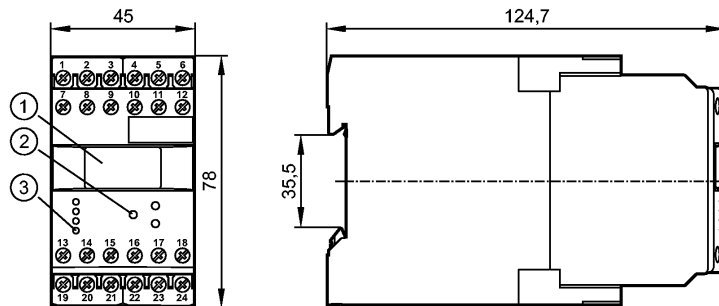




- 1: OLED display
2: Programming buttons
3: LEDs



Made in Germany

Product characteristics

MONITOR

FA-1

Housing for DIN rail mounting

programmable

Analogue output

0/4...20 mA; 0...10 V

proportional / antiproportional

averaging

Teach function

integrated pulse monitoring

Key function

1 relay output

1 transistor output

Application

Application

Conversion of pulse sequences into analogue standard signals

Electrical data

Nominal voltage [V]

110...240 AC (50...60 Hz) / 27 DC (typ. 24 DC)

Voltage tolerance [%]

-20...+10

Power consumption [VA]

5

Inputs

Inputs

pnp/npn; NAMUR (24 V)

auxiliary supply: typ. 24 V DC / 150 mA; short-circuit protected

threshold pnp: > 12 V on; < 5 V off

threshold npn: > 15 V off; < 8 V on

input frequency (max): 15 kHz (corresponds to min. pulse length / space 33 µs)

Derating (auxiliary voltage) [mA/K]

1.5 (> 40 °C)

Outputs

Relay

Relay outputs

1 changeover contact, floating

switching capacity: 6 A (250 V AC); B300, R300

Transistor

Transistor outputs

1 x pnp; external supply

switching voltage/current: 24 V DC / max. 15 mA; short-circuit protected

analogue

Analogue outputs

voltage: 0...10 V (max. 10.25 V), load min. 10 kΩ

current: 0/4...20 mA (max. 20.5 mA), load max. 500 Ω

Characteristics	transmission accuracy: ± 0.2 (of the analogue final value) resolution (internal): 12 bits temperature drift: $< \pm 100$ ppm/K
Measuring / setting range	
Setting range [pulses/min.]	0...600000 (0.0...10000 Hz)
Environment	
Ambient temperature [°C]	-40...60
Storage temperature [°C]	-40...85
Max. relative air humidity [%]	80 (31 °C), linear abnehmend bis 50 % (40 °C)
Protection housing / terminals	IP 50 / IP 20
Tests / approvals	
EMC	EN 61010 2011 EMC 89/336/EEC EN 61000-6-2 2005 EN 61000-6-4 2007
Mechanical data	
Housing materials	plastics
Displays / operating elements	
Input pulses LED	yellow
Output status indication LED	green (lights when the relay is energised / the transistor is closed)
Display	OLED display 128 x 64 dots luminous
Electrical connection	
Connection	dual-chamber terminals 2 x 2.5 mm ² (2 x AWG 14)
Wiring 1: 24 V DC Supply voltage (L-) 2: 24 V DC Supply voltage (L+) 3: supply transistor outputs (L+) 4: sensor signal pnp 5: DC Sensor supply (L+) 6: DC Sensor supply (L-) 7: AC Supply voltage (L) 8: AC Supply voltage (N) 9: n.c. 10: sensor signal npn 11: Reset pnp 12: transistor output pnp 13: Relay (common) 14: Relay (normally open) 15: Relay (normally closed) 16: n.c. 17: n.c. 18: n.c. 19: n.c. 20: n.c. 21: n.c. 22: analogue output (mA) 23: analogue output (GND) 24: analogue output (V)	
Remarks	
Remarks	overvoltage category II; degree of soiling 2
Pack quantity [piece]	1