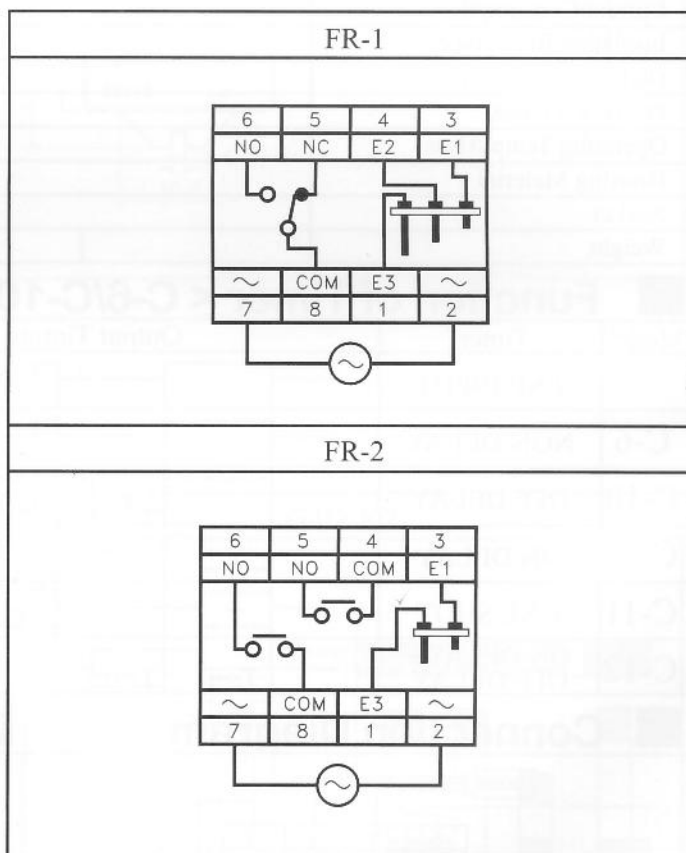
## Specification

|                       |                                                                          |
|-----------------------|--------------------------------------------------------------------------|
| Power Supply          | AC 110V or 230V or 380V<br>$\pm 20\%$ , 50/60Hz                          |
| Electrode Voltage     | 14 VAC                                                                   |
| Current Consumption   | 3VA max.                                                                 |
| Output Method         | Relay, 5A/250VAC                                                         |
| Response Time         | ON<80ms, OFF<160ms                                                       |
| Insulation Resistance | 100M $\Omega$ /500VDC                                                    |
| Dielectric Strength   | 2.5KV/1min.                                                              |
| Life of Relay         | Mechanical > $2 \times 10^7$ Times<br>Electrical > $5 \times 10^6$ Times |
| Circumstance          | -20° C~+60° C,35%~85%RH                                                  |

## Dimension



## Connection & Diagram



# VOLTAGE & PHASE RELAY

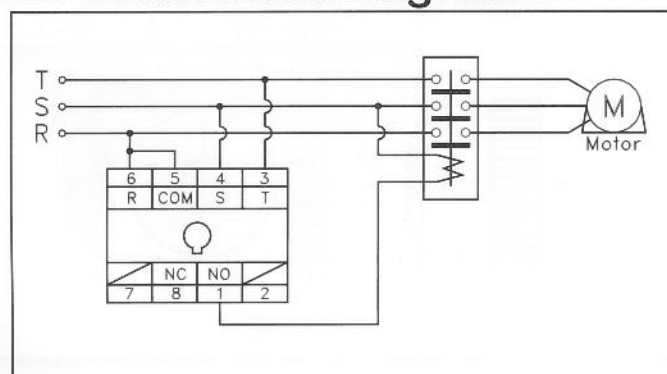
**PVR/PR**  
series

| Product             | Phase & Voltage Relay                                                             | Phase Relay                                                                         |
|---------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Model               | PVR - 3 - <input type="text"/> <input type="text"/> <input type="text"/> V        | PR - 1 - <input type="text"/> <input type="text"/> <input type="text"/> V           |
| Figure              |  |  |
| Power Supply        | 230V or 380V or 440VAC or 480VAC, 50/60Hz                                         |                                                                                     |
| High Voltage Limit  | $\pm 20\%$                                                                        |                                                                                     |
| Low Voltage Limit   | $\pm 20\%$                                                                        |                                                                                     |
| ON Delay Time       | 1.0~10.0 Sec Adjustable                                                           |                                                                                     |
| Reset Delay Time    | 1.0~10.0 Sec Adjustable                                                           |                                                                                     |
| Output Method       | Relay                                                                             |                                                                                     |
| Contact Rated       | 5A/250VAC                                                                         |                                                                                     |
| Output Status       | Normal ON < RUN >                                                                 |                                                                                     |
| Dielectric Strength | 2.5KV / 1 min                                                                     |                                                                                     |
| Insulation Strength | 100M $\Omega$ / 500 VDC.                                                          |                                                                                     |
| Life of Relay       | 20 X 10 <sup>6</sup> Times                                                        |                                                                                     |
| Circumstance        | -20 $^{\circ}$ ~+60 $^{\circ}$ C ; 35~85% RH                                      |                                                                                     |
| Weight              | 155g                                                                              | 140g                                                                                |

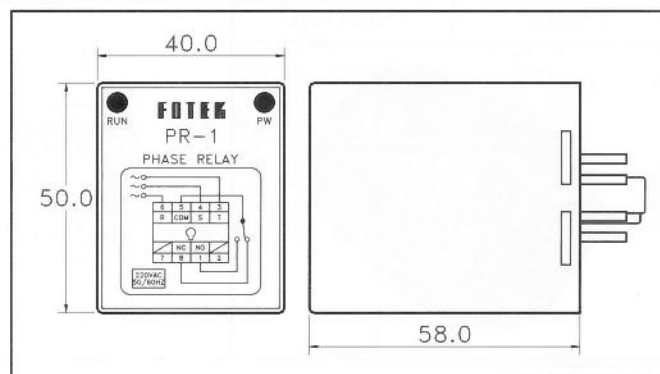
## Operating Status ( PVR-3 )

| Status<br>LED | Norm. | High<br>Voltage | Low<br>Voltage | R/T<br>Loss | S<br>Loss | Phase<br>Rev |
|---------------|-------|-----------------|----------------|-------------|-----------|--------------|
| Run           | ○     | ×               | ×              | ×           | ×         | ×            |
| Over          | ×     | ○               | ×              | ×           | ×         | ×            |
| Under         | ×     | ×               | ○              | ×           | ○         | ○            |

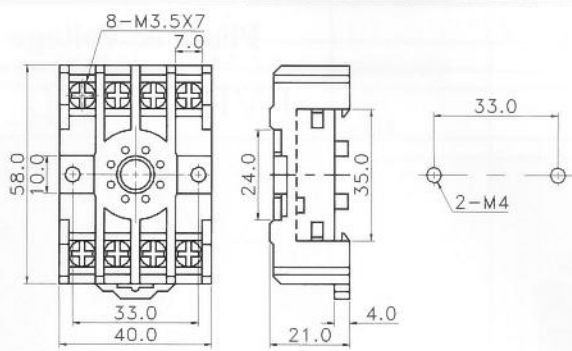
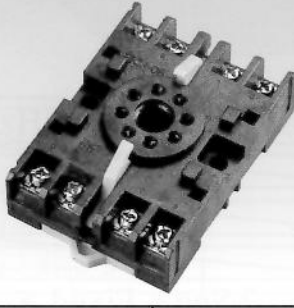
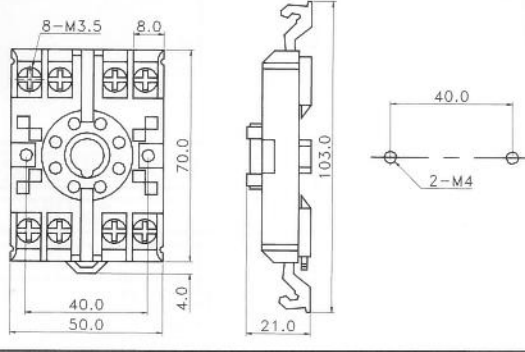
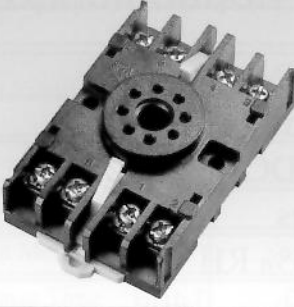
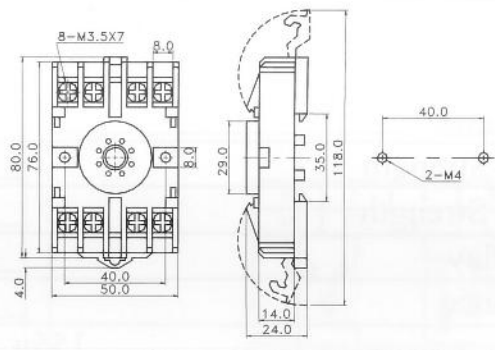
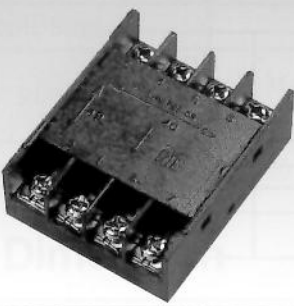
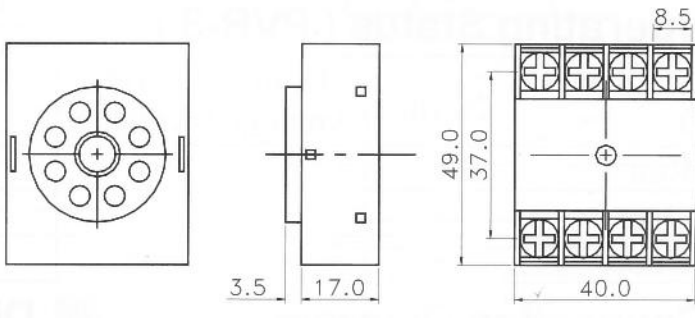
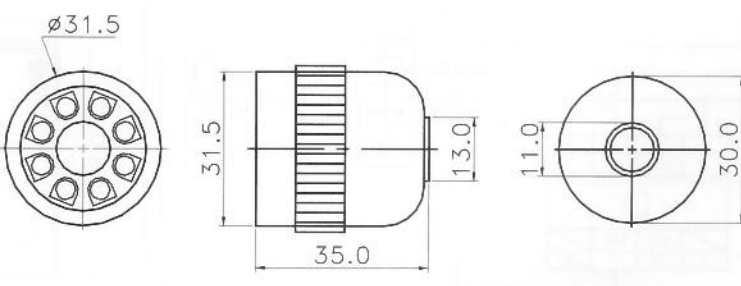
## Connection Diagram

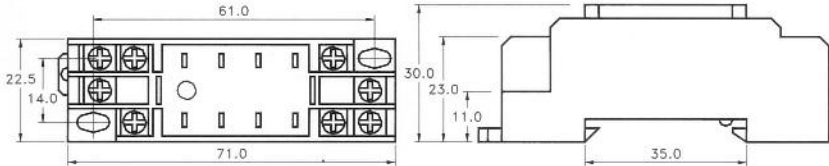
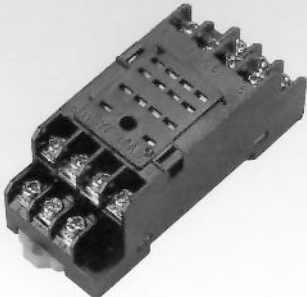
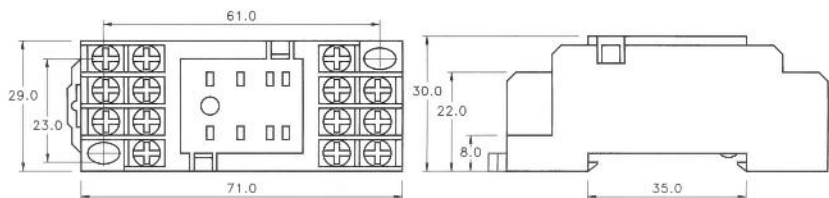
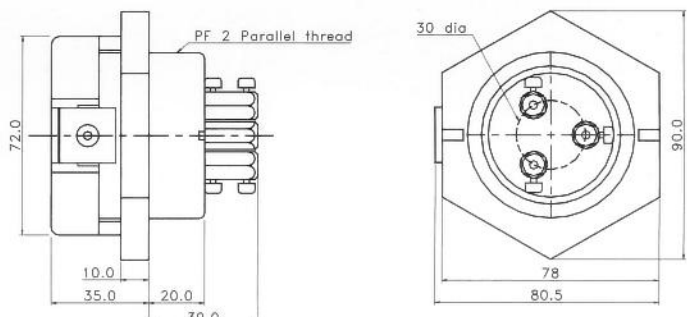
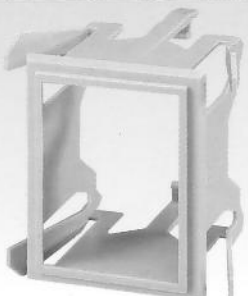
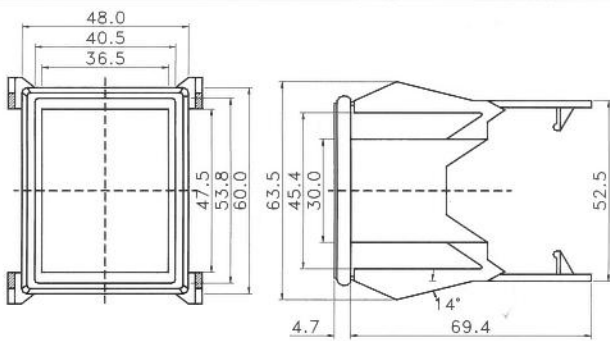
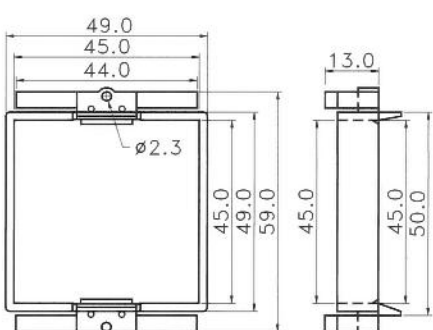


## Dimension



# SOCKET & ATTACHMENT

|         |            |                                                                                                                                                                          |
|---------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PF085A  | H3 series  |       |
| P2CF-08 | H5B series |       |
| 8PFA    | STP series |     |
| P3G-08  | Panel type |   |
| US-08   | Panel type |   |

|        |              |                                                                                                                                                                          |
|--------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PYF08A | MY-2P series |       |
| PYF14A | MY-4P series |       |
| PS-3S  | FR series    |     |
| Y-40   | H3 series    |   |
| Y-48   | H5 series    |   |