

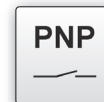
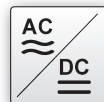
design 72 x 72 x 133mm

direction of counting adding
direction of counting subtracting

- ✓ status display by LED, 4-digits, 14mm high
- ✓ programmable count-up/count-down, 20/1500Hz selectable
- ✓ inputs via optocoupler
- ✓ 1 preset, 1 relay, (3A change-over contact) and 1 pnp-output 24V DC, 50mA
- ✓ auxiliary voltage 24V DC, 150mA
- ✓ external reset
- ✓ automatic repeat cycle (timed output 0.1sec to 1sec)
- ✓ 5 years retention time



pulse counter with 1 preset floating relay output



description

The CI04 series pulse counters with LED displays are used in all applications, where pulses have to be recorded and visualized. The integrated, potential-free relay is controlled by the input of a preset value, that is set using decimal switches. The counting range is from 0 to 9999 pulses.

The 14mm-high LED display has 4 digits.

The CI04 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 voltage of 24V DC is available on ter-

минал 7. This counter also has a pnp output.

Different operating modes can be set through a 4-pin DIP switch, such as addition or subtraction counting direction, latched or timed output signal and automatic reset. The frequency of count is switchable between 20Hz or 1500Hz.

application examples

- ▶ unit counting

TECHNICAL DATA	1 PRESET
display	LED, 4 decades, 14mm high
counting range	0 ... 9,999 / 9,999 ... 0
repeat accuracy	< 0.1%
counting mode	up/down programmable
operating voltage	230V AC and 24V DC, +5% -10%
power consumption	< 5VA
auxiliary voltage	+24V DC, 150mA
output	1 relay (change-over contact 250V/3A), 1 pnp-output 24V DC, 50mA
retention time	5 years
continuous duty	100% CD
system of protection (EN 60529)	IP40 (terminals IP20)
ambient temperature	-20 ... +70°C
sampling frequency	20/1500Hz programmable

connection

terminal 1	relay center contact
terminal 2	operating voltage (UB) e.g. 230V AC
terminal 3	relay make contact
terminal 4	relay break contact
terminal 5	external reset (pnp)
terminal 6	count input (pnp)
terminal 7	auxiliary voltage +24V DC, 150mA max.
terminal 8	pnp-output +24V DC, 50mA max.
terminal 9	when using the pnp output, connect to either the internal or external auxiliary voltage
terminal 10	operating voltage (UB) e.g. 230V AC
terminal 11	UB +24V DC (terminal 2 and 10 are not assigned!)
terminal 12	0V DC (minus for UB 24V DC and auxiliary voltage)

fig. 1

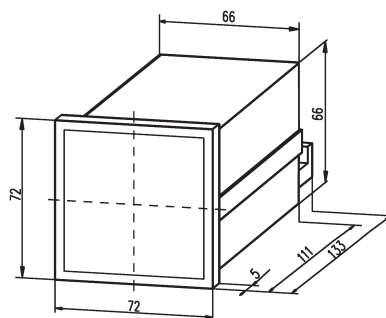
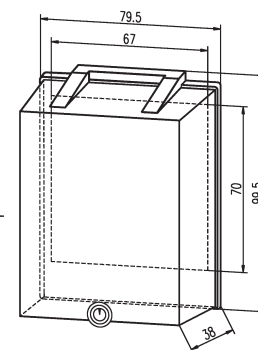


fig. 2



PROGRAMMING OF THE DIP SWITCHES

dip switches	s1	s2	s3	s4
on	timed contact	count-up	automatic reset	frequency of count 20Hz
off	permanent contact	count-down	external reset	frequency of count 1.5kHz

article-no.	design	description	comment	frequency	voltage	output	current	display	fig.
CI044420	72x72x133	pulse counter	memory	20/1500Hz	230VAC+24VDC	1 preset, 1 relay	3A	LED, 4-digit	1
AV000001	72x72	accessory	sealing ring						
AV000003	72x72	accessory	cover with key lock						2

The functions and programming of the multi-function counter are explained in detail in the operating instructions enclosed with the counter.

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