

2-period Multifunctional Timer CT03



- ◆ Fully programmable
- ◆ 2 time periods with 2 relay outputs
- ◆ Easy-to-set push-wheel switch
- ◆ External or power-on starting modes
- ◆ HOLD input
- ◆ Maximum time delay up to 999 min
- ◆ 4 operating modes
- ◆ 48x48 mm DIN-sized front panel



The CT03 timer is a low-cost microprocessor-based device for time sequence control with 2 adjustable time periods forming a time cycle, 3 sub-ranges, and 4 different timing modes. The push-wheel switch (BCD) on the front panel enables easy setting of the period duration and the 3-digit display indicates the current time, the parameters, or the operating mode. All modes of operation and parameters are user-programmable via front-panel keyboard. CT03 is also equipped with 2 contact inputs for external start and hold and 2 output relays with programmable action for timing control of processes through switching electrical actuators on and off. The extended features of CT03 simplify programming and process monitoring and make the timer a convenient solution to a wide range of timing related problems.

Technical specifications

Inputs

Input type	NO contacts
Input START	external closing contacts
Input HOLD	external closing contacts
Input programming	through keyboard

Times and modes

Ranges	0...99.9 s, 999 s, or 999 min
First period (t1)	after start
Second period (t2)	depends on the operation mode
Modes of operation	up to 4 modes ⁽¹⁾
Range selection	programmable
Time selection	programmable
Parameter programming	through keyboard ⁽²⁾
Value adjustment	by push-wheel switch

Outputs

	(up to 2 relay outputs)
Relay electromechanical	5A/250V w/ NO/NC contact
Solid state relay ⁽³⁾	1A/250VAC
MOS gate ⁽³⁾	0.1A/60V, optically isolated
Transistor gate ⁽⁴⁾	open collector, 40mA/40V
Output for ext. SSR	5...24 V, 30 mA
Relay K1 action	activates alternatively with t1 and t2
Relay K2 action	activates for total cycle time (t1+t2)

Accuracy

Measurement error	0.02% from span
Temperature drift	negligible

Indication and controls

Digital display	3 LED indicators, 10 mm
LEDs	2 LEDs for relay state
Keyboard	2 membrane keys
Push-wheel switch	for easy value programming

Power supply

Mains supply voltage	230 VAC or 115 VAC
SMPS voltage	90...250 V
Isolated low voltage	12...24 V or 24 VAC
Non-isolated low voltage	12...24 V
Consumption	max. 2 VA

Operating conditions

Ambient temperature	-10...65 °C
Ambient humidity	0...85 %RH
Storage temperature	-10...70 °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 UNDECAL ⁽⁵⁾
Wiring	
Dimensions	48x48(front)x95 mm
Mounting depth	103 mm (w/ socket)
Weight	max. 250 g
Protection, front/terminals	IP54 / IP20

⁽¹⁾ One-shut cycle mode; cyclic mode (repeated cycle); one-shut cycle mode (t2 - total cycle time); cyclic mode (t2 - total cycle time)

⁽²⁾ Relay K1 action after start; relay K2 action in active period; inactive state of K1 and K2; specifies period adjusted by BCD; restart during action; automatic start at power-on

⁽³⁾ Ask for availability!

⁽⁴⁾ ONLY with isolated power supply!

⁽⁵⁾ Ordered separately (see 'Accessories')

Ordering code CT03 - G1.G5G5

Code	Feature or option	Code values
G1	Power supply	A - 230 VAC, B - 115 VAC, C - 90...250 V, P - 12...24 V, non-isolated, Q - 12...24 V, isolated, R - 24 VAC
G5	Relay output	X - none ⁽⁶⁾ , C - relay NO/NC, D - SSR ⁽³⁾ , E - open collector NPN ⁽⁴⁾ , J - for external SSR, M - isolated MOS gate ⁽³⁾

⁽⁶⁾ At least one relay must be ordered!