

Tachometers

RPM, speed, frequency display with 2 limits

TA1220



TA1220 - tachometer

Technical data - electrical ratings

Voltage supply	21...53 VAC (50/60 Hz) or 10.5...70 VDC 85...265 VAC (50/60 Hz) or 100...300 VDC
Power consumption	5 W
Sensor supply	5 V, 8 V or 12 V programmable / 60 mA
Display	LED, 7-segment display (with 60 unit stickers for front)
Number of digits	4-digits
Digit height	10 mm
Display range	9999 ("OuE" to signal overflow)
Display refresh	0.1...9.9 s (programmable)
Function	Digital display of frequency or speed
Programmable parameters	Measuring units 1/h, 1/min, 1/s Sensor logic Decimal point Sensor supply Impulse evaluation Relay outputs with time delay or hysteresis
Measuring principle	Period duration measurement
Signal inputs	Programmable as NPN, PNP, Namur, TTL, 10...600 VAC or contact
Counting frequency	0.01 Hz...7 kHz (20 Hz if contact input)
Scaling factor	1...9999
Data memory	>10 years in EEPROM
Outputs relay	Normally open or closed, programmable
Interface	RS485
Standard DIN EN 61010-1	Protection class II Overvoltage category II Pollution degree 2

Features

- Reading programmable as 1/s, 1/min, 1/h
- Input: NPN, PNP, Namur, TTL, 10...600 VAC
- Two limits SET 1 and SET 2
- Sensor supply 5 V, 8 V, 12 V
- Frequency 0.01 Hz...7 kHz
- Period duration measurement
- LED display, 4-digits
- DIN housing 48 x 24 mm
- Interface RS485

Technical data - electrical ratings

Emitted interference	DIN EN 61000-6-3
Interference immunity	DIN EN 61000-6-2

Technical data - mechanical design

Ambient temperature	-10...+60 °C
Storage temperature	-25...+85 °C
Relative humidity	95 % non-condensing
Connection	Spring-loaded terminal connector, detachable
Core cross-section	1 mm ² (Grid 2.54) 2.5 mm ² (Grid 7.62)
Protection DIN EN 60529	IP 65 (face)
Operation / keypad	3 softkeys below bezel
Housing type	Built-in housing
Dimensions W x H x L	48 x 24 x 136 mm
Cutout dimensions	45 x 22.2 mm (+0.3)
Mounting depth	125 mm
Mounting type	Front panel installation by clip frame
Weight approx.	100 g
Material	Housing: Polycarbonate, UL 94V-0

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Part number

TA1220. 1 AX01

- Voltage supply**
- 4 85...265 VAC and 100...300 VDC
 - 5 21...53 VAC and 10.5...70 VDC
- Interface**
- 0 Without interface
 - 1 RS485

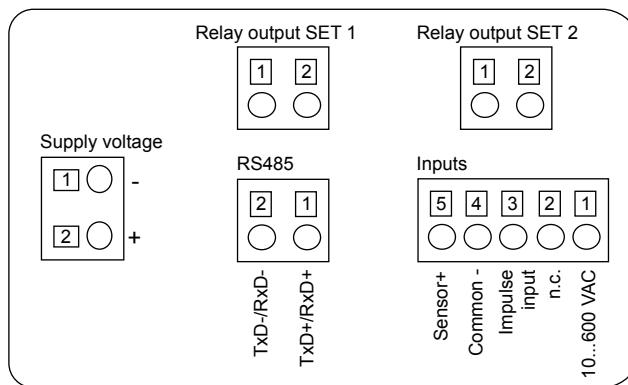
Inputs and outputs

Signal input	Specification
PNP	High level >2.6 V Low level <2.4 V Input resistance 1.5 kΩ
NPN	High level >2.6 V Low level <2.4 V Input resistance 3.9 kΩ
NAMUR	I _{on} <1 mA, I _{off} >3 mA Input resistance 1.5 kΩ
Magnetic sensor	V _{in} >30 mV _{eff} at 60 Hz V _{in} >300 mV _{eff} at 6 kHz
Contact	Input resistance 3.9 kΩ
Voltage 10...600 VAC	Measuring the frequency of the voltage

Relay outputs (SET 1, SET 2)

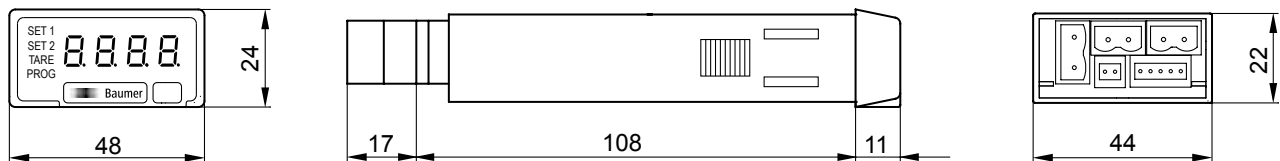
Switching voltage max.	250 VAC / 110 VDC
Switching current max.	1 A
Switching performance max.	150 VA / 30 W

Connection diagram



Dimensions

TA1220 - without clip frame



TA1220 - clip frame mounting

