

# Preset counters electronic

2 presets, printer interface

Display LED, 8-digits, programmable

## NE213



NE213 - LED Preset counter

### Features

- Preset counter with two presets
- Display batch counter, main counter: 6-digits
- Display totalizer: 8-digits
- Batch counter, totalizer, hour counter
- Operating mode, start count, scaling factor programmable
- Preset mode programmable
- Printout by F-key or singal input
- Printer interface RS232

### Technical data - electrical ratings

Voltage supply	22...50 VAC (50/60 Hz) 85...265 VAC (50/60 Hz) 24 VDC $\pm$ 10 %
Power consumption	15 VA, 8 W
Sensor supply	24 VDC $\pm$ 20 % / max. 200 mA
Display	LED, 7-segment display
Number of digits	8-digits - totalizer 6-digits - main counter, batch counter, tachometer, hour counter
Digit height	7.6 mm
Function	Preset counter Main counter with 2 presets Batch counter with 1 preset Totalizer Printer interface
Scaling factor	0.0001...9999.99
Multitplier / batch counter	1...99
Count modes	Adding or subtracting A-B (difference counting) A+B total (parallel counting) Up/Down A 90° B phase evaluation
Counting frequency	15 Hz, 25 Hz, 10 kHz programmable
Operating modes	Step preset, Main preset, Parallel alignment, Trailing preset
Data memory	>10 years in EEPROM
Reset	Button, electric or automatic
Outputs electronic	NPN / PNP transistor switch
Outputs relay	Potential-free change-over contact for main counter Normally open/closed potential-free for B1
Output holding time	0.01...99.99 s

### Technical data - electrical ratings

Interface	RS232
Standard DIN EN 61010-1	Protection class II Overvoltage category II Pollution degree 2
Emitted interference	DIN EN 61000-6-4
Interference immunity	DIN EN 61000-6-2
Programmable parameters	Operating modes Sensor logic Scaling factor Count mode Control inputs
Approvals	UL/cUL, CE conform

### Technical data - mechanical design

Operating temperature	0...+50 °C
Storing temperature	-20...+70 °C
Relative humidity	80 % non-condensing
E-connection	Plug-in screw terminals
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
Installation depth	108 mm
Mounting	Clip frame
Cutout dimensions	68 x 68 mm (+0.7)
Materials	Housing: Makrolon 6485 (PC) Keypad: Polyester
Weight approx.	320 g

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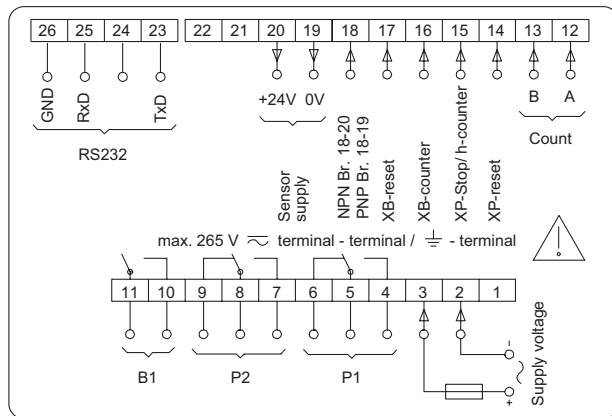
## 2 presets, printer interface

### Display LED, 8-digits, programmable

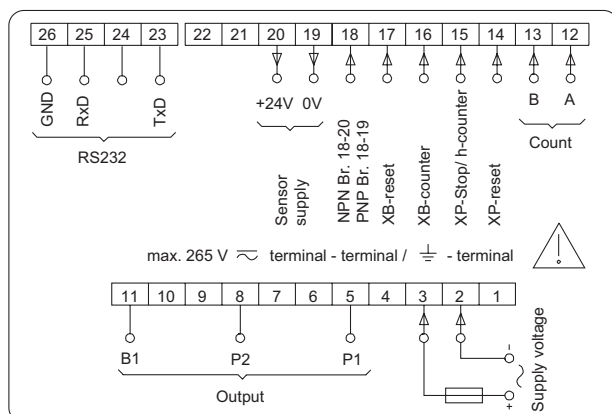
NE213

#### Connection diagram

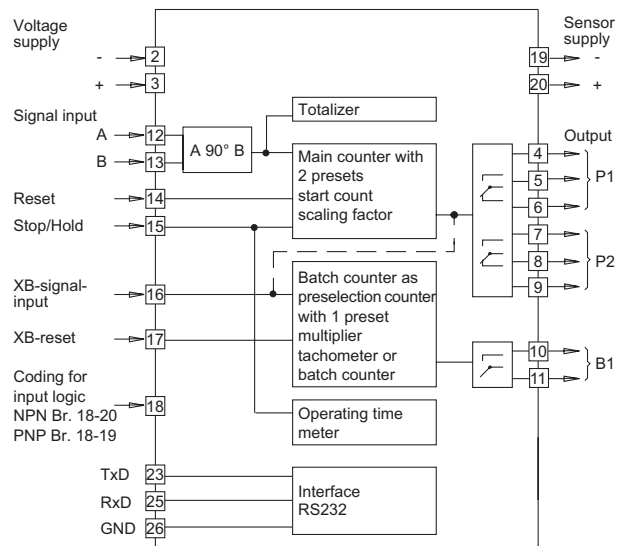
##### Relay outputs



##### Electronic outputs



#### Block circuit diagram



#### Trigger level

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

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### Part number

NE213. 3 AX09

#### Voltage supply

- 1 24 / 48 VAC
- 2 115 / 230 VAC
- 3 12...30 VDC

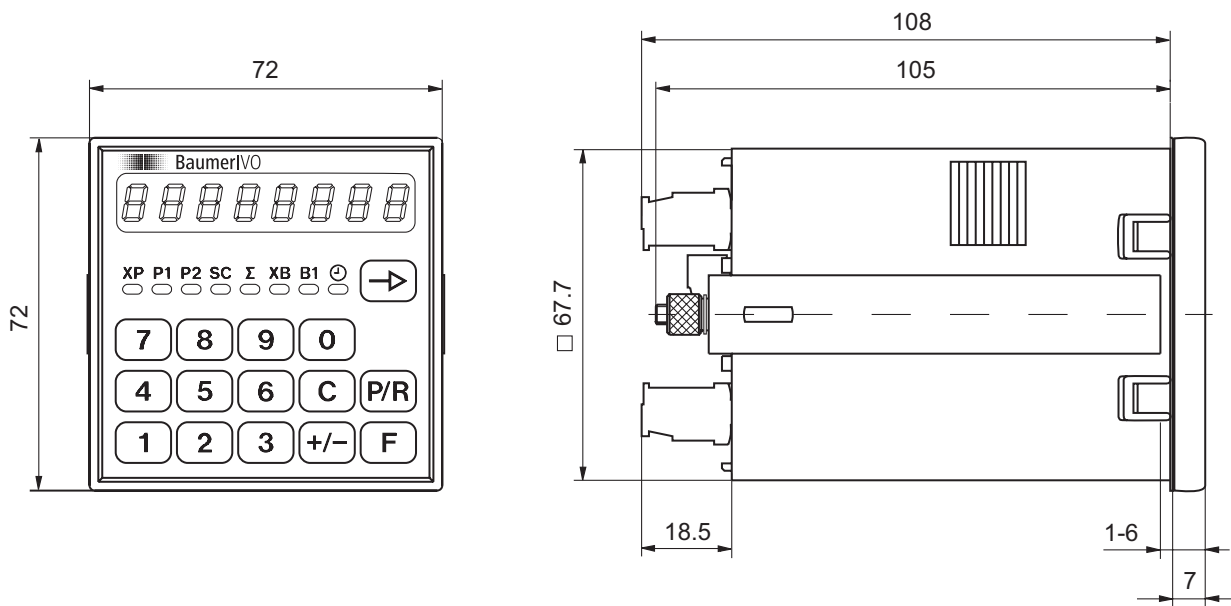
#### Outputs

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

#### Interface

- 3 RS232

### Dimensions



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