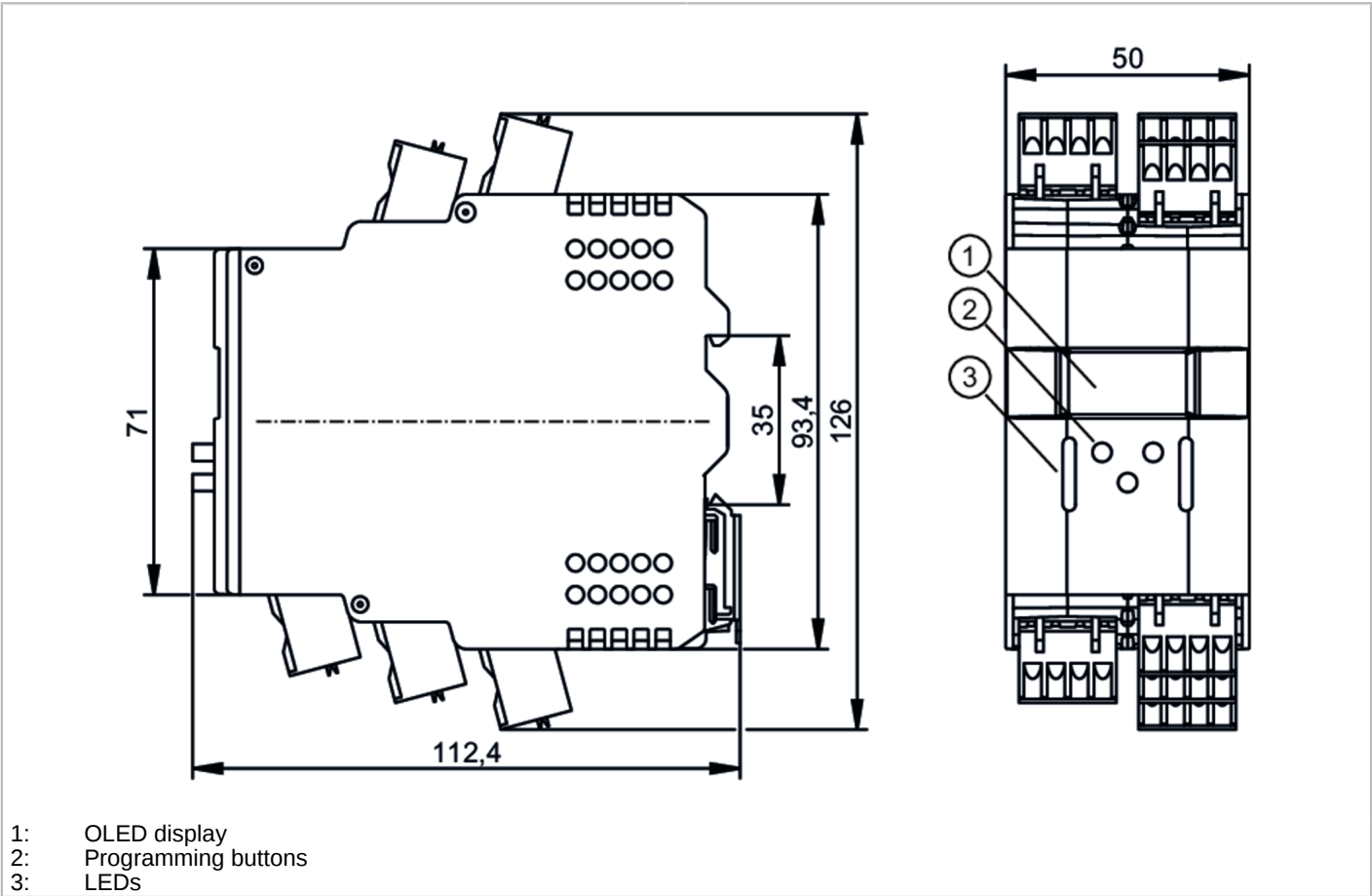




Evaluation unit for monitoring and converting frequency signals

MONITOR/FREQUENCY/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		Conversion of pulse sequences into analog standard signals; 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 %)
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; DC operation: ≤ 200 mA; AC operation: ≤ 150 mA)



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Inputs / outputs		
Number of inputs and outputs		Number of digital inputs: 3; Number of digital outputs: 2; Number of analog outputs: 1; Number of relay outputs: 2
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
Number of analog outputs		1
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]	< 2
Switching frequency DC	[Hz]	< 2
Short-circuit proof		no
Electrically separated		yes
Analog output		
Number of analog outputs		1; (configurable)
Short-circuit proof		yes
Electrically separated		no
Analog current output		
Analog current output		[mA] 4...20; (max. 20,5 mA)
Max. load		[Ω] 600; (300 Ω: Operating voltage < 24 V DC)
Analog voltage output		
Analog voltage output		[V] 0...10
Min. load resistance		[Ω] 2000
Measuring/setting range		
Setting range Hz		[Hz] 0.1...10000
Measuring range		[U/min] 6...900000
Measuring range		[Hz] 0.1...15000



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Accuracy / deviations		
Frequency input		
Accuracy	± 0.2 Hz; (0.1...200 Hz); ± 0.1 % (of the measured value 200...10000 Hz))	
Analog output		
Accuracy	± 0.6; (% of the final value)	
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	
Min. process cycle time	[ms]	4.3
Supported DeviceIDs	Type of operation	DeviceID
	default	1584
Operating conditions		
Ambient temperature	[°C]	-40...60
Note on ambient temperature	110V AC operation: -25...60 °C	
	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	
Degree of soiling	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]	336.1
Housing	rectangular	
Type of mounting	Mounting on DIN rail; (TH35 (EN 60715))	
Dimensions	[mm]	126 x 50 x 112.4
Material	housing: plastics	



Evaluation unit for monitoring and converting frequency signals

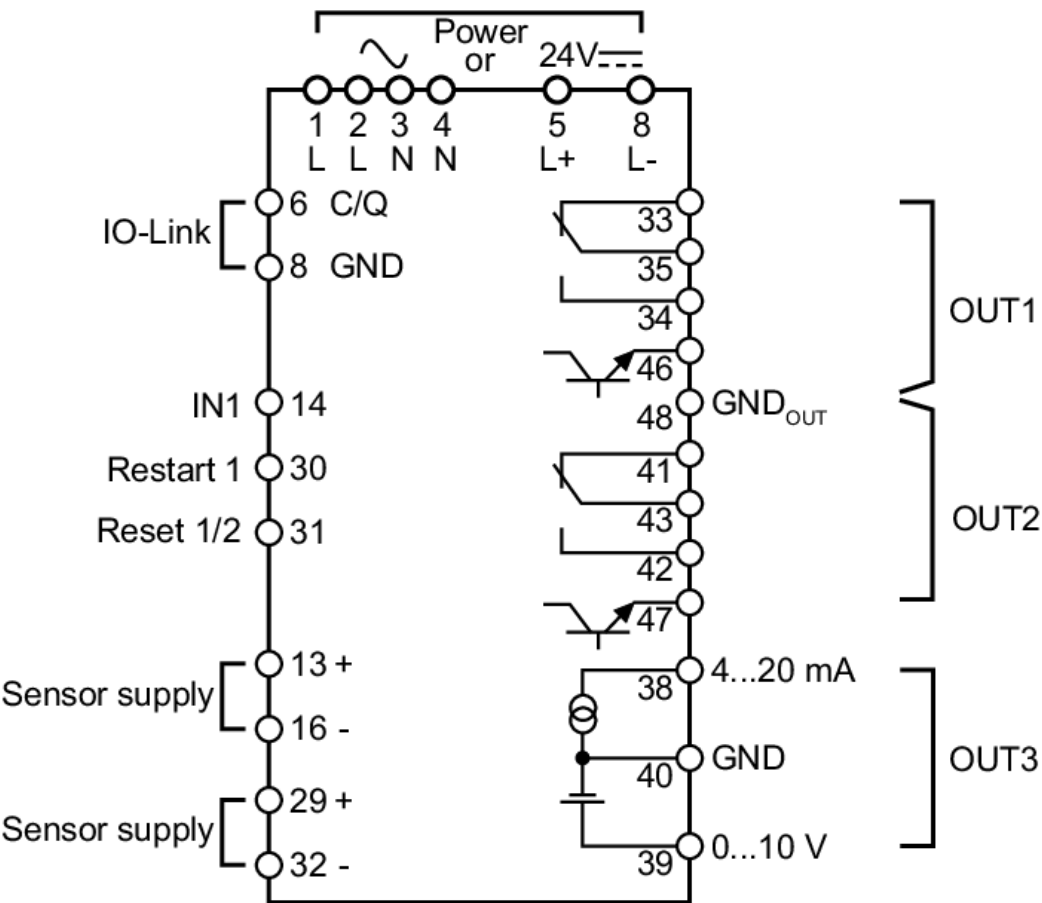
MONITOR/FREQUENCY/IOL/AC/DC

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: 8

Remarks	
Remarks	For information about installation and operation please see the operating instructions.
Pack quantity	1 pcs.

Electrical connection	
cage clamps: ...2.5 mm ²	
Connection	



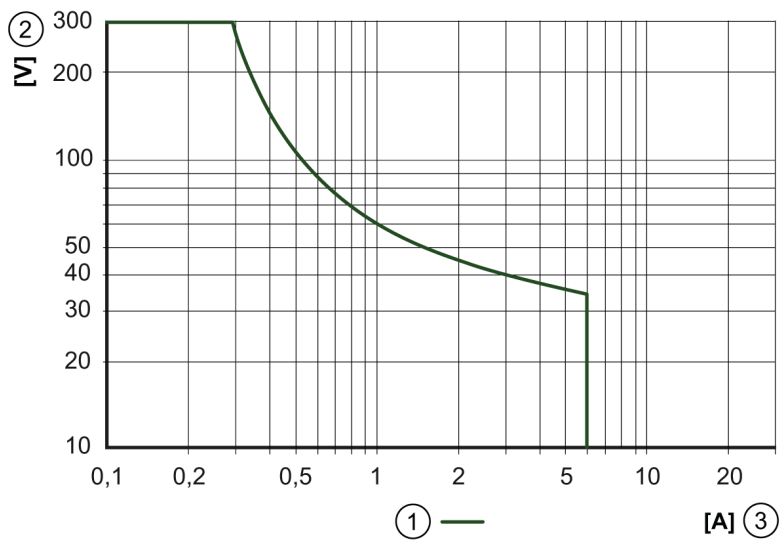


Evaluation unit for monitoring and converting frequency signals

MONITOR/FREQUENCY/IOL/AC/DC

Diagrams and graphs

Contact rating



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