

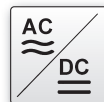
design 72 x 72 x 133mm

turn-on delay
turn-off delay



- ✓ LED display, 4-digit, 14mm high
- ✓ delays and time counter (quartz time base)
- ✓ programmable count-up/count-down
- ✓ 1 preset, 2 relays (1 programmable "instantaneous change-over contact")
- ✓ start, stop input
- ✓ auxiliary voltage 12V DC, 30mA, in AC-operation
- ✓ 8 adjustable time ranges from 0.01sec to 999.9h
- ✓ 5 years retention time
- ✓ external reset

**time counter with 1 preset
floating relay outputs**



description

The **CZ04** series elapsed-time counters with LED displays are used in all applications, where times are detected and have to be visualized. The relay outputs (floating change-over contacts) are controlled in accordance with preset time which is set by means of the decimal switch. 8 different time ranges are available so that a total range is covered from 0.01sec to 999.9h. The 14mm-high LED display has 4 digits. It is possible for time counting to take place forwards as well as backwards. For relay 2, the 'immediate contact' function is selectable.

CZ04 can be operated using a power supply of 24V DC as well as 230V AC. When operating using a 230V AC power

supply, an auxiliary supply of 12V DC is available on terminal 7.

The device has a reserve power supply which can be switched on if the mains supply fails. In switch position S4 ON, the device's time and operational sequence continues to run at the point where it has been disconnected after applying the power supply.

application examples

- ▶ time delay relay turn-off delayed
- ▶ time delay relay turn-on delayed

1500 time counter

TECHNICAL DATA

display	LED 4 decades, 14mm high		
time ranges	0.01 ... 99.99sec	0.1 ... 999.9sec	1 ... 9999sec
	0.01 ... 99.99min	0.1 ... 999.9min	1 ... 9999min
	0.01 ... 99.99h	0.1 ... 999.9h	
repeat accuracy	< 0.1%		
counting mode	up/down programmable		
operating voltage	230V AC and 24V DC, +5% -10%		
power consumption	< 5VA		
auxiliary voltage	+12V DC, 30mA		
output	2 relays (change-over contact 250V/3A)		
storage	5 years		
continuous duty	100% CD		
system of protection (EN 60529)	IP40 (terminals IP20)		
ambient temperature	-20 ... +70°C		

connection

terminal 1	relay 1 central contact
terminal 2	operating voltage (UB) e.g. 230V AC
terminal 3	relay 1 make contact
terminal 4	relay 1 break contact
terminal 5	external reset (preset) pnp
terminal 6	start, stop input pnp
terminal 7	UB +24V DC (terminal 2 + 10 not assigned!) auxiliary voltage +12V DC, 30mA max. (only in AC operation)
terminal 8	relay 2 central contact (instantaneous or delayed)
terminal 9	relay 2 make contact (instantaneous or delayed)
terminal 10	operating voltage (UB) e.g. 230V AC
terminal 11	relay 2 break contact (instantaneous or delayed)
terminal 12	0V DC (minus for UB 24V DC and auxiliary voltage)

fig. 1

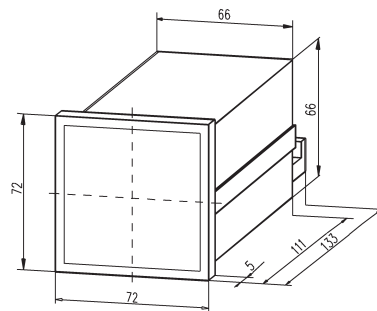
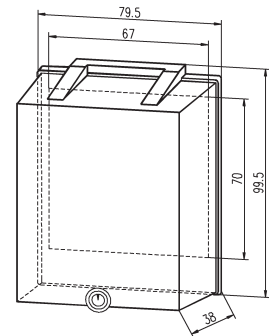


fig. 2



programming of the DIP switches

	s1	s2	s3	s4
on	relay 2 instantaneous	turn-off delay	up	memory
off	relay 2 delayed	turn-on delay	down	reset on power-up

article-no.	design	description	notes	voltage	output	current	display	fig.
CZ044410	72x72x133	time counter	memory, 0.01sec ... 999.9h	230V AC / 24V DC	1preset, 2relays	3A	LED, 4-digit	1
AV000001	79.5x99.5x38	sealing ring						
AV000003	79.5x99.5x38	coverage	lockable					2

You will receive an operating manual when the device is supplied. This will provide a detailed explanation concerning the functions and programming of the multifunction counter.

Warning: Never use these devices in applications where the safety of a person depends on their functionality.