

Tachometer electronic

Ratio display, 2 limits, analogue output

Large 14 mm display LED, 6-digits, programmable

TA202



TA202 - LED-Tachometer

Technical data - electrical ratings

| | |
|----------------------------|--|
| Voltage supply | 115/230 VAC $\pm 10\%$ (50/60 Hz) 24/48 VAC $\pm 10\%$ (50/60 Hz) 24 VDC $\pm 10\%$ |
| Power consumption | 7 VA, 5 W |
| Sensor supply | 12...26 VDC / max. 100 mA |
| Display | LED, 7-segment display |
| Number of digits | 6-digits |
| Digit height | 14 mm |
| Unit displayed | 1/s, 1/min, 1/h programmable |
| Function | Tachometer, ratio display |
| Measuring principle | Period duration measurement |
| Calculating functions | Difference F1-F2 Ratio F1:F2 Stretch-/shrinking (F2-F1):F1 Flow Pulse rate measurement |
| Signal inputs | Comparator inputs |
| Input logic | NPN / PNP |
| Control inputs | 2 Inputs |
| Control functions | Start, Stop |
| Counting frequency | F1: 10 kHz / F2: 25 Hz, 40 kHz |
| Scaling factor | 0.0001...9999.99 |
| Data memory | >10 years in EEPROM |
| Outputs electronic | Optocoupler |
| Analogue output | 0(2)...10 V, 0(4)...20 mA Resolution 12 bit Temp. coeffic. typ. ± 20 ppm/ $^{\circ}$ C |
| Outputs relay | Potential-free change-over contact |
| Interfaces | RS232, RS422, RS485 |
| Standard DIN EN 61010-1 | Protection class II Overvoltage category II Pollution degree 2 |
| Emitted interference | DIN EN 61000-6-3 |

Features

- Tachometer for 2 rotation speeds/velocities
- Display 6-digits
- Connection: Two one-channel digital sensors or potential-free contact
- Two limits
- Ratio display, peak value memory
- Impulse evaluation programmable
- Input F1 with phase evaluation
- Interface RS232, RS422, RS485

Description

Two limits „P1“/„P2“ that can be assigned at will enable monitoring of production processes. Two tachos to capture and display rotation speed and velocity as “F1” and “F2”. “F3” allows recall and display of a programmed calculating function, for example ratio, difference, stretching/shrinking, flow, time elapsed with start and stop signal, impulse rate measurement, period or impulse duration.

Technical data - electrical ratings

| | |
|-------------------------|--|
| Interference immunity | DIN EN 61000-6-2 |
| Programmable parameters | Assignment F1, F2 or F3 Calculating functions 2 limits, analogue output Slave pointer |
| Approval | UL approval / E63076 |

Technical data - mechanical design

| | |
|-------------------------|--|
| Ambient temperature | 0...+50 $^{\circ}$ C |
| Storing temperature | -20...+70 $^{\circ}$ C |
| Relative humidity | 80 % non-condensing |
| Connection | Plug-in screw terminal connector |
| Core cross-section | 1.5 mm ² |
| Protection DIN EN 60529 | IP 65 (face with seal) |
| Operation / keypad | Membrane with softkeys |
| Housing type | Built-in housing |
| Dimensions W x H x L | 96 x 48 x 124 mm |
| Cutout dimensions | 92 x 44 mm (-0.6) |
| Installation depth | 124 mm |
| Mounting | Front panel installation by clip frame |
| Weight approx. | 350 g (AC), 250 g (DC) |
| Material | Housing: Makrolon 6485 (PC) |

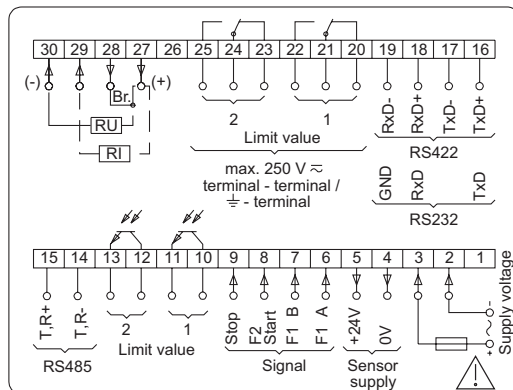
Tachometer electronic

Ratio display, 2 limits, analogue output

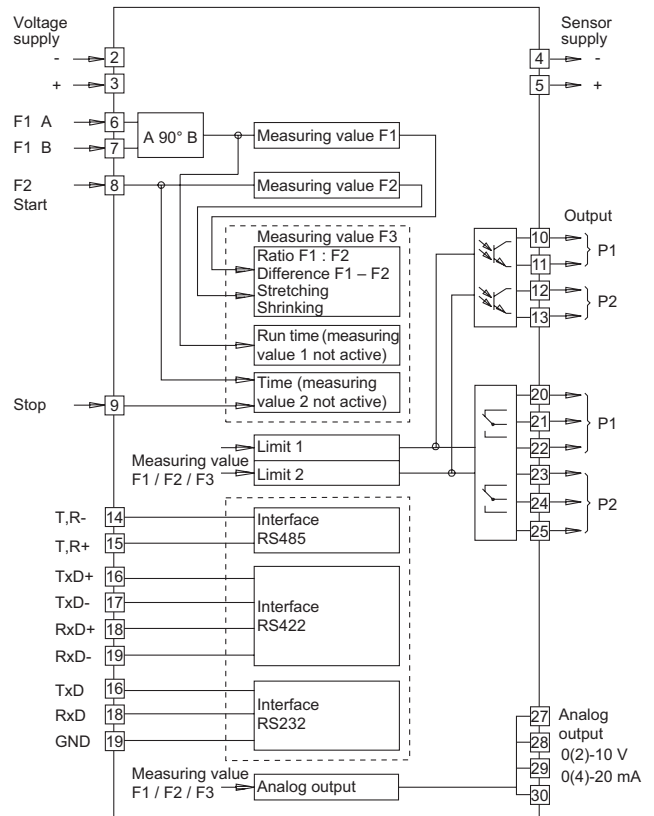
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Connection diagram



Block circuit diagram



Trigger level

| Comparator inputs | Input circuit |
|-------------------|------------------|
| Inputs | PNP- / NPN-logic |
| Input level | Programmable |
| Input level Low | 0...2 VDC |
| Input level High | 3...40 VDC |
| Input resistance | 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 |
|------------------------|---------------------------------|
| | Optocoupler short-circuit proof |
| Switching voltage max. | 40 V |
| Switching current max. | 15 mA |
| Residual voltage | <1 V |

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Part number

TA202. AXA1

Voltage supply

- 1 24 / 48 VAC
- 2 115 / 230 VAC
- 3 24 VDC

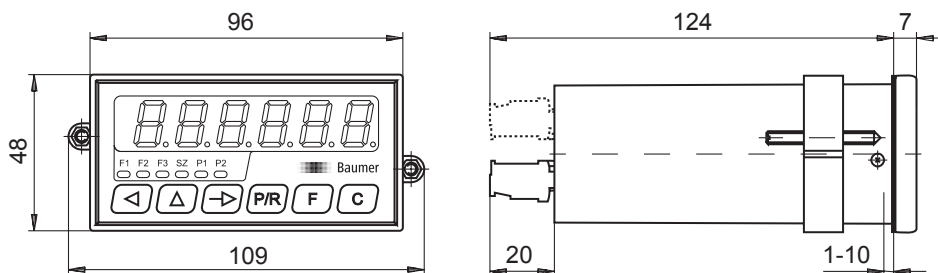
Outputs

- 0 Optocoupler outputs
- 1 Relay and optocoupler outputs
- 2 Relay and optocoupler outputs / analogue output

Interface

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

Dimensions



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