

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 4...20mA
- DIN housing 96 x 48 mm



Technical data

Technical data - electrical ratings

| | |
|-------------------------|---|
| Voltage supply | 10.5...70 VDC 21...53 VAC |
| 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 | 4 ... 20 mA |
| 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 |
|-----------------------|--------------|

NE1218.065AX01

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

Article number: 11041809

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

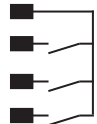
Terminal assignment

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 |

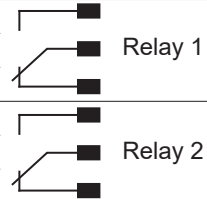
Analog output

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

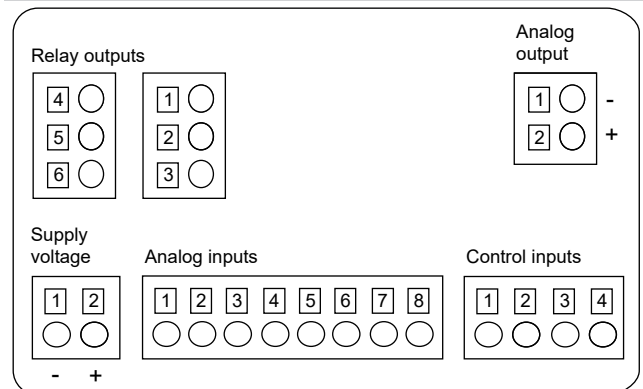
Terminal assignment

Relay outputs / two relays

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



Connection diagram



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Dimensions

