

## Digital Counter LIM NC400

### Technical description

#### Characteristic

- 6-digit red display 12 mm-high
- 2 counting input COUNT1, COUNT2, HOLD, RESET
- extended counting functions
- outputs triggering timing: 0,01 to 9999,99 s
- 3 work counters (main, partial, additive)
- max. counting frequency up to 20 kHz
- max. input voltage up to 30 V DC
- input impedance 4700 Ω
- auxiliary voltage source: 12 V DC/50 mA

#### Input

- NPN/PNP, voltage pulse connections
- counting input
- external voltage pulses max. 30 V DC

#### Output I

- SSR 5 V output impedance 100 Ω

#### Output II

- relay: 3 A/250 V

#### Additional source power

12 V DC/50 mA (±10%)

#### Power source

(100 ÷ 240) V AC/DC (±10%)  
 (12 ÷ 24) V AC/DC  
 9 VA

#### Operating conditions

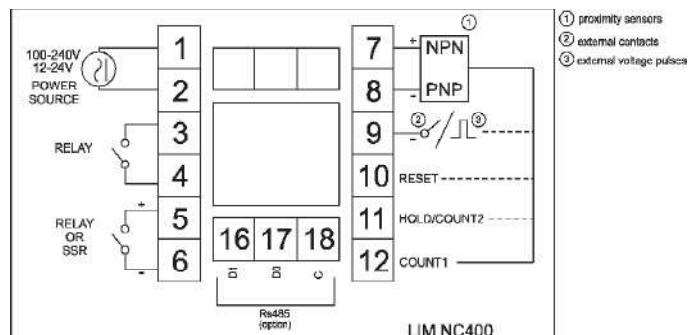
- temperature: (0 ÷ 50) °C
- humidity: (0 ÷ 85) % RH without condensation

#### Dimensions [mm]

48x48x110; hole: 45,5x45,5



Wiring diagram



#### Modes of operation

CODE	Input COUNT2/HOLD	Input COUNT1	Action
0	HOLD	SUB	DOWN
1	HOLD	ADD	UP
4	SUB	SUB	DOWN
5	SUB	ADD	UP
6	ADD	SUB	DOWN
7	ADD	ADD	UP
8	Select ADD	SUB or ADD	DOWN
9	Select SUB	ADD or SUB	UP
12	QUADRATURE		DOWN
13	QUADRATURE		UP
14	QUADRATURE 2x		DOWN
15	QUADRATURE 2x		UP

**UP/DOWN** - the main counter counts up/down starting from the programmed offset value (usually 0) to the SET POINT value.

**HOLD** - pause, stop counting

**ADD** - adding counted pulses from given input

**SUB** - subtracting the counted pulses from a given input

**Select ADD/SUB** - COUNT 2 input determines if COUNT1 is an input adding or subtracting

**QUADRATURE** - fast two-way counting mode that uses two counting inputs to determine if counting will be made adding or subtracting

**QUADRATURE 2x** -  
 the same as in QUADRATURE mode but it counts 2x faster with increased resolution

### Ordering example

Digital Counter LIM NC400 (standard power source (100 ÷ 240) V)

Digital Counter LIM NC400-24 V (optional power source (12 ÷ 24) V)