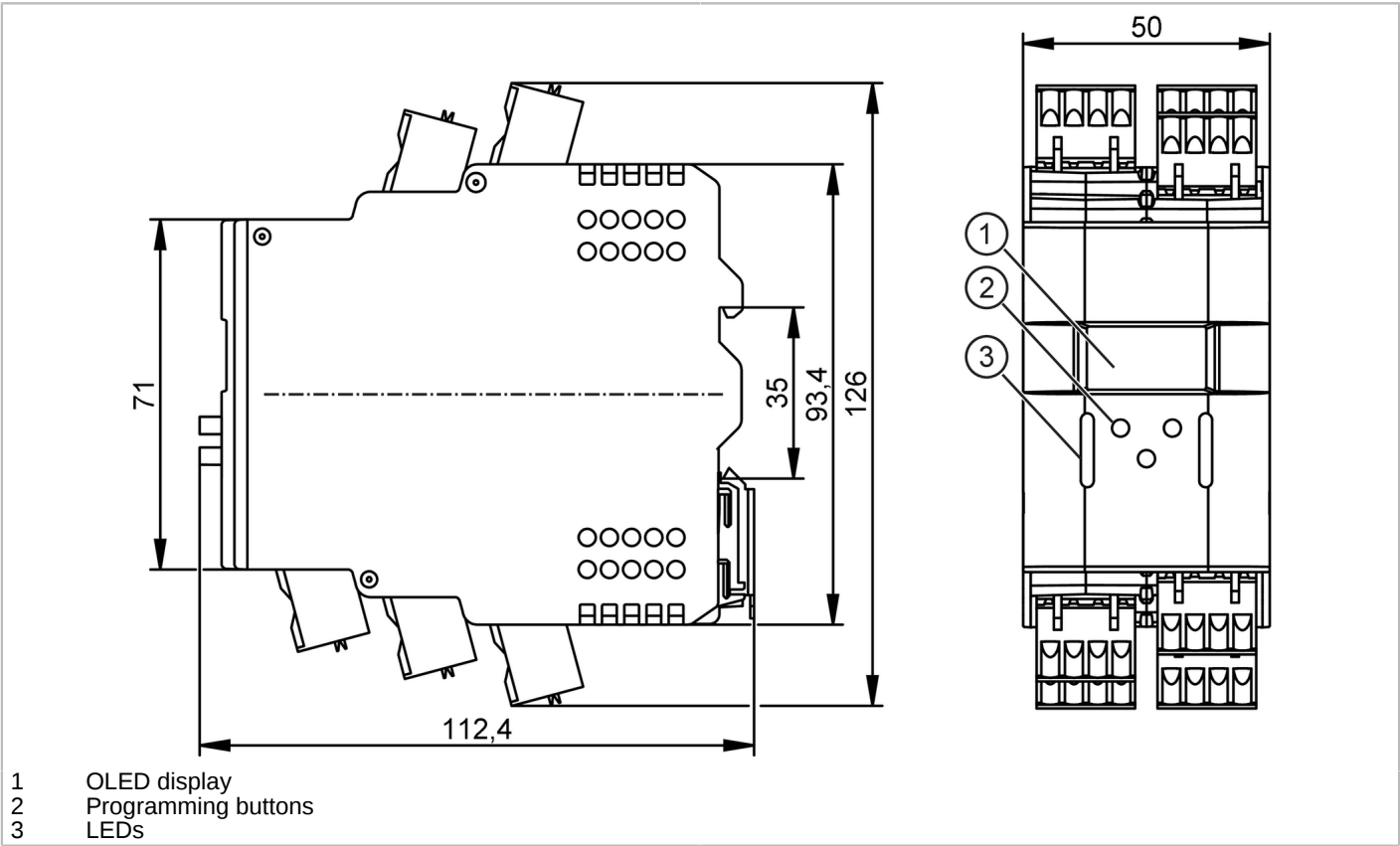




Evaluation unit for monitoring and converting frequency signals

MONITOR/SPEED/IOL/AC/DC



Product characteristics		
Communication interface		IO-Link
Housing		rectangular
Dimensions	[mm]	126 x 50 x 112.4
Application		
Design		housing for DIN rail mounting
Application		pulse evaluation system for frequency, rotational speed, speed, cycles and machine cycles
Electrical data		
Operating voltage	[V]	110...240 AC / 18...30 DC; (tolerance AC operation: -20 % / +10 % ; DC operation: to SELV/PELV)
Nominal voltage AC	[V]	110...240
Nominal voltage DC	[V]	24
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]	9
Overvoltage category		II
Auxiliary energy for sensors DC	[V]	16.5...27.7; (Short-circuit proof ; ≤ 200 mA)
Inputs / outputs		
Number of inputs and outputs		Number of digital inputs: 3; Number of digital outputs: 2; Number of relay outputs: 2



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Inputs		
Number of digital inputs	3; (1 x Frequency 1 x Reset 1 x Restart)	
Input circuit of digital inputs	PNP; (type 3 (IEC 61131-2))	
Input current High [mA]	2...4	
Input current low [mA]	0...1.5	
Switching level high [V]	11...28	
Switching level low [V]	0...5	
Outputs		
Number of digital outputs	2	
Number of relay outputs	2	
Digital output		
Circuit	PNP	
Max. current load per output [mA]	10	
Short-circuit proof	yes	
Electrically separated	no	
Relay output		
Minimum load current [mA]	10; (> 12 V)	
Number of relay outputs	2; (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]	0.01...10000	
Measuring range [U/min]	0...600000	
Measuring range [Hz]	0...10000	
Accuracy / deviations		
Frequency input		
Accuracy	± 0.2 Hz; (0.1...200 Hz); ± 0.1 % (of the measured value 200...10000 Hz))	
Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9	
Profiles	Smart Sensor - SSP 4.2.1	Measuring and Switching Sensor, high resolution, 1 channel
	Common - I&D	Identification and Diagnosis
	Extension	Sensor control
	Extension	Quantity detection, switches when value exceeds the setpoint
	Function	Locator
	Function	ProductURI
Required master port class	A	

DD3003



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Min. process cycle time	[ms]	4.3
Supported DeviceIDs	Type of operation	DeviceID
	default	1833
Operating conditions		
Ambient temperature	[°C]	-40...60
Note on ambient temperature		2000...3000 m: max. 58 °C
		3000...4000 m: max. 56 °C
		Contact rating Relay output: B300 max. 50 °C
Storage temperature	[°C]	-40...85
Max. relative air humidity	[%]	80; (31 °C; linearly decreasing to 50 % (40 °C))
Max. height above sea level	[m]	4000
Protection		IP 20; (when mounted)
Protection rating terminals		IP 20
Pollution degree		2
Tests / approvals		
EMC	EN 61000-6-2	
	EN 61000-6-8	
Electrical safety	EN 61010-1	
	EN 61010-2-201	
Mechanical data		
Weight	[g]	321.5
Housing		rectangular
Type of mounting		Mounting on DIN rail; (TH35 (EN 60715))
Dimensions	[mm]	126 x 50 x 112.4
Material		housing: plastics
Displays / operating elements		
Display		1 x OLED display, 128 x 64 pixels luminous
	Switching status	2 x LED, yellow
	Power	1 x LED, red/green
Accessories		
Items supplied		cage clamps: 7
Remarks		
Remarks		For information about installation and operation please see the operating instructions.
Pack quantity		1 pcs.



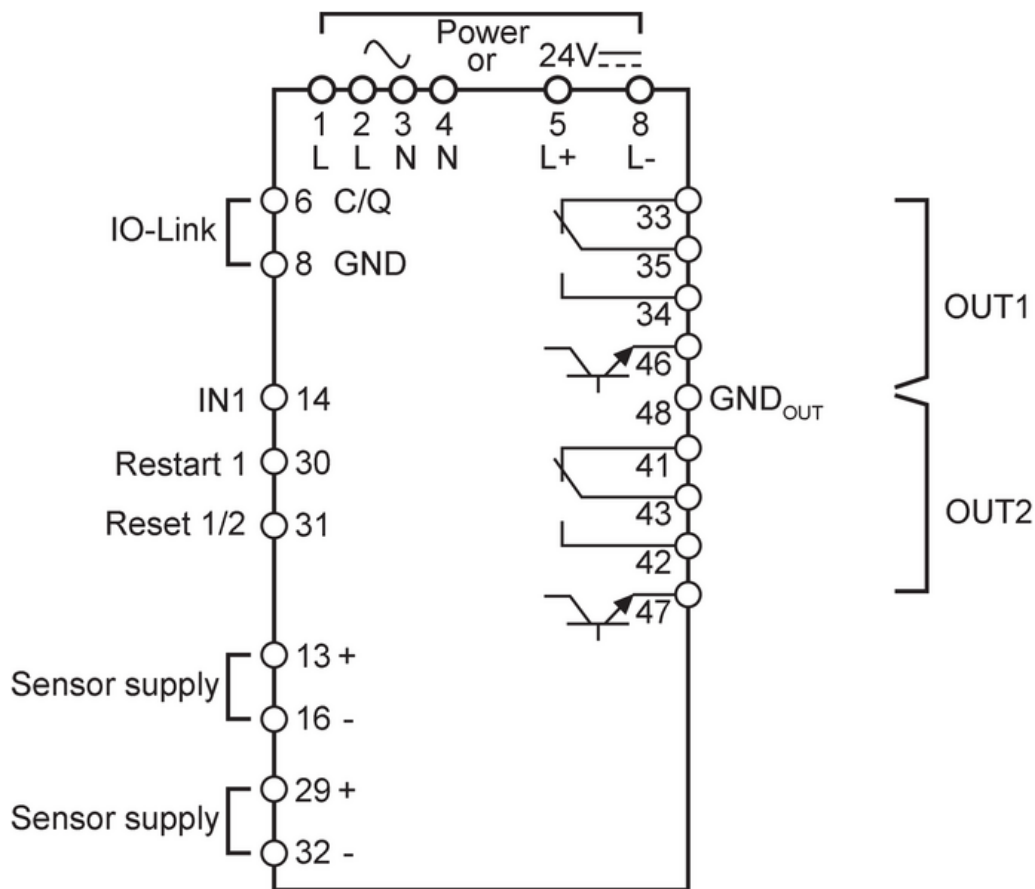
Evaluation unit for monitoring and converting frequency signals

MONITOR/SPEED/IOL/AC/DC

Electrical connection

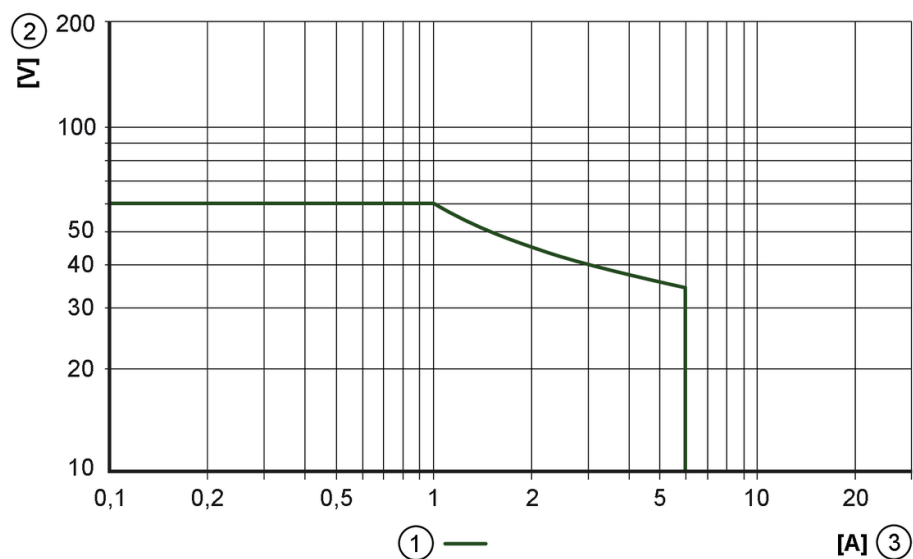
cage clamps: ...2.5 mm²

Connection



Diagrams and graphs

Contact rating



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