

Overview

- For universal counting inputs
- For tachometer and frequency
- Display range can be linearised
- Three control inputs, programmable
- Display stabilization filter
- LED display, 5-digits, 3 colors, programmable
- Min, Max functions
- With 2 relays and analog output 0...10V
- DIN housing 96 x 48 mm



Technical data

Technical data - electrical ratings

Voltage supply	85...265 VAC 100...300 VDC
Nominal frequency	50 / 60 Hz
Power consumption	8 W
Sensor supply	8.2 VDC @ 30 mA 20 VDC (not stabilized) @ 100 mA
Display	LED, 7-segment display (with 100 unit stickers for front)
Display color	3 colors - red, green, amber
Number of digits	5-digits + activity indicator
Digit height	14 mm
Display range	-99999 ... 99999 "OvE" as overflow display
Function	Totalizer Hour counter Tachometers Frequency display
Programmable parameters	Analog input Measuring range Display intensity Display color Display range can be linearised Decimal point Relay outputs with time delay or hysteresis
Limits	2
Calculating functions	Unidirectional 1 input A Unidirectional 1 input A + Stop count input B Differential inputs A - B Bidirectional 1 input A + direction input B (Up/Down) Bidirectional inputs A 90° B
Control inputs	3 programmable Optocoupler inputs logic NPN

Technical data - electrical ratings

Inputs	NPN PNP Namur Voltage 10...300 VAC Encoder 2x90° TTL
Control functions	13 programmable functions
Counting frequency	Tachometer 0.01 Hz ... 8 kHz (with counter) Tachometer 0.01 Hz ... 20 kHz (without counter) Pulse counter 9 kHz (with counter) Pulse counter 11 kHz (without counter)
Scaling factor	0.0001 ... 99999
Count mode	Pulse counter: Main counter XP + Totalizer Σ Operating hours counter: Main counter XP + Totalizer Σ Tachometer XP with direction of rotation + Totalizer Σ Frequency counter XP
Measuring range	Main counter from -99999 ... 99999 Operating hours counter 999 s 99/100 s - 99999 h Tachometer 0 ... 99999 Frequency counter 0 ... 99999 Totalizer -99999 ... 99999 Programmable decimal point
Data memory	>10 years in EEPROM
Reset	Button and electric
Analog output	0 ... 10 V
Outputs relay	2 change-over contact, floating
Standard DIN EN 61010-1	ISO 16750-2 (Electrical loads)
Emitted interference	EN 61000-6-3
Interference immunity	EN 61000-6-2
Approval	CE

Technical data - mechanical design

Operating temperature	-10...+60 °C
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The product features and technical data specified do not express or imply any warranty. Technical modifications subject to change.

Technical data

Technical data - mechanical design

Storage temperature	-25 ... +80 °C
Relative humidity	95 %
Connection	Spring-loaded terminal connector, detachable
Core cross-section	1 mm ² (Grid 5.08) 2.5 mm ² (Grid 7.62)
Protection EN 60529	IP 65 (face)
Operation / keypad	Membrane with softkeys
Housing type	Built-in housing

Technical data - mechanical design

Dimensions W x H x L	1/8 DIN 96 x 48 x 96 mm
Cutout dimensions	92 x 45 mm (+0.3)
Mounting depth	83 mm
Mounting type	Front panel installation by clip frame
Weight approx.	160 g
Material	Housing: Polycarbonate, UL 94V-0

Inputs and outputs

Inputs

Input	Frequency	Specification	Input resistance
Namur	Counter input max. 11 kHz	I _{on} <1 mA DC / I _{off} >3 mA DC	3.3 kΩ
NPN, PNP	Tachometer 0.01 Hz...20 kHz	„0“ <2.4 VDC / „1“ >2.6 VDC	
TTL/24 VDC (encoder)			
Contact input	Counter input max. 20 Hz	Control voltage 5 VDC	3.9 kΩ
Voltage (1 input)		Control voltage 10...300 VAC	

Relay outputs

Relay	Switching voltage max.	Switching current max.	Switching performance max.
2x changeover	250 VAC / 110 VDC	1 A	150 VA / 30 W
4x normally open	250 VAC / 50 VDC	0.2 A	30 VA / 6 W

Analog output

Output	Range	Resolution	Load resistance
Current	4...20 mA	13 bit	Max. 500 Ω
Voltage	0...10 V	13 bit	Min. 10 kΩ

Scaling configurable relating to value display, accuracy ±0.1 %, transformation 20/s

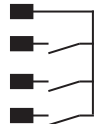
Terminal assignment

Voltage supply

Pin	Assignment VAC	Assignment VDC
1	Phase	-
2	Neutral	+

Control inputs

Pin	Assignment
1	Common
2	IN 1
3	IN 2
4	IN 3



Analog inputs

Pin	Assignment
1	n.c.
2	Sensor supply +20 V
3	Sensor supply +8.2 V
4	Sensor supply - / IN-
5	Track B +
6	Track A +
7	n.c.
8	Input 10...300 VAC

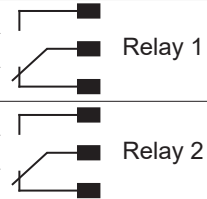
Analog output

Pin	Assignment
1	(-) 4...20 mA / 0...10 V
2	(+) 4...20 mA / 0...10 V

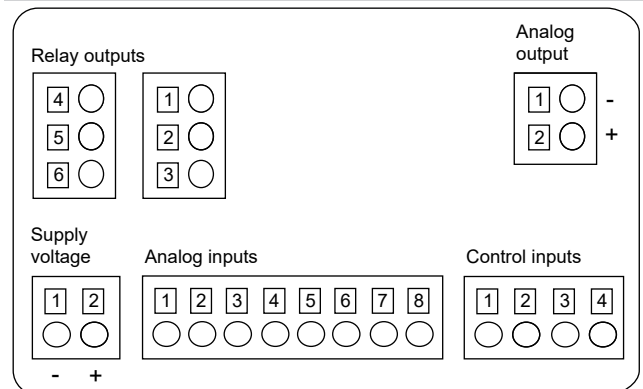
Terminal assignment

Relay outputs / two relays

Pin	Assignment
1	Normally open
2	Changeover
3	Normally closed
4	Normally open
5	Changeover
6	Normally closed



Connection diagram



NE1218.0B4AX01

For tachometer, frequency, totalizer and time/hour counter, with 2 limits

Article number: 11041918

Dimensions

