Dial-type Analog Timer CT02

- **Very low cost**
- **Wide time range**
- **48x48 mm or 96x48 mm DIN-sized front panel**
- **8 operating modes**
- **Main and auxiliary relays**
- **Panel or rail mounting**

The CT02 timer is designed for time sequence control of electrical actuators. The time setting adjustment is done by rotating a dial on the front panel and the timing is started at power-on or by external 'start/stop' contact. Various modes of operation – on-delay, off-delay, pulse output, and cyclical output – are available. The operating modes as well as the time range (for variant 'S') can be selected via micro switches. The timer may be equipped with up to 2 relays – main timing relay and auxiliary relay, which is activated at power-on or simultaneously with the main relay. CT02 has no indication, is very easy to set and operate, and yet has all the main functions of a modern electronic timer.

Technical specifications

Input [1]	
Input type	passive contact (NO)
Input function	external 'Start/Stop' or front-panel 'Start/Stop' button [2]

Times and modes	'N'	'S'
Ranges [3]	1...10 s, 10...100 s, 1...10 min, 10...100 min	0...1, 0...3, 0...6
Dial multiplication coefficient	-	x1 s, x10 s, x1 min
Delay	ON or OFF	ON or OFF
Output pulse	yes	no
Cyclic mode	yes	no

Outputs	*(up to 2 - main and auxiliary)*
Relay electromechanical	5A/250V w/ NO/NC contact
Solid state relay [4]	1A/250VAC
MOS gate	0.1A/60V, optically isolated
Transistor gate [5]	open collector, 40mA/40V
Output for external SSR	12/24 V, 30 mA
Main (timer) relay	time operated
Auxiliary relay	activates at power-on [6]

Accuracy	
Measurement error	1% (2% for 'N') from span
Temperature drift	0.007% from span for 1 °C

Power supply	
Mains supply voltage [1]	230 VAC or 115 VAC
SMPS voltage [7]	24…230 VAC/DC
Isolated low voltage [1]	24 VDC
Non-isolated low voltage	24 VDC
Consumption	max. 2 VA

Indication and controls	
LEDs	LED for the time operated relay
Rotating dial	for time adjustment
Micro switches	for mode selection and multiplication coefficient setting [7]

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	'H': in 93x45 mm panel cut-out; 'S': in 45x45 mm panel cut-out or on 35 mm DIN rail
Wiring:	
- for variant 'N'	'H': screw terminals; 'S': socket UNDECAL [8]
- for variant 'S'	socket OCTAL [8]
Dimensions:	
- for variant 'N'	'H': 96x48(front)x136 mm; 'S': 48x48(front)x102 mm
- for variant 'S'	48x48(front)x95 mm
Mounting depth	'H': 120 mm; 'S': max. 105 mm (w/ socket)
Weight	max. 250 g
Protection, front/terminals	IP40 / IP20

[1] Only for variant 'N'
[2] Only for case 'H'
[3] For variant 'S', ranges are user selectable; for variant 'N', they are fixed and should be specified in customer order.
[4] Ask for availability!
[5] ONLY with isolated power supply!
[6] For variant 'S', a mode may be selected when auxiliary relay operates TOGETHER WITH the main time operated relay.
[7] Only for variant 'S'
[8] Ordered separately (see 'Accessories')

Ordering code **CT02✶ - G0.G1.G4.G5G5.G8**

Code	Feature or option	Code values
✶	Variant	**N** - normal, **S** - simplified
G0	Case (front panel) [1]	**S** - 48x48 mm, **H** - 96x48 mm
G1	Power supply	**A** - 230 VAC [1], **B** - 115 VAC [1], **D** - 24 VDC, non-isolated, **K** - 24…230 V [7], **Q** - 24 VDC, isolated [1]
G4	Start/Stop	**A** - at power-on, **C** - from front-panel button [2], **D** - from input [1]
G5	Relay output	**X** - none [9], **C** - relay NO/NC, **D** - SSR [4], **E** - open collector NPN [5], **J** - for external SSR, **M** - isolated MOS gate
G8	Operating mode [1]	**B** - selectable, **D** - delay ON, **E** - delay OFF, **F** - output pulse, **G** - cyclic

[9] A main relay MUST be installed!