



Electronic Digital Counter 6 Decade Predetermining

CP696
CP696-PS

- 6 Digit LED Display
- 96 x 96 mm DIN standard Housing
- 115/230VAC or 12-28VDC supply
- 5 & 12VDC output for proximity sensors etc
- Single shot or cycle
- Count UP or DOWN
- Selectable non-volatile memory
- Selectable PNP or NPN type inputs.
- Selectable fast or slow count rates
- Screw terminal connections
- Relay and Open Collector outputs
- Adjustable relay ON time in cycle mode



DESCRIPTION

These electronic predetermining counters provide precision counting for both industrial and laboratory applications. They will accept electronic input signals from proximity switches and shaft encoders etc. at rates up to 2 KHz and mechanical contacts (switches, relays etc) up to 100 Hz.

The required batch size is set using the front panel “push-push” switches and the counter will either count UP from zero to the set value or DOWN from the set value to zero. When counting UP the relay energise at equality and energises at Zero when counting DOWN. The 5A changeover relay output is available for controlling external devices

A small 8 way switch, accessible through the rear of the instrument allows the user to set up the operation of the counter. This allows selection of the two operating modes, PNP or NPN type inputs, fast or slow count and activation of the internal memory. Decimal points in the display may be turned on with this switch as well.

Rear panel connections are available for Reset, Up/Down selection and Count input as well as the 12VDC output for powering sensors, the AC or DC power inputs and the relay & transistor outputs.

Modes of Operation

One Shot—Up: The counter counts up from zero and the relay energises at the set point. Counting continues and the relay remains on. The count and relay are reset using the reset input.

One Shot—Down: The counter counts down from the set point and the relay energises at zero. Further input pulses are ignored. The count is restored to the set point value and the relay is reset using the reset input.

Cycle—Up: The counter counts up from zero and the relay energises at the set point. The count immediately resets to zero and continues counting the next batch. The relay remains on for a period set using the control on the side of the instrument. This can be set between 80 milliseconds and 5 seconds.

Cycle—Down: The counter counts down from the preset value and the relay energises at zero. The count immediately resets to the preset value and continues counting the next batch. The relay remains on for a period set using the control on the side of the instrument. This can be set between 80 milliseconds and 5 seconds.



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Options

Input Prescaler: These counters are available with a universal input prescaler that can be used to convert the displayed counter total into engineering units. For example, if pulses are coming from a flow meter the prescaler can be set so that the display shows the total volume dispensed in litres.

Serial Data Output: The displayed count value can be transmitted as an RS232 or RS485 type serial output to a remote device. (Such as an Abtek large display unit or a computer). The data is sent as standard ASCII characters in an 8 character burst at preset time intervals.

SPECIFICATION

Count Maximum:	999 999
Count direction:	Up or Down
Display:	7 Segment LED 14 mm high
Count Speed:	2 Khz maximum for electronic pulses, or 100 Hz for switch inputs
Inputs:	Reset, Pulse input, Up/Down
Count input type:	Selectable PNP or NPN with 1000 ohm input resistance
Input Requirements:	DC voltage from 3 to 30 volts (momentary or maintained)
Memory:	Count value maintained for >10 years in absence of power
Supply:	115/240 VAC or 12 - 30 VDC
Power Output :	12 volt DC output @ 50 mA for powering sensors etc.
Relay:	changeover contacts, 5 amp (resistive) at 250 VAC/30VDC
Open Collector:	1 amp PNP at 30 VDC max
Power Consumption:	3VA or 250 mA
Environment:	Temperature- -10 to +60 degree Celsius relative humidity- 10% to 90% non-condensing IP65 sealing kit available
Housing:	Plastic moulding
Dimensions:	96 x 96 x 135 mm (125 behind panel including terminals)
Panel Cut-out:	92 x 92 mm
Connections:	Removable plug in rising cage screw terminal block
Order code:	{type} {option 1} {option 2} i.e. CP696, CP696-PS, CP696-RS232

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