



## Programmable Counter/Timer - IBC



BCH ELECTRIC LIMITED



# Programmable Counter/Timer - IBC

## Features

- Selectable Counter, Chronometer or Timer Functions
- Up Counter, Down Counter, Up / Down Counter
- Up Chronometer, Down Chronometer
- Timer with On Delay, Interval, Off Delay, Single shot, and Cyclic Functions with Programmable time base
- Two Presets with SPDT relays and solid state open collector outputs
- Selectable Decimal Point
- EEPROM Data Backup
- 7 Segment 6 Digit 8mm High LCD Display

## SPECIFICATIONS

Power Supply	115/ 230VAC $\pm$ 10%, 12/ 24VDC -10%to +15% Selectable
Supply Frequency	50/60 Hz
Power Consumption	6VA for AC, 2.4 W for 24 VDC, 1.2 W for 12 VDC
Counting Range	0 - 999999 Counts
Count Speed	30Hz / 800Hz Selectable
Mode of Operation	Single cycle with or without overflow, Repeat cycle with adjustable length of signal from 0.1 to 1 sec Reset to zero or reset to preset selectable in counter mode
Time Ranges	4 time ranges - 0 to 99 h 59 min 59 sec, 0.00 to 9999.99 min, 0.0 to 9h 59 min 59.9 sec, 0.00 to 99 min 59.99 sec
Time Accuracy	+/- 0.05% +/- 20 ms
Inputs	Proximity Switch, Potential Free Contact, Voltage Input - Low Level : 0 - 2V, High Level : 4 - 30V
Sensor Supply	12VDC 50mA
Memory Retention	10 Years
Preset	Two Set Points, each Separately Programmable through keypad
Reset	On front Panel and External provided on rear terminal Minimum signal duration 20ms
Inhibit Input	For interruption of counting provided on rear terminal
Output	2 Relays SPDT 7A @250VAC resistive load, Transistor Open Collector 30V / 40mA, NPN
Operating Temperature	0°C to + 50°C
Storage Temperature	-15°C to +60°C
Size	48mm x 48mm x 107.3mm (WxHxD) , 60mm x 60mm front panel
Mounting	Panel Mounting
Connections	Screw Terminals
Weight	275g
Mechanical Life	1 X 10 <sup>7</sup> Operations
Electrical Life	1X 10 <sup>5</sup> Operations with full load



## Ordering Information

IBC00 # 00

" # " Voltage Code

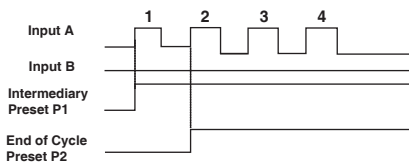
230V/115V AC 1

24V/12V DC 2

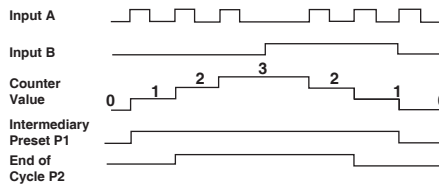
## Counter Operation

1. UP Counter
2. Down Counter
3. UP/Down Counter
4. Total Range: 0-999999

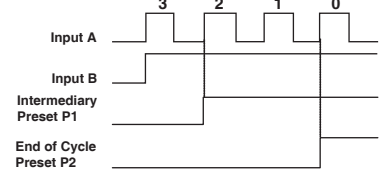
UP Counter With Preset=1 (Intermediary) and 2 (End of Cycle)



UP/DOWN Counter with Preset=1 (Intermediary) & Preset= 2 (End of Cycle)



Down Counter With Preset 2 ( Intermediary ) & 4 ( End Of Cycle)

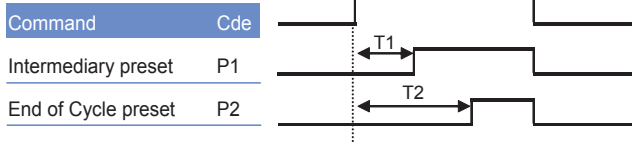


## Timers

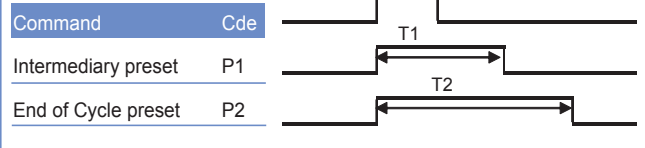
Functions	-On Delay, Off Delay, Single Shot, Interval, Cyclic Timer
Timer Ranges	0 to 99H 59 Min 59 Sec
	0.00 to 9999.99 Min
	0.0 to 9H 59 Min 59.9 Sec
	0.00 to 99 Min 59.99 Sec.

# Timing Diagrams

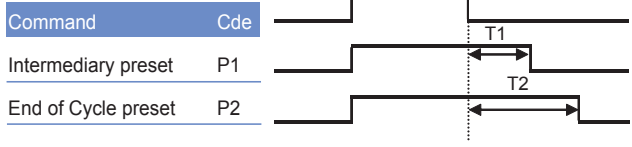
### A (On Delay)



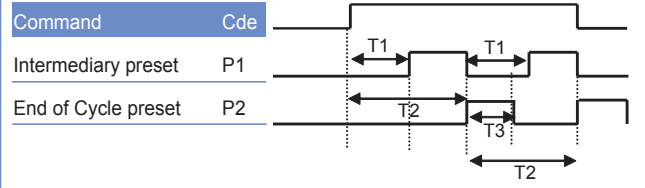
### B (Single Shot)



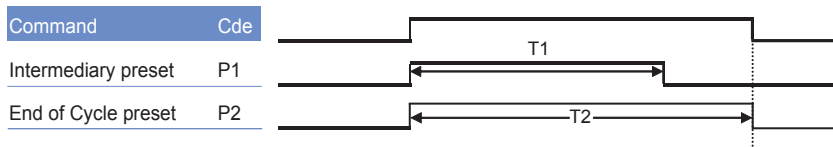
### C (Off Delay)



### D (Recycling)



### H (interval Delay)



# Chronometer

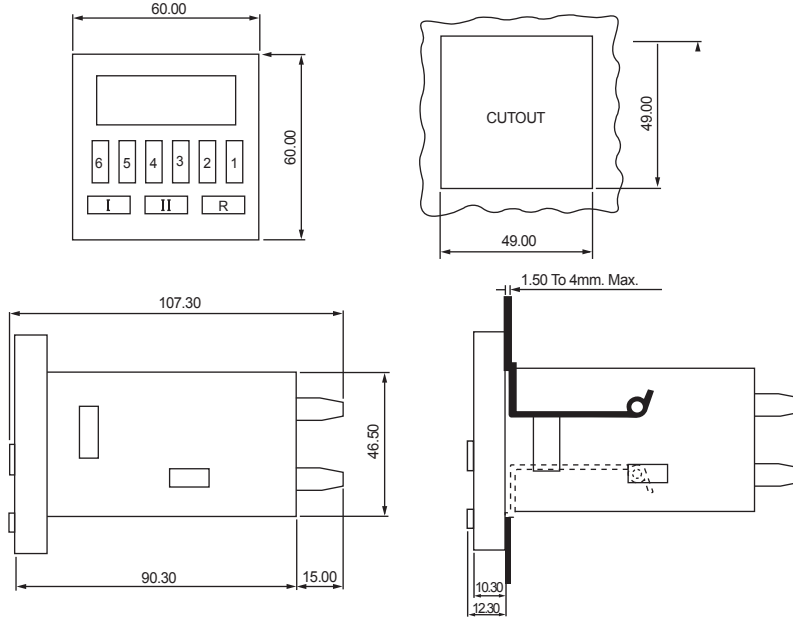
## Functions :

1. UP Chronometer
2. Down Chronometer

## Timer Ranges :

- 0 to 99H 59 Min 59 Sec
- 0.00 to 9999.99 Min
- 0.0 to 9H 59 Min 59.9 Sec
- 0.00 to 99 Min 59.99 sec

## Dimensions(mm)



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