

## DIN72x72mm Best-selling Counter

- Easy setting with thumbwheel switches.
- Models with , 4-, 5-, or 6-digit displays are also available.
- x0.1,x1,x10,x100 Display / signal ratio.
- By internal DIP switches enable the multifunction mode selection.
- Power supply freely selectable within a range of 100 to240 VAC, as well as 12 to 24VAC/DC.
- Good anti-interference performance.
- NPN / PNP input signal can be switched.



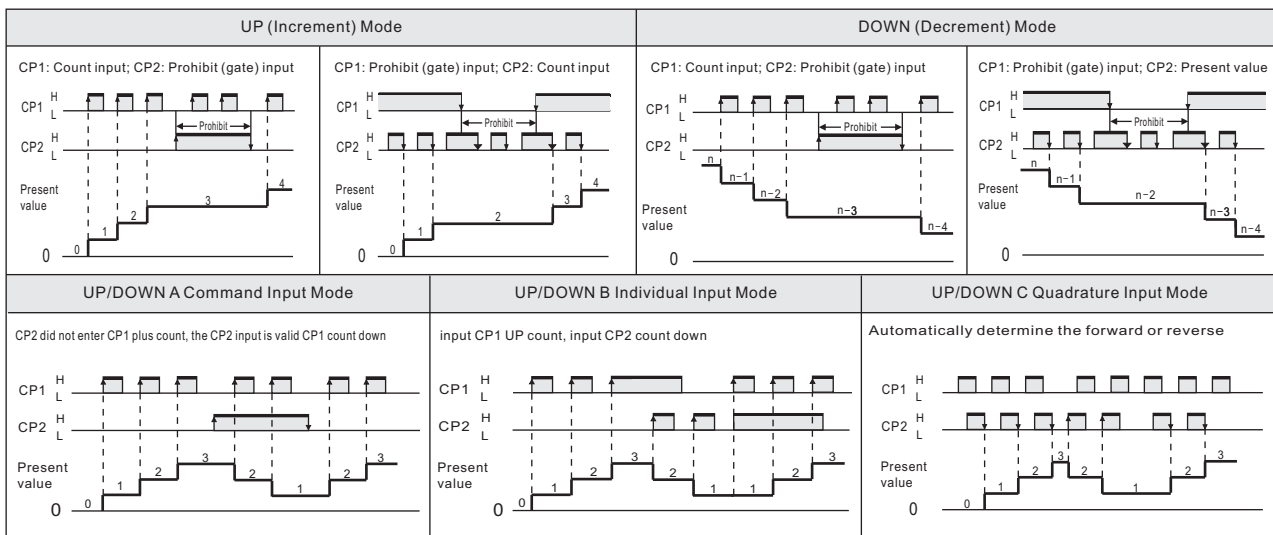
### ■ Ratings

| Model                 | NC7F-4  | NC7F-5           | NC7F-6           |
|-----------------------|---|------------------|------------------|
| Category              | 4 digits counter  | 5 digits counter | 6 digits counter |
| Power Supply          | 1: AC100~240V 50/60HZ 2: AC/DC12~24V (Allowable voltage range: 85 ~ 110%)   |                  |                  |
| Power consumption     | Approx.5VA (AC240V) , Approx.3. 2VA (DC24V)   |                  |                  |
| Mounting method       | Flush mounting  |                  |                  |
| Display               | 7-segment LEDs  |                  |                  |
| Counting range        | -999-9999   | -9999-99999      | -99999-999999    |
| Counting speed        | 5Hz 、 30Hz 、 1KHz 、 5KHz (selectable, ON/OFF ratio 1:1)   |                  |                  |
| Input signals         | Cp1, CP2, reset   |                  |                  |
| Input method          | No-voltage input/voltage input (switchable)<br>No-voltage input<br>ON impedance: 1 k $\Omega$ max. (Leakage current: 5 to 20 mA at 0 $\Omega$ ), ON residual voltage: 3 V max.<br>OFF impedance: 100 k $\Omega$ min.<br>Voltage input<br>High (logic) level: 4.5 to 30 VDC, Low (logic) level: 0 to 2 VDC (Input resistance: approx. 4.7 k $\Omega$ ) |                  |                  |
| Input modes           | UP、DOWN、UP/DOWN-A、UP/DOWN-B、UP/DOWN-C   |                  |                  |
| Output modes          | N, F, C, R  |                  |                  |
| Control output        | Contact output: 3 A at 250 VAC/30 VDC, resistive load (cos $\phi$ =1)   |                  |                  |
| Reset system          | External, manual, and automatic reset (internal according to C, R, and K mode operation)  |                  |                  |
| Reset input           | Minimum reset input signal width: 20 ms   |                  |                  |
| Memory backup         | EEPROM (overwrites: 100,000 times min.) that can store data for 10 years min.   |                  |                  |
| External power supply | 12 VDC ( $\pm$ 10%), 100 mA Max   |                  |                  |
| Ambient               | Operating temperature: -10 to 55°C(with no icing or condensation), Ambient humidity:25% to 85%  |                  |                  |

### ■ Output Modes

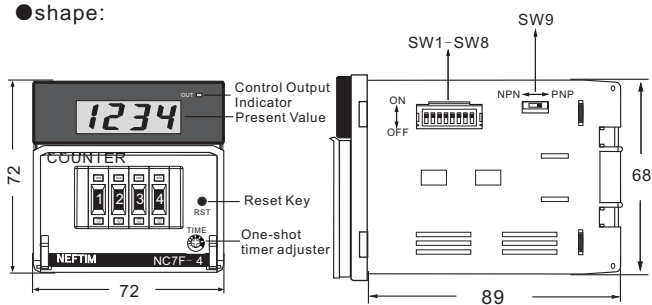
|  |  |   |  |
|--|--|---|--|
| <p><b>N</b> :The outputs and present value display are held until reset/reset 1 is input.</p> <p>*With UP examples</p> | <p><b>F</b> :The present value display continues to increase/decrease. The outputs are held until reset/reset 1 is input.</p> <p>*With UP examples</p> | <p><b>C</b> :As soon as the count reaches SV, the present value display returns to the reset start status. The present value display does not show the present value upon count-up. The outputs repeat one-shot operation.</p> <p>*With UP examples</p> | <p><b>R</b> :The present value display returns to the reset start status after the one-shot output time. The outputs repeat one-shot operation.</p> <p>*With UP examples</p> |
|--|--|---|--|

## Input Modes



## Dimensions, wiring diagram, feature Switches

### ●shape:



### ●Arrangement and Functions of Specification Selection Switches

| SW1 | SW2 | SW3 | Input Modes | SW4 | SW5 | Output Modes |
|-----|-----|-----|-------------|-----|-----|--------------|
| OFF | OFF | OFF | UP, ×1      | OFF | OFF | N Mode       |
| OFF | ON  | OFF | UP, ×10     | ON  | ON  | F Mode       |
| ON  | ON  | OFF | UP, ×100    | ON  | OFF | R Mode       |
| OFF | ON  | ON  | UP, ×0.1    | OFF | ON  | C Mode       |
| ON  | OFF | OFF | DOWN, ×1    |     |     |              |
| OFF | OFF | ON  | UP/DOWN-A   |     |     |              |
| ON  | ON  | ON  | UP/DOWN-B   |     |     |              |
| ON  | OFF | ON  | UP/DOWN-C   |     |     |              |

| SW8 | Power failure memory backup |
|-----|-----------------------------|
| OFF | Memory backup               |
| ON  | No memory backup            |

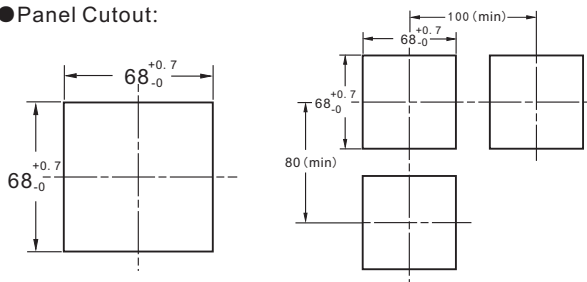
| SW6 | SW7 | counting speed |
|-----|-----|----------------|
| ON  | ON  | 5PCS           |
| OFF | OFF | 30CPS          |
| OFF | ON  | 1000CPS        |
| ON  | OFF | 5KCPS          |

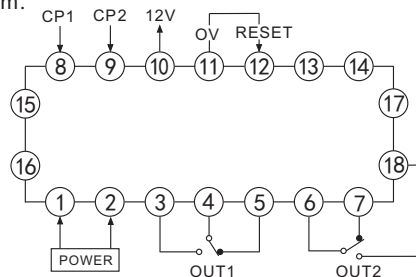
| SW9                | Input Type |
|--------------------|------------|
| Panel direction    | NPN        |
| Terminal direction | PNP        |

Note: Specifications selected using the internal specification selection switches become after switching once a reset has been performed. If a reset is not performed, operation will continue with the specifications before switching.

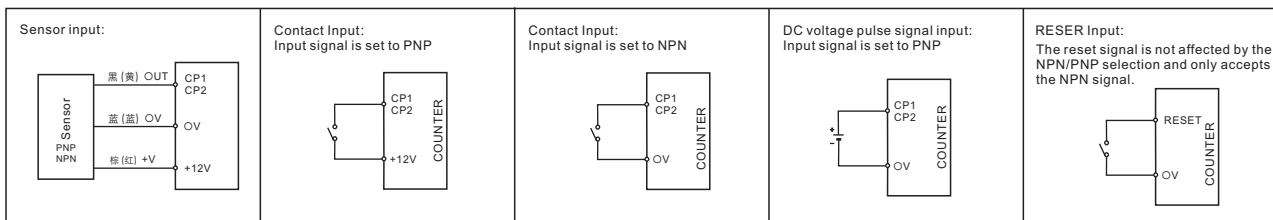
### ●Panel Cutout:



### ●wiring diagram:



### ●Signal input connection diagram



## Note

1. Display / signal ratio: ×1, the count value = displayed value; ×10, the count value = displayed value ×10; ×100, the count value = displayed value ×100; ×0.1, the count value = displayed value ÷10.
2. Contact signal input, the CPS count rate should be set for low-speed 30Hz, can Prevent switch bounce error count. Reasonable speed settings, you can make the count more accurate.