



# H5KLR

MULTI-FUNCTION DIGITAL COUNTER

## User's Manual

### RESTRICTIONS ON USE

When using this product in applications that require particular safety or when using this product in important facilities, please pay attention to the safety of the overall system and equipment. Install fail-safe mechanisms, perform redundancy checks and periodic inspections and adopt other appropriate safety measures when it is necessary. This product is rated at Class II

### SAFETY PRECAUTION

This manual uses the following symbols to ensure safe operation of this timer.

- WARNING** Warnings are indicated when mishandling this product might result in death or serious injury to user.
- CAUTION** Cautions are indicated when mishandling this product might result in minor injury to the user, or only physical damage to the timer.

### WARNING

- Note this incorrect wiring of this product can damage it and lead to other hazards. Make sure the product has been correctly wired before turning the power ON.
- Before wiring, or removing / mounting the product, be sure to turn the power OFF. Failure to do so might cause electric shock.
- Do not touch electrically charged parts such as the power terminals. Doing so might cause electric shock.
- Do not disassemble the product. Doing so might cause electric shock or faulty operation.

### CAUTION

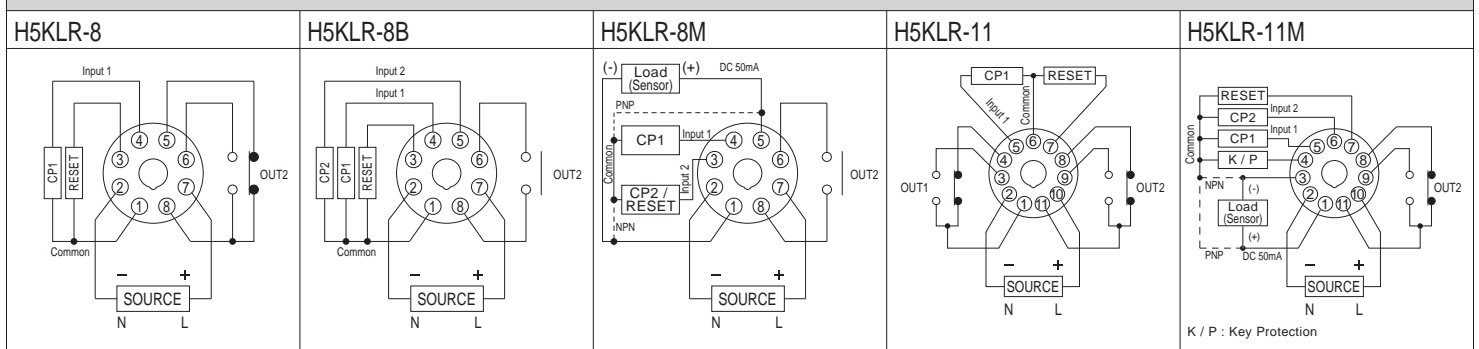
- Use the product within the operating ranges recommended in the specification (temperature, humidity, voltage, shock, mounting direction, atmosphere and etc.). Failure to do so might cause fire or faulty operation.
- Firmly tighten the wires to the socket. Insufficient tightening of the wires to the socket might cause fire.

SPECIFICATIONS		NAMES AND FUNCTIONS OF FACEPLATE	
Operating voltage	AC/DC : 12~48V / AC/DC : 100~240V	<p><b>LEDs</b></p> <p>RUN: Counting indicator            OUT1: Control output 1 indicator            OUT2: Control output 2 indicator            RESET: Reset indicator            CP1: Signal input 1 indicator            CP2: Signal input 2 indicator            Set1: 1st set value indicator            Set2: 2nd set value indicator            K/P: Key protection indicator</p> <p><b>key :</b>   : Performing arithmetic shift operations and switches the display. Hold down for at least 3 seconds to enter setting modes.    : Used for incrementing or decrementing numeric values. And show the first set value or second set value.</p>	
Allowable operating voltage range	85 ~ 110% of rated operating voltage		
Rated frequency	50 / 60Hz		
Contact rating	250VAC 5A (Resistive load)		
Count speed	MAX 30 cps or 1,000 cps		
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		

### SETTING PROCEDURE

COUNTER VALUES RESET	SWITCH TO THE MODE SETTING STATUS	ON / OFF KEY PROTECT	SWITCH TO THE NEXT MODE	SAVE AND BACK TO THE OPERATION STATUS
<p><b>POWER ON</b> or </p>	<p>(1) Stop  + 3 Sec</p> <p>(2) Counting  →  +  + 3 Sec</p>	<p> +  + 3 Sec</p>	<p></p>	<p></p>
<p><b>1.INPUT MODE</b></p> <p>1-1 UP 1-5 UP/DOWN C            1-2 DOWN            1-3 UP/DOWN A            1-4 UP/DOWN B</p> <p>※ UP/DOWN MODE not available on H5KLR-8/11 type</p>	<p><b>2.OUTPUT MODE</b></p> <p>2-1 Mode N 2-5 Mode K            2-2 Mode F 2-6 Mode P            2-3 Mode C 2-7 Mode Q            2-4 Mode R 2-8 Mode A</p> <p>See reverse page for more details</p>	<p><b>3.OUTPUT 2 TIME</b></p> <p>3-1 0.01S 3-5 0.5S 3-9 10S            3-2 0.05S 3-6 1S 3-A 20S            3-3 0.1S 3-7 2S            3-4 0.2S 3-B 5S</p> <p>※ Not available for Mode N and Mode F</p>	<p><b>4.OUTPUT 1 TIME</b></p> <p>4-1 Hold 4-5 0.2S 4-9 5S            4-2 0.01S 4-6 0.5S 4-A 10S            4-3 0.05S 4-7 1S 4-b 20S            4-4 0.1S 4-B 2S</p> <p>※ Available on H5KLR-11 type only</p>	
<p><b>5.COUNT SPEED</b></p> <p>5-1 30 cps            5-2 1k cps            5-3 5k cps</p>	<p><b>6.MINIMUM RESET TIME</b></p> <p>6-1 20mS            6-2 1mS</p>	<p><b>7.DECIMAL POINT</b></p> <p>7-1 9999            7-2 999.9            7-3 99.99            7-4 9.999</p>	<p><b>8.PRESCALE VALUE</b></p> <p>8-1 0.001-9.999</p>	
<p><b>9.KEY PROTECTION LEVEL</b></p> <p>9-1 Lock function key  + 3Sec            9-2 Lock reset key             9-3 Lock preset value key              9-4 Lock all key</p>	<p><b>10.POWER OFF MODE</b></p> <p>A-1 Power off reset            A-2 Power off memory</p>	<p><b>11.NPN/PNP INPUT MODE</b></p> <p>b-1 nPn            b-2 PnP</p>		

### CONNECTION

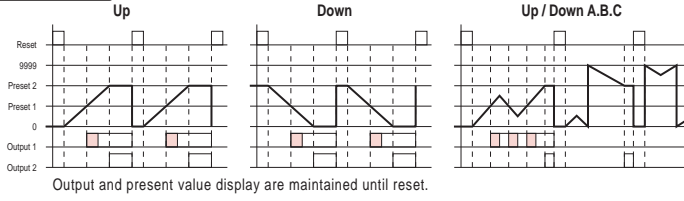


H5KLR : b-1 NPN, Common = 0V  
 H5KLR : b-2 PNP, Common = +V

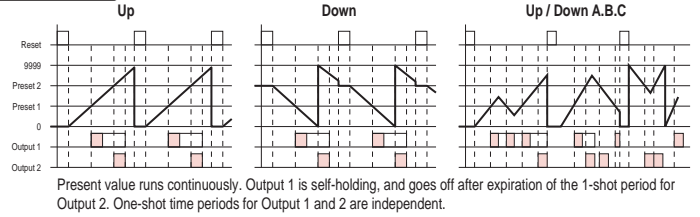
## TIMING CHART

Output :  One-shot output from Output 1  One-shot output from Output 2  
 Self-holding output  Self-holding output

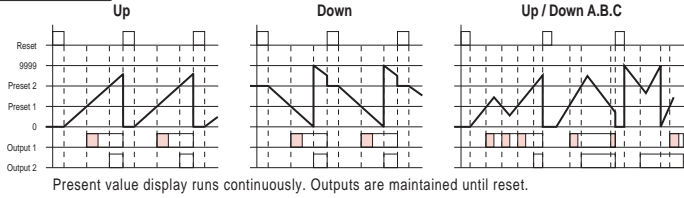
### Output mode N



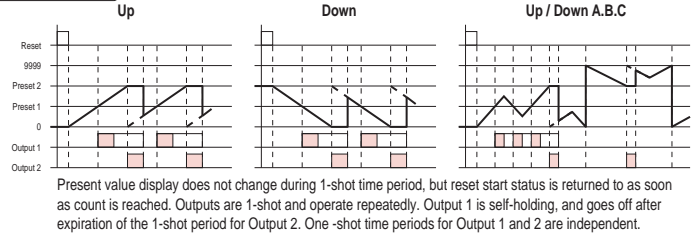
### Output mode K



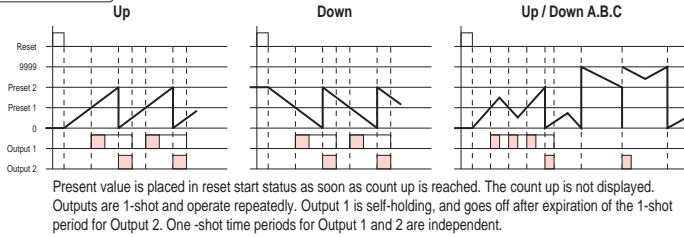
### Output mode F



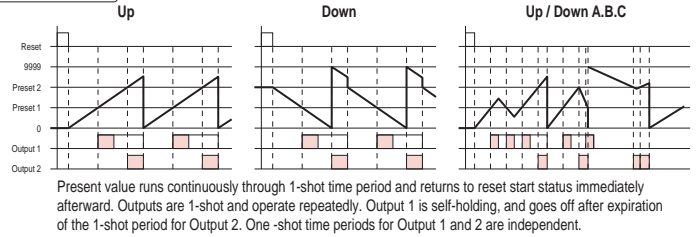
### Output mode P



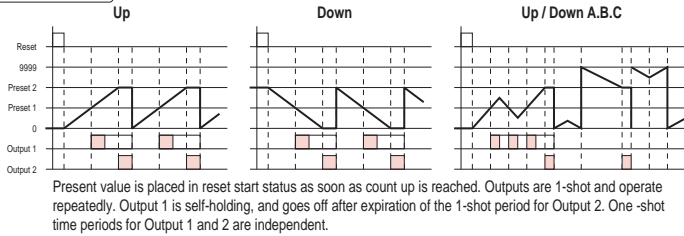
### Output mode C



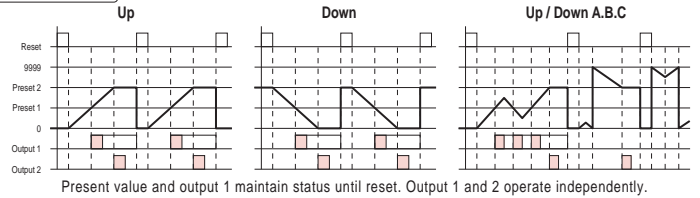
### Output mode Q



### Output mode R

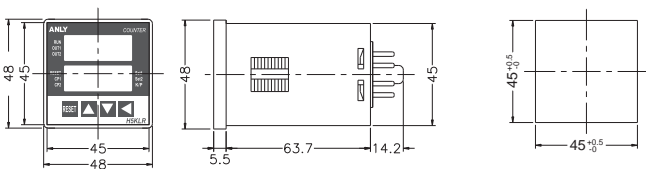


### Output mode A

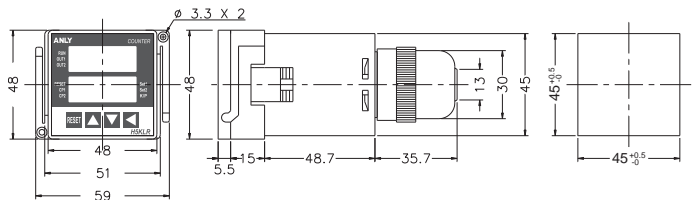


## DIMENSION(mm)

### H5KLR



### H5KLR + Y-50 + US-08



## NOTE