



## Electronic totalizer

### Characteristics of device

|            |                                                                                                                      |
|------------|----------------------------------------------------------------------------------------------------------------------|
| Technology | CMOS                                                                                                                 |
| Model      | Totalizer                                                                                                            |
| Functions  | Internal voltage supply<br>Manual and/or electrical reset<br>Counting via floating contact or through voltage pulses |

### Order designation

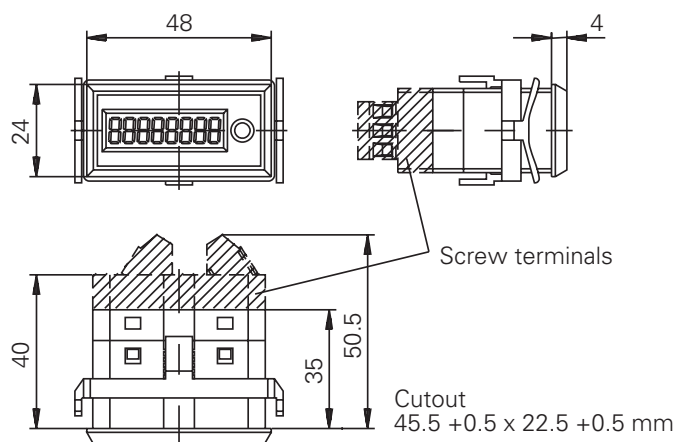
- A Jack plug with cable leads of floating contact
- B Screw terminals of floating contact
- C Screw terminals, voltage pulses 12 ... 240 VDC / VAC

N 121.01 ☐

### Mechanical data

|                    |                                            |
|--------------------|--------------------------------------------|
| Display            | 8-digit LCD-display<br>8 mm high           |
| Operation, keypad  | Rubber key for reset                       |
| Front dimensions   | DIN housing 48 x 24 mm                     |
| Mounting           | Front-plate installation                   |
| Fastening          | By means of clamping brackets              |
| Type of connection | Screw terminals<br>Grid 5 mm or cable lead |
| Core cross-section | Max. 1.5 mm <sup>2</sup>                   |
| Weight             | Ca. 30 (40) g                              |
| Housing material   | ABS black                                  |

### Dimensions and cutout size



### Accessories

Order no.

|            |                              |
|------------|------------------------------|
| ZN 121.A00 | Adapter plate 53.2 x 28.2 mm |
| ZN 121.B00 | Adapter plate 60 x 50 mm     |

## Ambient conditions

|                       |                                                                                        |
|-----------------------|----------------------------------------------------------------------------------------|
| Ambient temperature   | 0 ... +50 °C                                                                           |
| Storage temperature   | -10 ... +60 °C                                                                         |
| Relative humidity     | Max. relative humidity 80 %, at 25 °C, non-condensing                                  |
| Protection            | Front IP 65 to DIN 40050                                                               |
| Interference immunity | IEC 801-2 Severity grade 2<br>IEC 801-3 Severity grade 2<br>IEC 801-4 Severity grade 2 |
| Emitted interference  | EN 55022 Class B                                                                       |

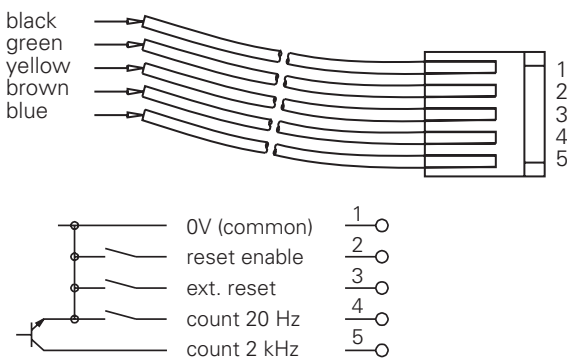
## Electrical data

|                |                                                                                                                                                                                                                                |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Supply voltage | Integrated 3 V lithium battery with a life cycle of approx. 10 years at +20 °C                                                                                                                                                 |
| Reset inputs   | External reset<br>Reset NPN, switching to 0 V (Pin 1 to Pin 3).<br>Min. pulse duration 25 ms, no counting during reset signal.<br>Reset enable<br>The reset key is active if Pin 2 (reset enable) is connected to Pin 1 (0 V). |

## Pin assignments

### Version A

Jack plug with cable leads / floating contact



## Signal inputs

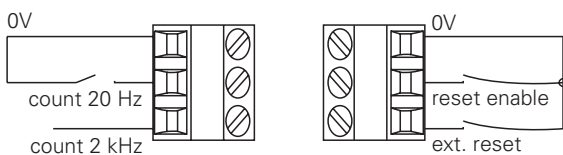
### Version A and B

Two count inputs: electronic count input for pulses up to max. 2 kHz and contact input / open collector input for pulses up to 20 Hz with internal contact debouncing.

|             |                                                                                                                                            |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Count 20 Hz | Max. counting rate 20 Hz, e.g. via floating contact from Pin 4 to Pin 1 (0 V)<br>Counting by negative edge<br>Minimum pulse duration 25 ms |
| Count 2 kHz | Max. counting rate 2 kHz NPN-logic<br>Counting by negative edge<br>Limit value 0.7 V<br>Minimum pulse duration 250 µs                      |

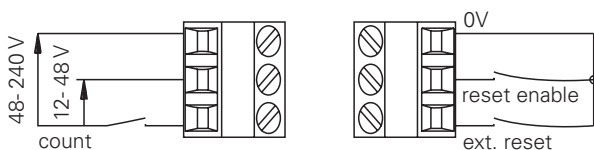
### Version B

Screw terminals / floating contact



### Version C

Screw terminals / for counting with voltage pulses from 12 ... 240 VDC / VAC



### For version C the following data are valid:

|                        |                      |
|------------------------|----------------------|
| Maximum counting rate  | 15 Hz                |
| Minimum pulse duration | 35 ms                |
| Input impedance        | 10 ... 54 kOhm       |
| Low                    | 1 VDC / VAC          |
| High                   | 12 ... 240 VDC / VAC |