## SAINT WIEN DIGITAL COUNTER

## **H7K-**

# TYPE H7K-1D, 2D, 3D, 4D, 5D. DIN Size 48x48mm Microcomputer based Digital Counters

#### **FEATURES**

- \*Incorporative an exclusive one-chip microcomputer based Miniature Digital Counter
- \* Normal is Up count. Down count.is available upon request.
- \*Front panel with30 [30] or 3K [3K] cps counting speed select SW, Auto [A] or Manual [M] reset select SW.

Auto reset time (one shot) adjustable 0.1-4S

Manual reset [R] push button SW is also available.

\*Outstanding noise immunity with Schmitt trigger circuit applied to the input terminal.

Software de-bouncing to 30 cps to SW or contact input.

\*Power off reset or with suffix of [M] is EEPROM backup memory available

\*Compact size DIN 48x48mm, for both surface & flush mounting



#### **AVAILABLE TYPES**

Туре	H7K-□U	H7K-□D	H7K-□UM	H7K-□DM
Operation	UP	DOWN	UP	DOWN
Reset	YES , Auto/Man			
Display	YES			
Backup memory	NO		YES	
Reset method	<ol> <li>POWER off reset</li> <li>Manual reset</li> <li>Auto reset</li> </ol>		Manaul reset     Auto reset	
No. of digit	□=1 to 5 digit	ts		

#### **SPECIFICATIONS**

\*Rated voltage:110 or 220VAC 50/60Hz; 12 or 24VDC

\*Operating voltage: 90~110% of rated voltage.

\*Power consumption: 2~3.5VA

\* External sensor power supply: 12VDC+-20%, 20mA

\*Count input: 1.Contact/SW input: Connect 12VDC by shorting or opening the contact/SW

2.Solid state voltage input: High=+6 to 30VDC Low=0 to 2VDC

Input impedance=4.7K $\Omega$ 

\*Maximum counting speeds: 1. Contact input: [30]: 30cps maximum, minimum pulse width 16msec

2. Solid state voltage input [3K]: 3000cps maximum, minimum pulse width 0.16msec

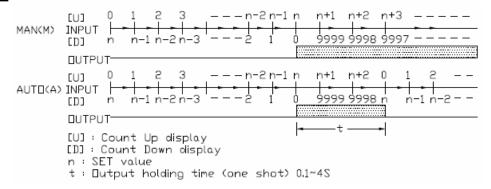
\*Reset system: 1. Power off reset: Minimum power off 0.5S

- 2. Manual reset [M]: Depress the reset [R] push button. Reset time following signal application 0.5S
- 3. Auto reset [A]: Auto reset time 0.1~4S panel adjustable. Internal 0.5S fixed auto reset for H7K-5U/D.

\*Control output: Contact output SPDT (1A1B). 3A250VAC, PF=1.0

Note: 1. Input signal ON/OFF ration=1:1

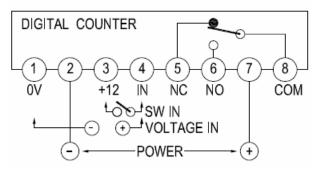
- 2. Power off reset is not applicable to the types with suffix "M".
- 3. Must press reset button [R] after changing the counting speed SW [30] [3K] or operation mode SW [A] [M]. Otherwise, the counter will work on previous counting speed or operation mode.



#### Notes:

- 1. In this timing chart the number of step (display) advances during the one shot time (t period) is shown 3 pulses, But it may be changed by adjusting the speed of input signal and one shot time.
- 2. While the manual reset is being applied, the display is extinguished in all digit position.
- 3. One shot time is 0.1~4S panel adjustable except H7K-5D/U is internal fixed about 0.5S.

#### CONNECTION



PANEL SW & TIMER

\*AT [30] IS SWITCH IN

\*AT [3K] IS VOLTAGE IN

\*AT [A] IS AUTO RESET

\*AT [M] IS MANUAL RESET

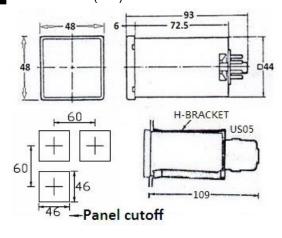
\*TIME 0.1~4S FOR AUTO RESET [A]

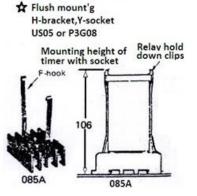
\*RESET AFTER CHANGING SW POSITION

\*+12 OUTPUT 20mA FOR SENSOR

\*RELAY 3A 250VAC PF=1,0

### DIMENSIONS(mm) & ACCESSORY





★ Surface mount'g F-hook, N-socket 085A

#### ■ ORDER INFORMATION

