

# Preset counters electronic

## 2 presets, totalizer and batch counter

### Display LED, 8-digits, programmable

#### NE212



NE212 - LED Preset counter

#### Features

- Preset counter with two presets
- Display batch counter, main counter: 6-digits
- Display totalizer: 8-digits
- Batch counter, tachometer, totalizer, hour counter
- Operating mode, start count, scaling factor programmable
- Connection: Incremental encoder or digital sensors
- Preset mode programmable
- Interface RS232, RS422, RS485

#### Technical data - electrical ratings

|                             |   |
|-----------------------------|---|
| Voltage supply              | 24/48 VAC $\pm 10\%$ (50/60 Hz)<br>85...265 VAC (50/60 Hz)<br>24 VDC $\pm 10\%$                                 |
| Power consumption           | 15 VA, 8 W  |
| Sensor supply               | 24/48 VAC: 12-26 VDC/80 mA<br>85...265 VAC:<br>24 VDC $\pm 20\%$ /200 mA<br>24 VDC: 24 VDC $\pm 20\%$ /200 mA   |
| Display                     | LED, 7-segment display  |
| Number of digits            | 8-digits - totalizer<br>6-digits - hour/main/<br>batch counter, tachometer                                      |
| Digit height                | 7.6 mm  |
| Function                    | Preset counter<br>Main counter with 2 presets<br>Batch counter with 1 preset<br>Totalizer<br>Hour counter       |
| Scaling factor              | 0.0001...9999.99  |
| Multitplier / batch counter | 1...99  |
| Count modes                 | Adding or subtracting<br>Difference counting A-B<br>Total (parallel) A+B<br>Up/Down<br>A 90° B phase evaluation |
| Counting frequency          | 15 Hz, 25 Hz, 10 kHz<br>programmable  |
| Preset                      | 2 presets   |
| Operating modes             | Main preset, Parallel alignment,<br>Trailing preset, Step preset  |
| Data memory                 | >10 years in EEPROM   |
| Reset                       | Button, electric or automatic   |
| Outputs electronic          | NPN / PNP transistor switch   |

#### Technical data - electrical ratings

|                            |   |
|----------------------------|---|
| Outputs relay              | Potential-free change-over<br>contact for main counter<br>Normally open/closed<br>potential-free for B1 |
| Output holding time        | 0.01...99.99 s  |
| Interfaces                 | RS232, RS422, RS485   |
| Standard<br>DIN EN 61010-1 | Protection class II<br>Overvoltage category II<br>Pollution degree 2                                    |
| Emitted interference       | DIN EN 61000-6-4  |
| Interference immunity      | DIN EN 61000-6-2  |
| Programmable<br>parameters | Operating modes<br>Sensor logic<br>Scaling factor<br>Count mode<br>Control inputs                       |
| Approval                   | UL approval / E63076  |

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#### Part number

NE212.     **AXA2**

#### Voltage supply

- 1 24 / 48 VAC
- 2 85...265 VAC
- 3 24 VDC

#### Outputs

- 1 Relay outputs, B1 normally open
- 2 Relay outputs, B1 normally closed
- 3 Electronic outputs PNP
- 4 Electronic outputs NPN

#### Interface

- 0 Without interface
- 1 RS485
- 2 RS422
- 3 RS232

#### Technical data - mechanical design

|                         |  |
|-------------------------|--|
| Ambient temperature     | 0...+50 °C                                       |
| Storage temperature     | -20...+70 °C                                     |
| Relative humidity       | 80 % non-condensing                              |
| Connection              | Plug-in screw terminal connector                 |
| Core cross-section      | 1.5 mm <sup>2</sup>                              |
| Protection DIN EN 60529 | IP 65 (face with seal)                           |
| Operation / keypad      | 10 figure keypad with 5 function keys            |
| Housing type            | Built-in housing                                 |
| Dimensions W x H x L    | 72 x 72 x 108 mm                                 |
| Mounting depth          | 108 mm   |
| Mounting                | Clip frame for built-in housing                  |
| Cutout dimensions       | 68 x 68 mm (+0.7)                                |
| Weight approx.          | 320 g (24 VDC/85-265 VAC),<br>450 g (24/48 VAC)  |
| Materials               | Housing: Makrolon 6485 (PC)<br>Keypad: Polyester |

#### Trigger level

| Optocoupler inputs       | Input circuit            |
|--------------------------|--------------------------|
| Control inputs           | PNP- / NPN-logic         |
| Count input              |                          |
| Trigger current          | 9...16 mA                |
| Switch-off current       | <0.5 mA                  |
| Input resistance         | 1.65 kΩ                  |
| Reset input              |                          |
| Trigger current          | 5...8 mA                 |
| Switch-off current       | <0.5 mA                  |
| Input resistance         | 3.3 kΩ                   |
| Relay outputs            | Output circuit           |
| Switching voltage max.   | 250 VAC / 110 VDC        |
| Switching current max.   | 1 A                      |
| Switching capacity max.  | 150 VA / 30 W            |
| Relay responding time    | 5 ms                     |
| Electronical outputs     | Output circuit           |
| PNP-switching transistor | Open collector           |
| Switching voltage        | 24 VDC ±20 %             |
| Switching current max.   | 10 mA (AC)<br>50 mA (DC) |
| NPN-switching transistor | Open collector           |
| Switching voltage max.   | 35 V                     |
| Switching current max.   | 50 mA                    |

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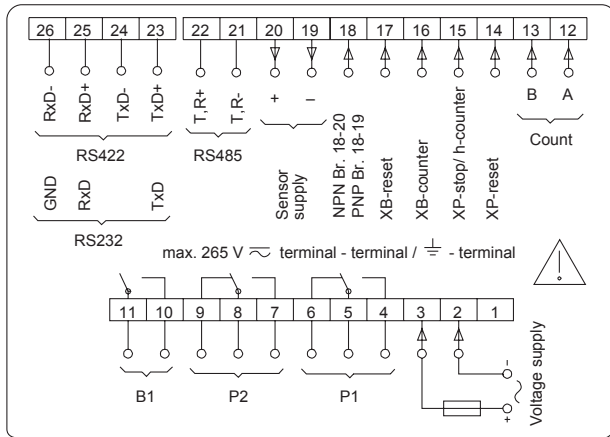
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### Display LED, 8-digits, programmable

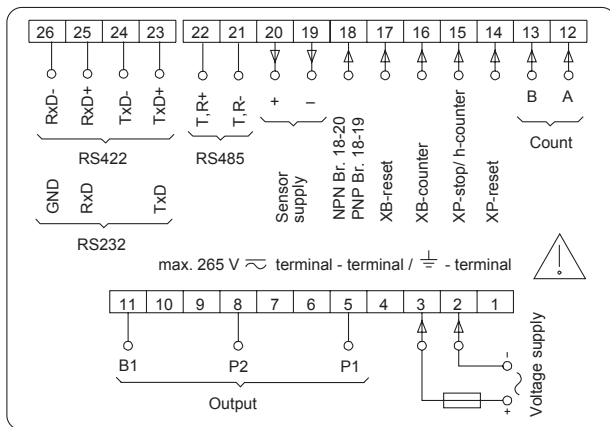
NE212

#### Connection diagram

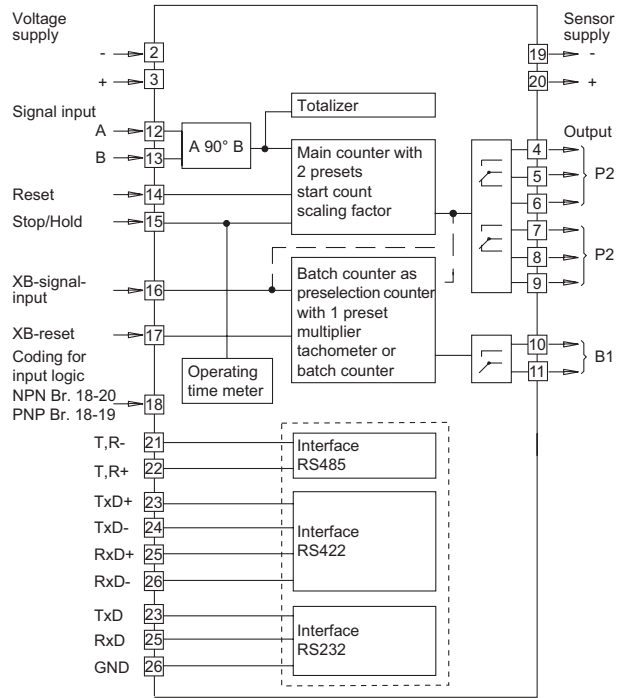
##### Relay outputs



##### Electronic outputs



#### Block circuit diagram



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## Dimensions

