



ORDERING CODE

TYPE	MODEL	VOLTAGE	POWER SUPPLY	SENSOR OUTPUT	RELAY CONTACTS
CC	701	230	A	D	SPDT

SEE PAGE 126 FOR ORDERING OPTIONS

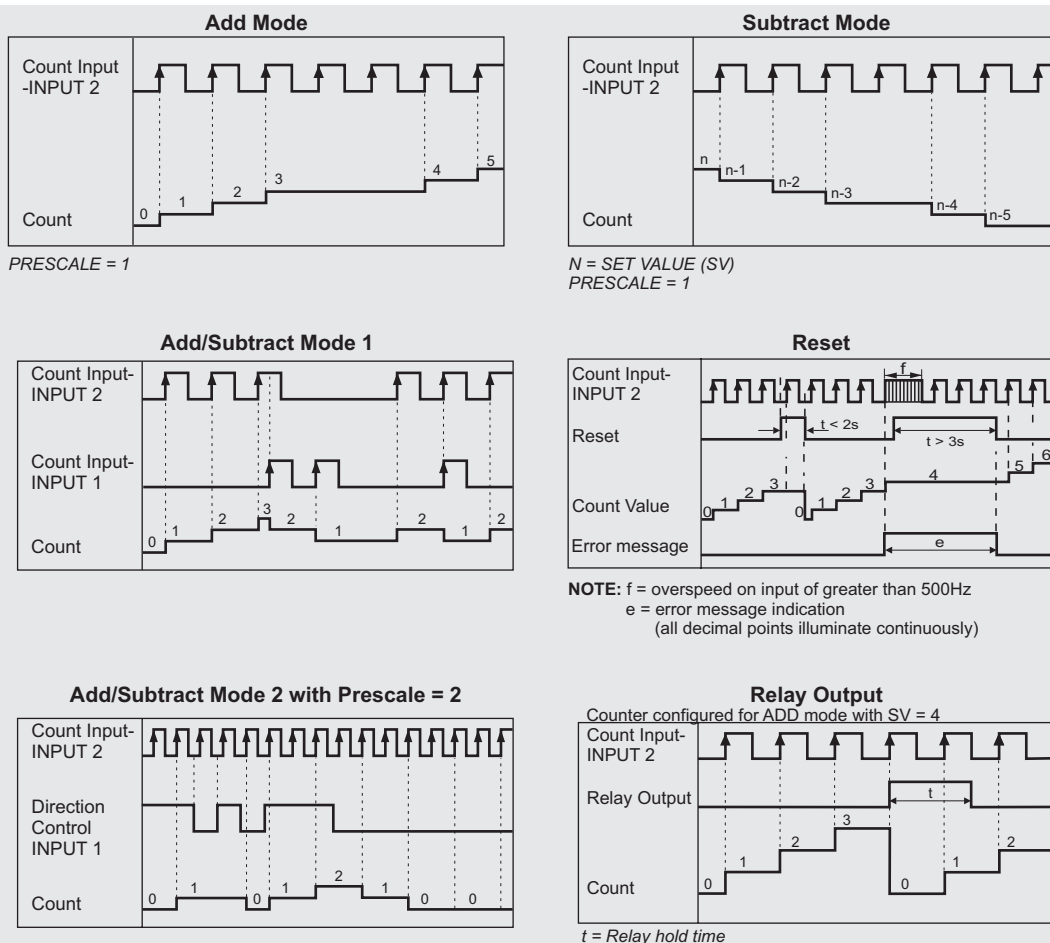
Introduction

- The Countaline CC701 is a fully programmable 4-digit preselect counter designed with the latest microcontroller technology.
- Incorporating many features and input options, the counter is very versatile and easy to use.
- All programming is guided through by the conspicuous LED display and user

Features

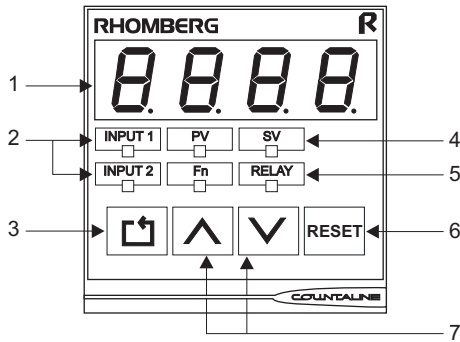
- 48 x 48 mm panel mount housing format
- Large 4-digit display with leading zero suppression
- User friendly keypad programming
- Selectable ADD, SUBTRACT, or ADD/SUBTRACT count modes
- Separate up and down count inputs in ADD/SUBTRACT mode 1.
- Separate count and count direction inputs in ADD/SUBTRACT mode 2.
- Dividing prescale programmable from 1 to 250.
- Relay hold time, programmable from 0.1 to 25 seconds in 0.1 second increments.
- High speed count input (500Hz) with selectable positive or negative active edge.
- Independent low speed count input (30Hz)
- Count input overspeed indication
- LED indication of relay output and of both count inputs
- Error message for indication of power supply interruption less than 0.3 second.
- Reset achieved via front panel keypad, via external switch or via NPN sensor.
- DC (NPN/PNP) or Namur sensor compatible high speed input (order option)
- Sensor leads can be connected directly as the CC-701 has an internal sensor power supply.
- Output: 8A SPDT Relay or Solid State Relay (order option).

Operational Diagrams



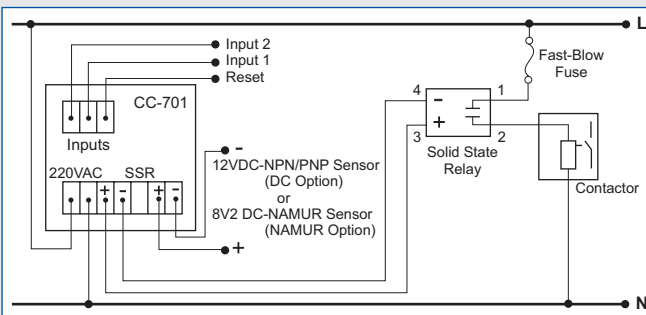


Description of Controls

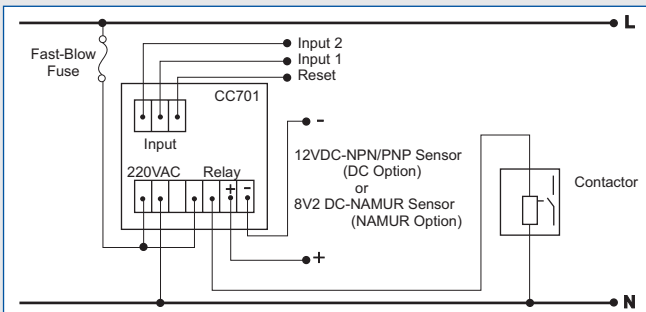


- 1: **4 Digit Display:** Displays the present value, the set value or the function status.
- 2: **Input Status Indication:** The input 1 LED illuminates whenever the low speed count input is activated. The input 2 LED illuminates whenever the high speed count input is activated.
- 3: **Enter Key:** Press to scroll through various display modes in order to modify function/ status values.
- 4: **Display Mode Indication:** The corresponding LED illuminates to indicate which parameter is on the display (PV, SV or Fn).
- 5: **Output Status Indication:** The relay LED illuminates if the relay is energised.
- 6: **Reset Key:** Used to reset or to clear any error.
- 7: **Up/Down Keys:** Press to change the displayed value of SV or the status function. Hold down to scroll quickly.

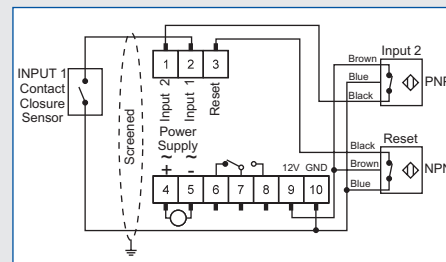
Wiring and Connection



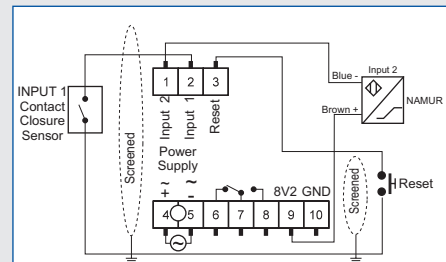
Connection Example 1: CC-701 with Solid State Relay (SSR) Output
INPUT 1: Low speed input
INPUT 2: High speed input



Connection Example 2: CC701 with Relay Output
INPUT 1: Low speed input
INPUT 2: High speed input



APPLICATION 1: DC OPTION-NPN/PNP sensor connection available on INPUT 2.



APPLICATION 2: NAMUR OPTION-Namur sensor connection available on Input 2.

Note: The CC-701 is available for DC or Namur sensor input and should therefore be specified in the ordering code.

Technical Specifications

INPUT SPECIFICATIONS			
	High speed input	Slow speed input	Reset input
NAMUR option	NAMUR sensor DIN 19234	Potential free contact or NPN sensor (open collector type)	Potential free contact or NPN sensor (open collector type)
DC option	NPN or PNP sensor (open collector type)		
Maximum input frequency	500Hz	30 Hz	500Hz
Minimum pulse width	1 millisecond	16.7 ms	1 millisecond
Active pulse edge	Positive or Negative (programmable on Function 2, Fn2)	Positive or Negative (programmable on Function 2, Fn2)	Negative: holds count value Positive (if low for < 2 sec): resets count value and clears error messages Positive (if low for > 3 sec): clears error message but not count value

SENSOR INTERFACE	
Internal sensor power supply	
NAMUR sensor option:	8.2V DC / 10mA
NPN or PNP sensor (i.e. DC option):	12V DC / 30mA
Maximum NPN sensor saturation voltage:	2V DC (high speed count input)
Maximum PNP sensor saturation voltage:	2.5V DC (low speed count input)
	2V DC (high speed count input)

GENERAL SPECIFICATIONS	
Power Supply Tolerance	±15%
Power Consumption	<3VA
Operating Temperature	0-55°C
Protection Class (Front Panel)	IP54
Protection Class (Rear)	IP30

OUTPUT SPECIFICATIONS	
Relay option	250 VAC, 8a, SPDT
SSR Drive option	10mA at 6V

Additional information in Section J, page 131.