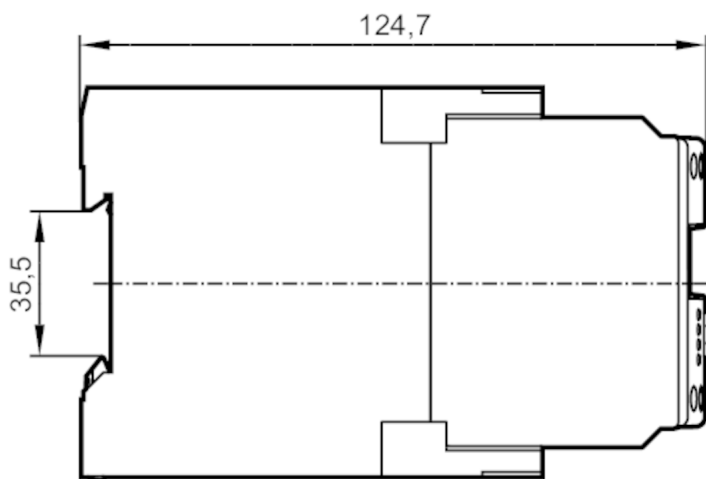
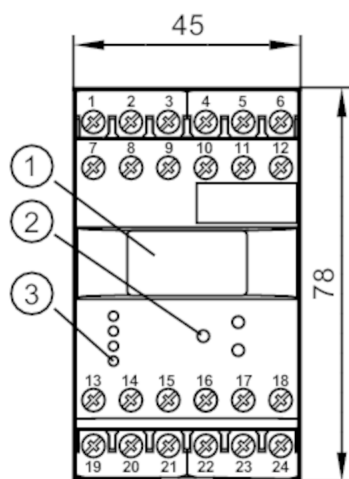


Evaluation unit for speed monitoring

MONITOR/FR-1 /230VAC

phase-out article



- 1 OLED display
- 2 programming buttons
- 3 LEDs



Product characteristics

Housing	housing for DIN rail mounting
Dimensions [mm]	78 x 45 x 124.7

Application

Application	pulse evaluation system with microprocessor for frequency; rotational speed; speed; pulses and machine cycles
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Electrical data

Nominal voltage AC [V]	< 230
Nominal voltage DC [V]	24
Nominal voltage tolerance [%]	10
Nominal voltage tolerance 2 [%]	10
Nominal frequency AC [Hz]	50...60
Power consumption [W]	3
Auxiliary energy for sensors DC [V]	19.6...27.7; (SELV, ≤ 15 mA)

Inputs / outputs

Number of inputs and outputs	Number of analogue outputs: 1; Number of relay outputs: 2
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Outputs

Number of relay outputs	2
Contact rating	4 A (250 V AC)
Number of analogue outputs	1
Analogue current output [mA]	4...20
Max. load [Ω]	500

Measuring/setting range

Setting range Hz [Hz]	0.1...1000
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Evaluation unit for speed monitoring

MONITOR/FR-1 /230VAC

Setting range	[Imp/min]	1...60000
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Operating conditions

Ambient temperature	[°C]	-40...60
Storage temperature	[°C]	-40...85
Max. relative air humidity	[%]	80; (40 °C: 50 %)
Protection		IP 50
Protection rating terminals		IP 20

Tests / approvals

EMC	EN 61010	2011
	EMV 89/336/EWG	
	EN 61000-6-2	2005
	EN 61000-6-4	2007

Mechanical data

Weight	[g]	380
Housing		housing for DIN rail mounting
Dimensions	[mm]	78 x 45 x 124.7
Materials		plastics

Displays / operating elements

Display		OLED display, 128 x 64 pixels luminous
	switching status	LED, green

Remarks

Remarks	The unit complies with overvoltage category II; pollution degree 2
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Electrical connection

dual-chamber terminals: 2 x ...2.5 mm²

1	DC supply voltage (L-)
2	DC supply voltage (L+)
3	current 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	not used
10	sensor signal npn
11	not used
12	not used
13	relay 1 common
14	relay 1 normally open
15	relay 1 normally closed
16	transistor output 1 pnp
17	reset 1 pnp
18	reset 2 pnp
19	relay 2 common
20	relay 2 normally open
21	relay 2 normally closed
22	analogue output (+)
23	analogue output (-)
24	transistor output 2 pnp