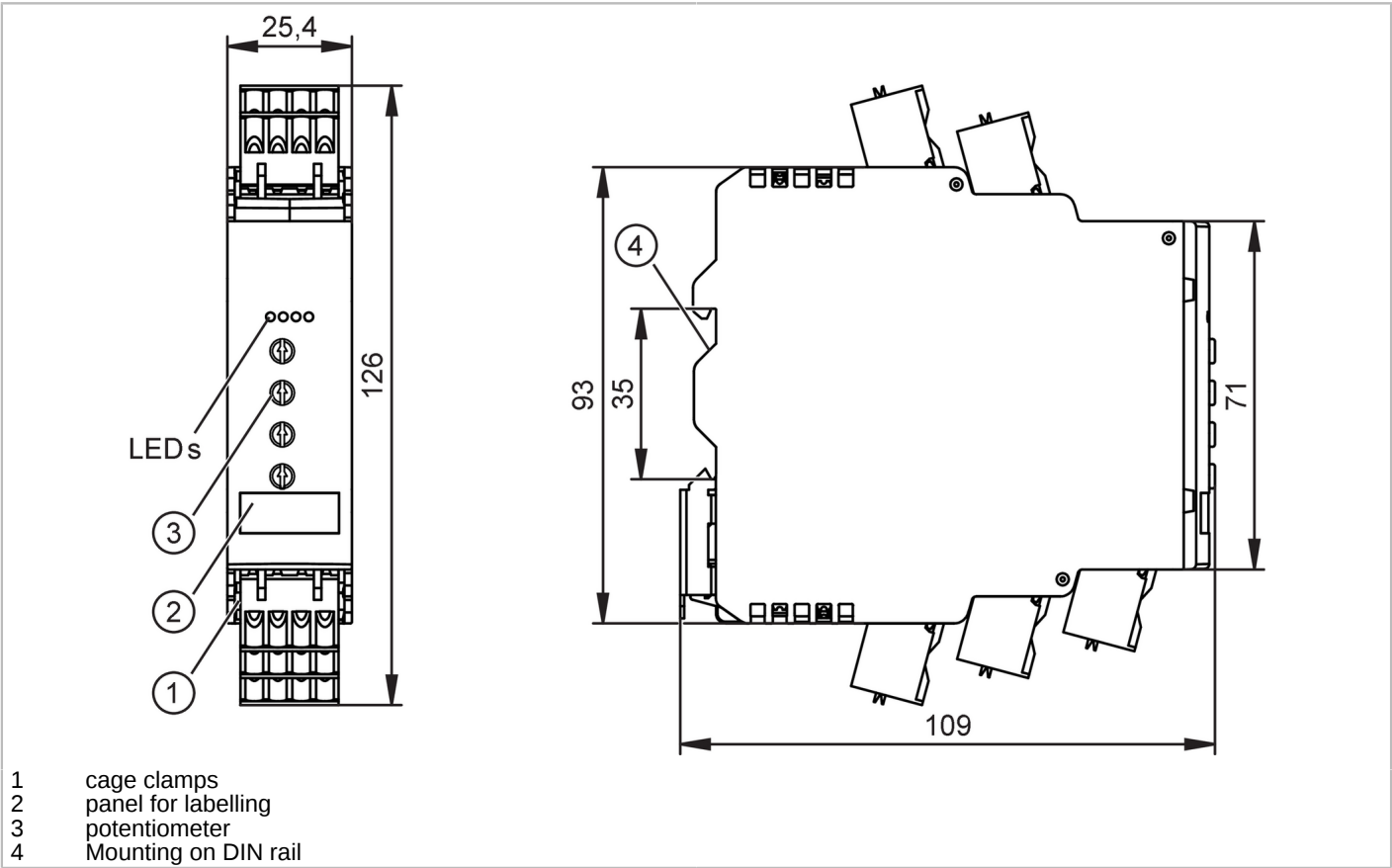




Evaluation unit for speed monitoring

D200/FR1A 110-240VAC 24VDC



Product characteristics		
Housing		rectangular
Dimensions	[mm]	93 x 25.4 x 109
Application		
Design		housing for DIN rail mounting
Application		universal evaluation of pulse sequences with regard to overspeed and underspeed; Rotational speed monitoring
Electrical data		
Operating voltage	[V]	110...240 AC / 27 DC; (tolerance: -20 % / +10 % ; DC operation: SELV)
Nominal voltage AC	[V]	110...240
Nominal voltage DC	[V]	27
Nominal frequency AC	[Hz]	50...60
Current consumption	[mA]	AC operation: max. 8 A (including maximum AC supply for additional devices)
Max. power consumption DC	[W]	4
Overvoltage category		II
Auxiliary energy for sensors DC	[V]	18.5...30; (SELV, Short-circuit proof , ≤ 100 mA)
Inputs / outputs		
Number of inputs and outputs		Number of digital inputs: 2; Number of digital outputs: 1; Number of relay outputs: 1



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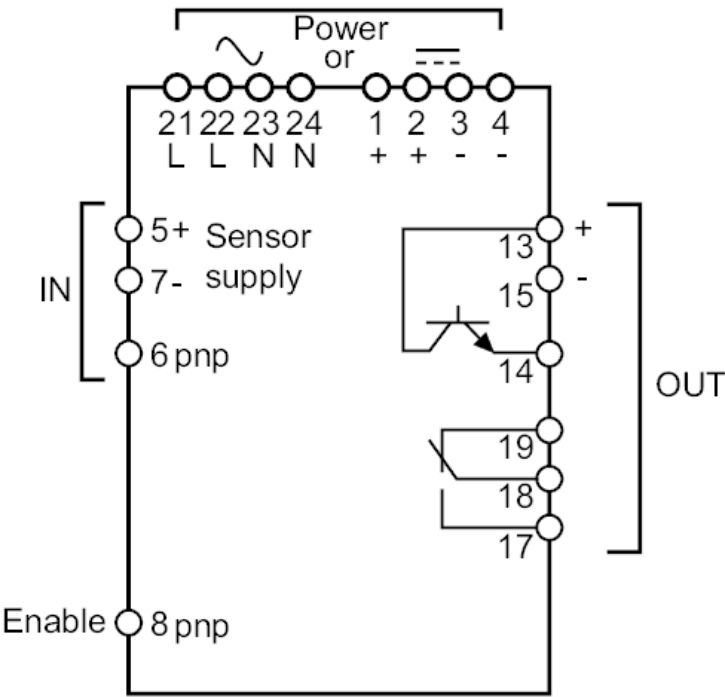
Inputs		
Number of digital inputs		2; (1 x Frequency ; 1 x Enable signal)
Input circuit of digital inputs		PNP; (type 2 according to IEC 61131-2)
Input current High	[mA]	6...10
Input current low	[mA]	0...5
Switching level high	[V]	11...30
Switching level low	[V]	0...5
Outputs		
Number of digital outputs		1
Number of relay outputs		1
Digital output		
Circuit		PNP
Current rating outputs	[A]	0.1
Short-circuit proof		yes
Electrically separated		no
Relay output		
Minimum load current	[mA]	10; (> 12 V)
Number of relay outputs		1; (changeover contact)
Contact rating		6 A; (max. 240 V AC / 30 V DC see diagram:: Contact rating ; B300: 6000 cycles)
Switching frequency AC	[Hz]	< 0.1
Switching frequency DC	[Hz]	< 0.1
Short-circuit proof		no
Electrically separated		yes
Measuring/setting range		
Setting range Hz	[Hz]	0.1...1000
Accuracy / deviations		
Hysteresis	[% of Sp]	1...100
Reaction times		
Start-up delay	[s]	0.1...15
Software / programming		
Parameter setting options		setting of the switching function, switch point, hysteresis and start-up delay via potentiometer
Operating conditions		
Ambient temperature	[°C]	-25...60
Note on ambient temperature		Contact rating Relay output: B300 max. 50 °C
Storage temperature	[°C]	-25...70
Max. relative air humidity	[%]	80; (40 °C: 50 % non condensing)
Max. height above sea level	[m]	2000
Protection		IP 20; (when mounted)
Protection rating terminals		IP 20
Pollution degree		2



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Tests / approvals		
EMC	EN 61000-6-2	
	EN 61000-6-3	
Electrical safety	EN 61010-1	
	EN 61010-2-201	
MTTF	[years]	190
Mechanical data		
Weight	[g]	242
Housing		rectangular
Type of mounting		Mounting on DIN rail; (TH35 (EN 60715))
Dimensions	[mm]	93 x 25.4 x 109
Material		housing: PC-GF20
Displays / operating elements		
Display	voltage supply	1 x LED, green
	input signal	1 x LED, yellow
	Output	1 x LED, green
	Enable signal	1 x LED, yellow
Accessories		
Items supplied		cage clamps: 5
Remarks		
Remarks		For information about installation and operation please see the operating instructions.
Pack quantity		1 pcs.
Electrical connection		
cage clamps: ...2.5 mm²		
Connection		



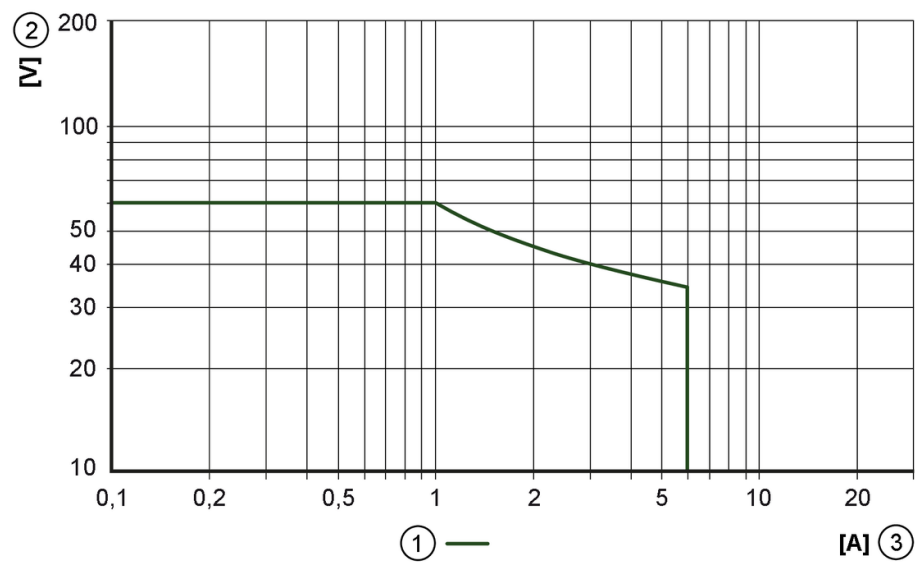


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Diagrams and graphs

Contact rating



- 1 resistive load
- 2 Voltage [DC]
- 3 Current [DC]