

Preset counters electronic

2 presets, totalizer and batch counter

Display LED, 8-digits, programmable

NE212



NE212 - LED Preset counter

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 Hour counter
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

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
- Connection: Incremental encoder or digital sensors
- Preset mode programmable
- Interface RS232, RS422 or RS485

Technical data - electrical ratings

Interfaces	RS232, RS422, RS485
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 ²
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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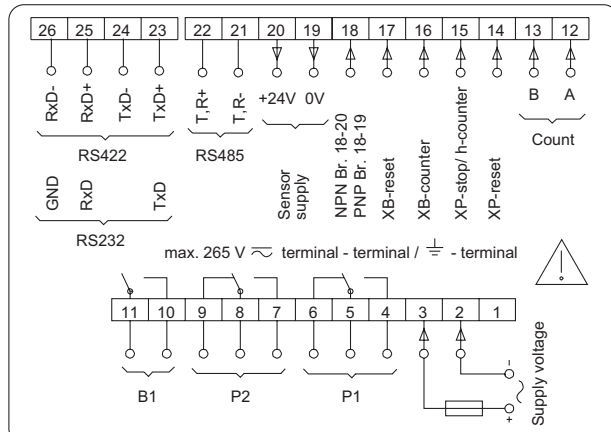
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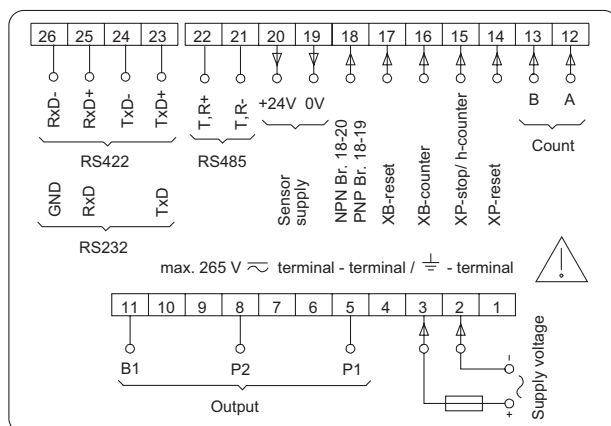
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Connection diagram

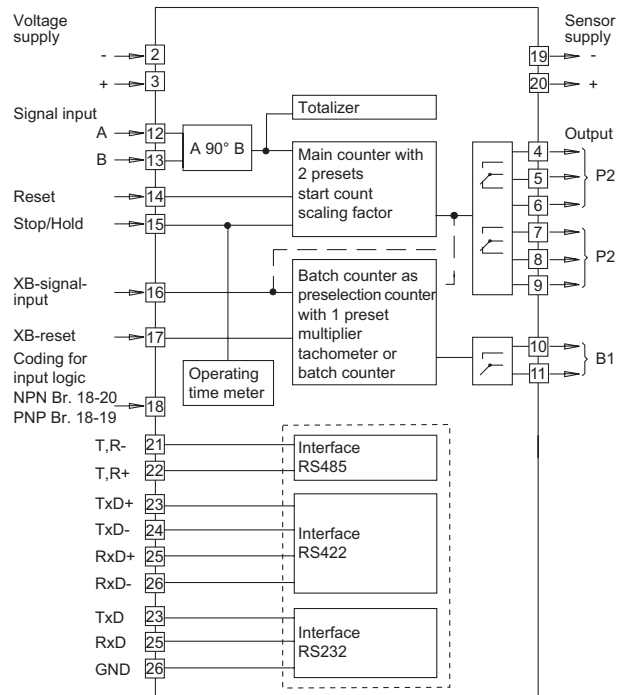
Relay outputs



Electronic outputs



Block circuit diagram



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 k Ω
Reset input	
Trigger current	5...8 mA
Switch-off current	<0.5 mA
Input resistance	3.3 k Ω
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 $\pm$ 20 %
Switching current max.	10 mA (AC) 50 mA (DC)
NPN-switching transistor	Open collector
Switching voltage max.	35 V
Switching current max.	50 mA

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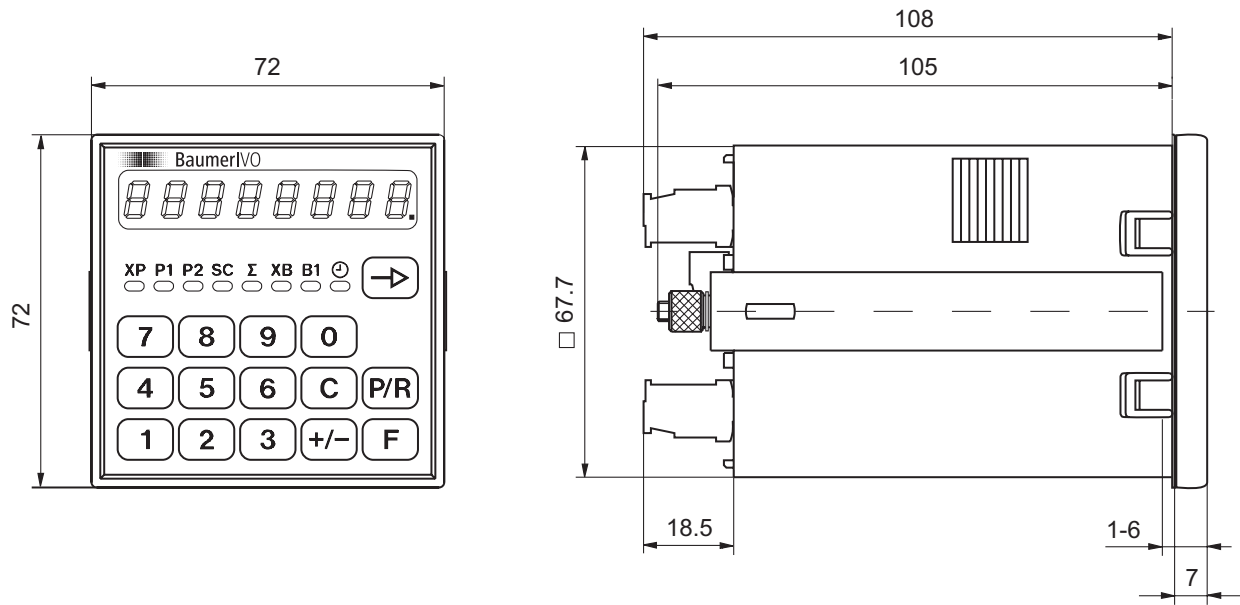
Part number

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|---|--|-----------------------------------|
| | | <u>Voltage supply</u> |
| 1 | | 22...50 VAC |
| 2 | | 85...265 VAC |
| 3 | | 24 VDC |
| | | <u>Outputs</u> |
| 1 | | Relay outputs, B1 normally closed |
| 2 | | Relay outputs, B1 normally open |
| 3 | | Electronic outputs PNP |
| 4 | | Electronic outputs NPN |
| | | <u>Interface</u> |
| 0 | | Without interface |
| 1 | | RS485 |
| 2 | | RS422 |
| 3 | | RS232 |

Dimensions



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