

3-Digit Thumbwheel Counter

User Manual

Notice before start-up

Please confirm the specification of instrument is to totally with your requirement before using it, also read this manual in detail.

Danger

Danger! Electric Shock!

DON'T touch AC power wiring terminals when instrument has been powered!

Keep the power off until all of the wirings are completed!

Warning

- 1) Please confirm the AC power wiring to instrument is correct, otherwise it would be caused aggravated damage on instrument.
- 2) Be sure to use the rated power supply, otherwise it would be caused aggravated damage on instrument.
- 3) Please confirm wires are connected with correct terminal (Power, Input and Output).
- 4) Avoid installing instrument in following spaces:
 - I. A place where the ambient temperature may reach beyond the range from 0 to 50°C
 - II. A place where the ambient humidity may reach beyond the range from 20 to 90% RH.
 - III. A place where the instrument likely to come into contact with water, oil, chemicals, steam and vapor.
 - IV. A place where the instrument is subject to interface with static electricity, magnetism and noise.
- 5) For proximity input, use shield compensating lead wire.

TECHNICAL SPECIFICATIONS

Product Name	: Thumbwheel Counter
Model No.	: A5023-PR-L2-CNT
Input	: Proxy (selectable), Back reset
Output	: 1 Relay, 5Amp/ Relay (Contacts 2NO-2C-2NC)
Output Logic	: On delay/Off delay
Power Supply	: 230VAC $\pm$ 10%, 50Hz

TERMINAL DETAILS

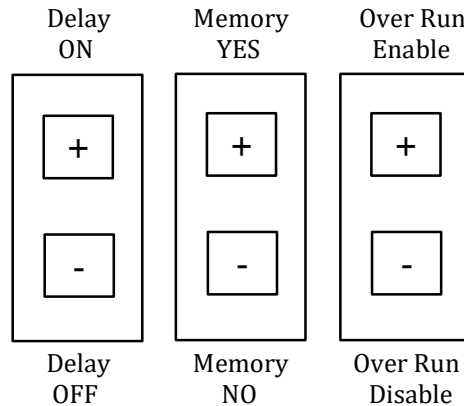


INPUT TYPE	A5023-A-PR-L2-CNT
230 V AC Power supply	Terminal 1 & 2
NPN Pulse Input	Short Terminal 8 & 9, Terminal 8(+Ve), 10(NPN Signal) & 11(-Ve)
PNP Pulse Input	Short Terminal 10 & 11, Terminal 8(+Ve), 9 (PNP Signal) & 11(-Ve)
Reset Input	Terminal 11 & 12 (Potential Free Contact)
Output (Relay)	Terminal 7(NC1), 5(C1) & 6(NO1). Terminal 20(NC2), 19(C2) & 18(NO2).

CONFIGURATION MENU

- ✓ Firstly, press RST key & switch on the power supply to the device. The display will blink with PASS message.
- ✓ Here when you release the RST key, display will show the Thumbwheel count.
- ✓ Now in this display, enter the password 808 by using Thumbwheel count. And press RST key once.
- ✓ Now the display will blink with Thumbwheel count.
- ✓ Here, Set the Thumbwheel count in your Thumbwheel switch, according to your requirement.
- ✓ For this see the image of Thumbwheel module with associated parameters is given below.
- ✓ Thumbwheel 1 is used for ON Delay/OFF Delay.
 - 0: OFF Delay
 - 1: ON Delay

- ✓ Thumbwheel 2 is used for Over Run count.
 - 0: NO Memory
 - 1: YES Memory
- ✓ Thumbwheel 3 is used for Memory.
 - 0: Disable Over Run count
 - 1: Enable Over Run count
- ✓ When you press the RST key, the Counter will save all your parameters & will come in running mode.
- ✓ Here if you set any of the Thumbwheel digit to the value other than 0 (zero) or 1 (one), the Counter will discard all parameters & previously saved parameter will be applied.



Auto Reset Time Setting:

- Press the Reset key for 5 seconds. Then the upper display will blink with the “ rSt ” and its “ old-time ” continuously.
- Now to change the relay reset time, press the reset key again.
- Now the display will blink with the “ rSt ” and “ Thumbwheel digits ”.
- Set the Thumbwheel digit according to your desired time for relay reset.
- Now press the reset key again to exit this setting mode.

Display Indication:

Running Count ----- = on Upper Display

Keys & Terminal Function:

External Reset (Back RST) ----- = to reset the Counter

Front Reset Key ----- = to reset the Counter

WORKING:

- Here in working mode, if all the Thumbwheel digits are set to zero, then the Counter will work as an Indicator only.

ON-Delay Counter:

- Counter will get running according to the input count & display shows the parameters as mentioned above.
- Relay is OFF initially & when the **[Running Count >= Set 1]**, the **[Relay]** will be ON.
- Relay will auto reset according reset time, if reset time is non-zero. As well as you can reset manually or by applied external reset input.

OFF-Delay Counter:

- Counter will get running according to the input count & display shows the parameters as mentioned above.
- Relay is ON initially & when the **[Running Count >= Set 1]**, the **[Relay]** will be OFF.
- Relay will auto reset according reset time, if reset time is non-zero. As well as you can reset manually or by applied external reset input.