

Programmable Counter CT38



- ◆ Low cost
- ◆ 4-digit LED display for up to 9999 units
- ◆ Easy programming
- ◆ Universal optically isolated counting input
- ◆ Additional RESET input available
- ◆ 6 modes of operation of the counter and the relay output
- ◆ Programmable input multiplying coefficient
- ◆ 48x48 mm DIN-sized front panel



CT38 is a single-channel programmable counter with simplified programming. The device has a 4-digit display and can count up to 9999 input pulses. CT38 may work as up or down counter and has a relay output for switching on and off electrical actuators. Relay output action at reaching the preset counter value is user programmable. CT38 offers 4 counting modes and 2 output action modes. It features optical input isolation, and, optionally, an additional RESET input. The universal input allows connection of both mechanical contacts and electronic sensors. A software preliminary multiplying coefficient enables counting several units at each pulse. With its compact size, easy programming, and attractive price, the CT38 counter is widely used in machine manufacturing and various other areas.

Technical specifications

Inputs

Counting input	mechanical contact (NO) or electronic (from PNP / NPN sensor)
- type selection	not needed (automatic)
Input RESET	NO contact; resets counter to 0
Maximum input frequency	500 Hz
Input filter (fixed)	for input contact bouncing
Prescaling multiplying coefficient	1...999, programmable
Input isolation	optical, 750 VAC

Modes

Counting modes	4 ⁽¹⁾
Output action modes	2 ⁽²⁾
Counting range	0...9999
Programming	through keyboard

Outputs

(up to 2 relay outputs)

Relay electromechanical	5A/250V w/ NO/NC contact
Solid state relay ⁽³⁾	1A/250VAC
MOS gate	0.1A/60V, optically isolated
Transistor gate ⁽⁴⁾	open collector, 40mA/40V
Output for external SSR	12 V, 30 mA
Relay action	according to the mode
Output pulse duration	0.1...9.9 s, programmable

Indication and controls

Digital display	4 LED indicators, 10 mm
LEDs	3 LEDs for output and modes
Keyboard	6 membrane keys

Power supply

Mains supply voltage	230 VAC or 115 VAC
Isolated low voltage	12 VDC
Non-isolated low voltage	12 VDC or 12 VAC
Consumption	max. 2 VA

Operating conditions

Operating temperature	-10...65 °C
Operating humidity	0...85 %RH
Storage temperature	-20...65 °C
Storage humidity	0...95 %RH, non-condensing

Design and materials

Case material	plastic
Mounting	in 45x45 mm panel cut-out or on 35 mm DIN rail socket ⁽⁵⁾ OCTAL or UNDECAL ⁽⁶⁾
Wiring	
Dimensions	48x48(front)x92 mm
Mounting depth	max. 103 mm (w/ socket)
Weight	max. 250 g
Protection, front/terminals	IP40 / IP20

⁽¹⁾ Counting up or down; counting with or without automatic reset at reaching preset counter value

⁽²⁾ Output activates and retains the new state with counter reaching preset value; output activates for a short time with counter reaching preset value

⁽³⁾ Ask for availability!

⁽⁴⁾ ONLY with isolated power supply!

⁽⁵⁾ Ordered separately (see 'Accessories')

⁽⁶⁾ ONLY with RESET input (G7="A")

Ordering code CT38 - G1.G5.G7

Code	Feature or option	Code values
G1	Power supply	A - 230 VAC, B - 115 VAC, D - 12 VDC, E - 12 VAC, Q - 12 VDC, isolated
G5	Relay output	C - relay NO/NC, D - SSR ⁽³⁾ , E - open collector NPN ⁽⁴⁾ , J - for external SSR, M - isolated MOS gate
G7	RESET input	X - none, A - contact