

# TECO

## H5KLR MULTI-FUNCTION DIGITAL COUNTER



### CHARACTERISTICS :

- Proximity and photoelectric switch compatible
- Protection against power surge and high frequency interference
- High-speed response allows 1,000 counts per second
- Online change of set value possible
- Four levels of key protection provided
- Count Up, Count Down or Count Up/Down mode user selectable
- Memory function available
- UL, C-UL recognized and CE certified

### SPECIFICATION :

Operating voltage	AC/DC(V): 12~48 or 100~240
Allowable operating voltage range	85~110% of rated operating voltage
Rated frequency	50 / 60 Hz
Contact rating	250VAC 5A (resistive load)
Count speed	MAX 30 cps or 1,000 cps
Reset time	MAX 0.1s
Power consumption	Approx. 2.5VA
Life	Mechanical: 5,000,000 times Electrical: 100,000 times
Ambient temperature	-10 ~ +50 °C
Ambient humidity	MAX 85%RH
Weight	Approx. 120g

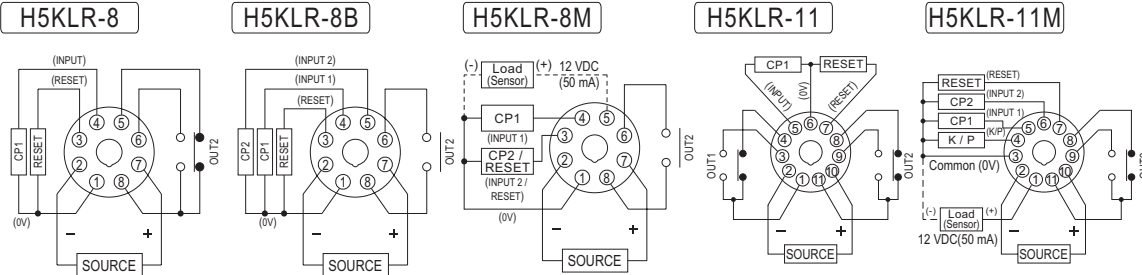
### TYPE SELECTION :

Type	H5KLR-8	H5KLR-8B	H5KLR-8M	H5KLR-11	H5KLR-11M
Count speed	Max 30 cps or 1,000 cps(user program selectable)				
Output contact	1C	1a	1a	2C	1C
Memory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
External Reset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Count Up	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Count Down	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Count Up/Down		<input type="radio"/>	<input type="radio"/>		<input type="radio"/>

Product is subject to change without notice.

B04

**CONNECTION :**



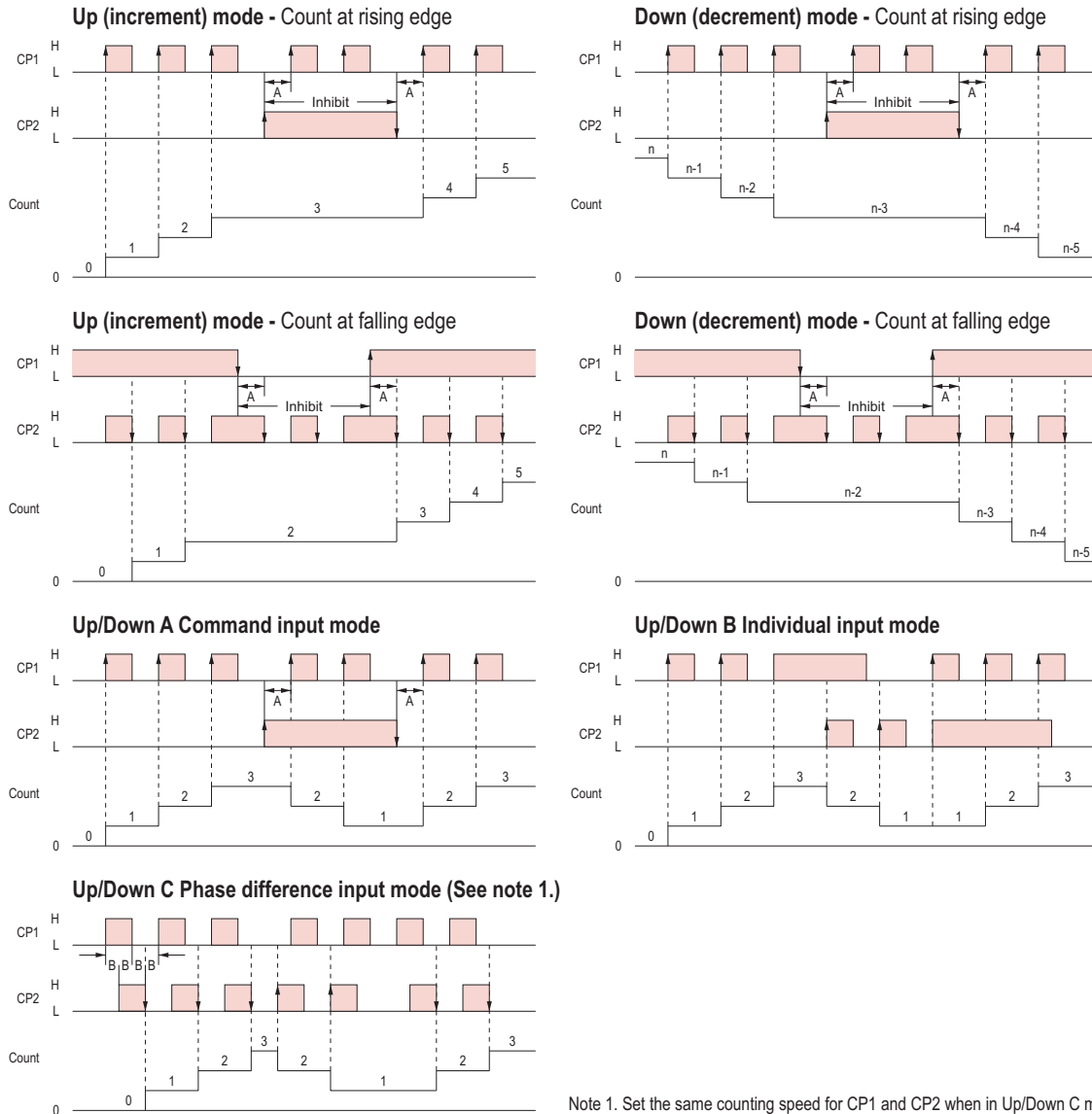
Note: **H5KLR-8** : When using Proximity(Type NPN) or photoelectric switch, connect (+) to external 12VDC, (-) to pin (1) and (OUT) to pin (4). (OUT2) to pin (5) for H5KLR-8B only. Connect (+) to pin (5) and (OUT) to pin (4), (OUT2) to pin (3) for H5KLR-8M only.  
**H5KLR-11** : When using Proximity(Type NPN) or photoelectric switch, connect (+) to external 12VDC, (-) to pin (6) and (OUT) to pin (5)  
**H5KLR-11M**: When using Proximity(Type NPN) or photoelectric switch, connect (+) to pin (1), (-) to pin (3), (OUT) to pin (5) and (OUT2) to pin (6)

**TIMING CHART :**

**Input Modes and Count Value**

Please note: 1. "A" indicates minimum signal width; "B" indicates 1/2 of minimum signal width. Signals may not be counted if the minimums for A and B are not met.  
 2. H and L

Signal	No-voltage input	Voltage input
H	Short circuit	4.5 ~ 30 VDC
L	Open circuit	0 ~ 2 VDC



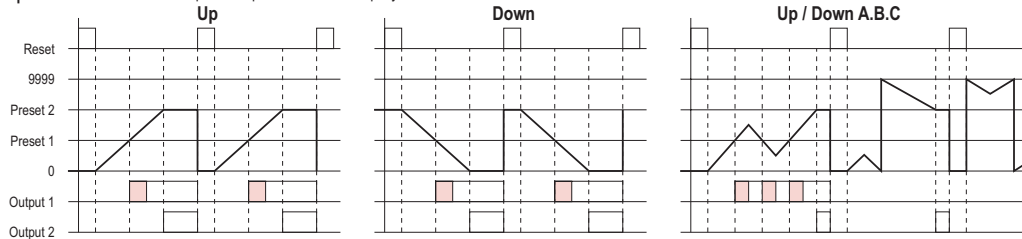
Note 1. Set the same counting speed for CP1 and CP2 when in Up/Down C mode.

## Input / Output Mode Setting

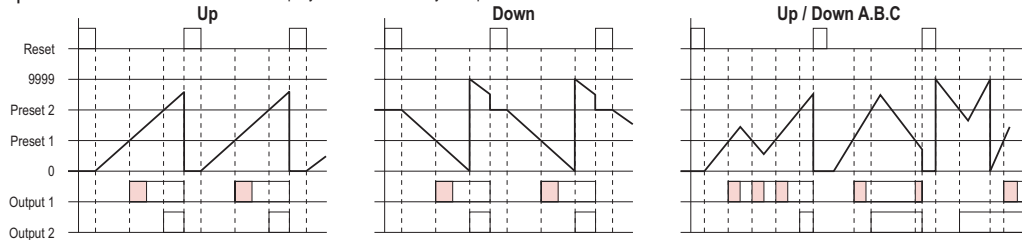
One-shot output from Output 1  
 Self-holding output

One-shot output from Output 2  
 Self-holding output

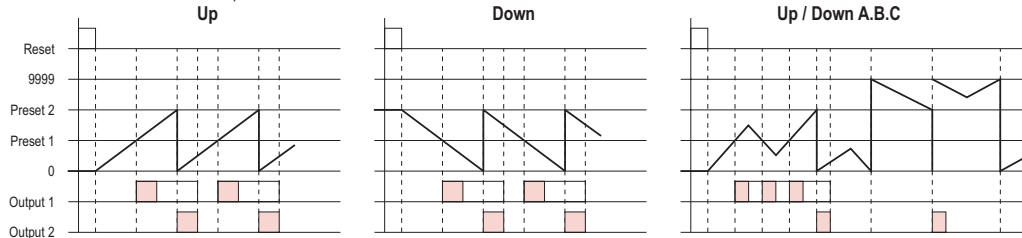
**Output mode N** : Output and present value display are maintained until reset.



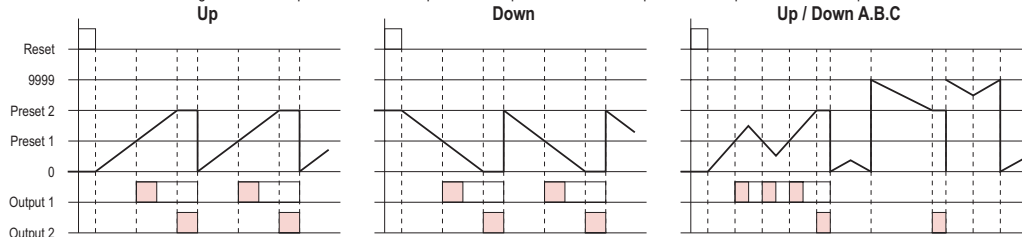
**Output mode F** : Present value display runs continuously. Outputs are maintained until reset.



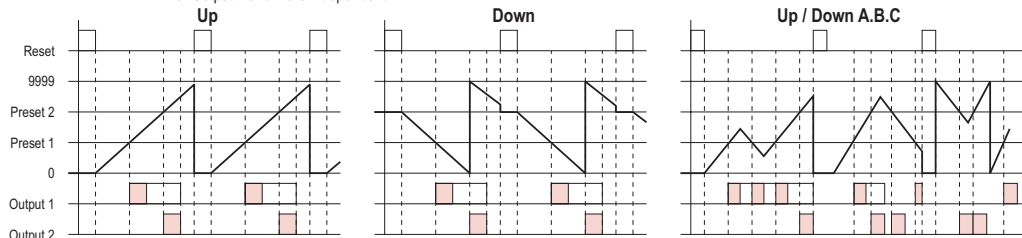
**Output mode C** : Present value is placed in reset start status as soon as count up is reached. The count up is not displayed. Outputs are 1-shot and operate repeatedly. Output 1 is self-holding, and goes off after expiration of the 1-shot period for Output 2. One-shot time periods for Output 1 and 2 are independent.



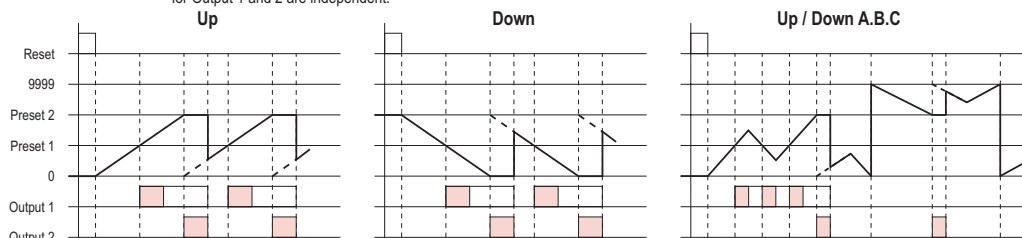
**Output mode R** : Present value is placed in reset start status as soon as count up is reached. Outputs are 1-shot and operate repeatedly. Output 1 is self-holding, and goes off after expiration of the 1-shot period for Output 2. One-shot time periods for Output 1 and 2 are independent.



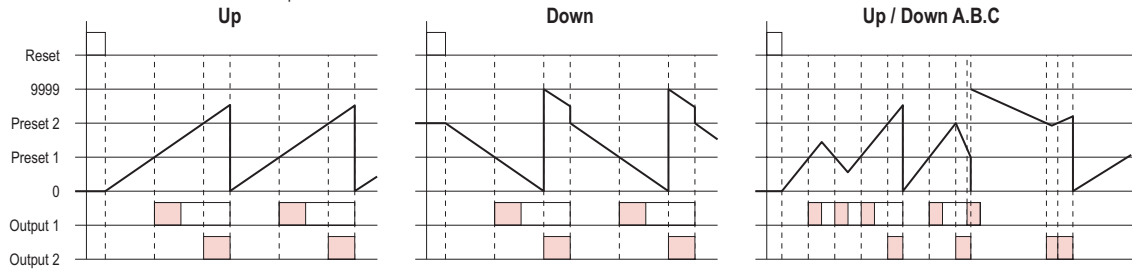
**Output mode K** : Present value runs continuously. Output 1 is self-holding, and goes off after expiration of the 1-shot period for Output 2. One-shot time periods for Output 1 and 2 are independent.



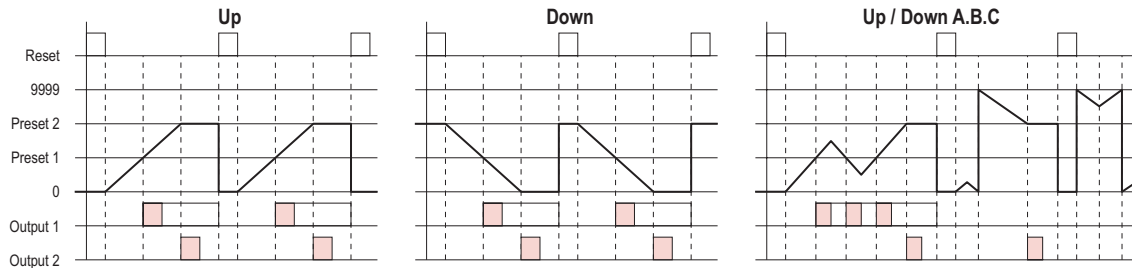
**Output mode P** : Present value display does not change during 1-shot time period, but reset start status is returned to as soon as count is reached. Outputs are 1-shot and operate repeatedly. Output 1 is self-holding, and goes off after expiration of the 1-shot period for Output 2. One-shot time periods for Output 1 and 2 are independent.



**Output mode Q** : Present value runs continuously through 1-shot time period and returns to reset start status immediately afterward. Outputs are 1-shot and operate repeatedly. Output 1 is self-holding, and goes off after expiration of the 1-shot period for Output 2. One-shot time periods for Output 1 and 2 are independent.

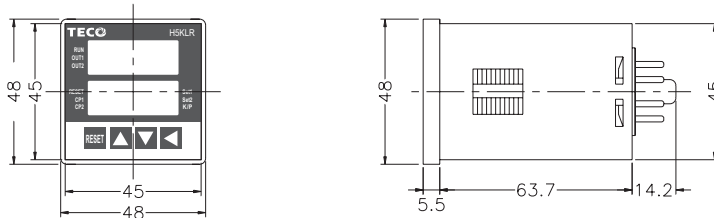


**Output mode A** : Present value and output 1 maintain status until reset. Output 1 and 2 operate independently.



## DIMENSIONS : (mm)

**N type(Surface Mounting):** Using P2CF-08 , PF085A Socket or  
PF113A Socket(for H5KLR-11/11M use only)



**Y type(Flush Mounting):** Using Y50 Frame & US-08 Socket , P3G-08 Socket or  
P3G-11 Socket(for H5KLR-11/11M use only)

