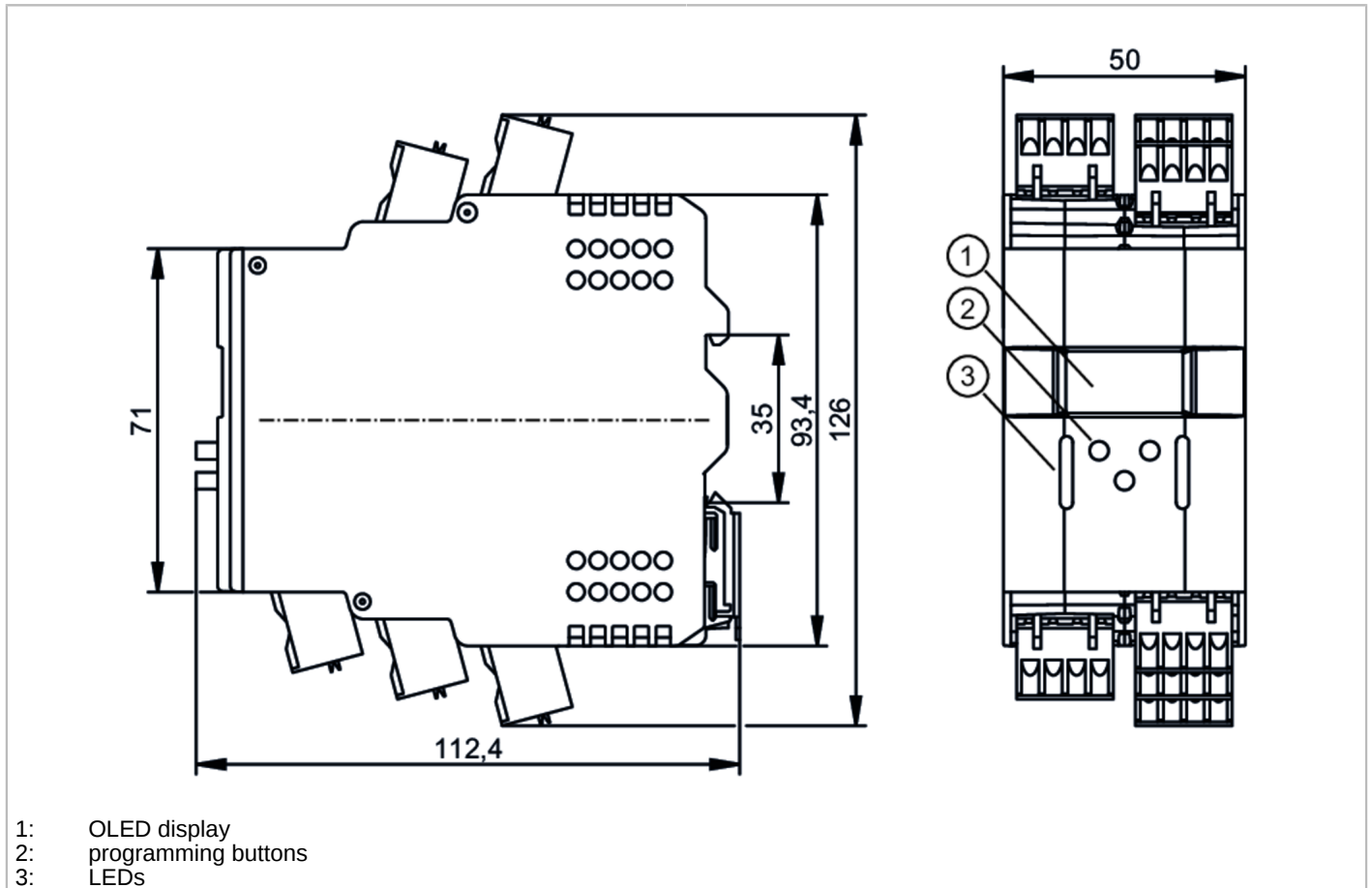


# DW3003



## Evaluation unit for monitoring and converting frequency signals

MONITOR/FREQUENCY/IOL/AC/DC



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



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 analogue 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
Overtoltage 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 analogue 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 analogue 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
Analogue output	
Number of analogue outputs	1; (configurable)
Short-circuit proof	yes
Electrically separated	no
Analogue current output	
Analogue current output [mA]	4...20; (max. 20,5 mA)
Max. load [Ω]	600; (300 Ω: Operating voltage < 24 V DC)
Analogue voltage output	
Analogue 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))	
Analogue 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 type	A	
Min. process cycle time [ms]	4.3	
Supported DeviceIDs	<b>Type of operation</b>	<b>DeviceID</b>
	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	
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]	336.1	
Housing	rectangular	
Type of mounting	mounting on DIN rail; (TH35 (EN 60715))	
Dimensions [mm]	126 x 50 x 112.4	
Materials	housing: plastics	

# DW3003



## 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
operation	1 x LED, red/green

### Accessories

Items supplied	cage clamps: 8
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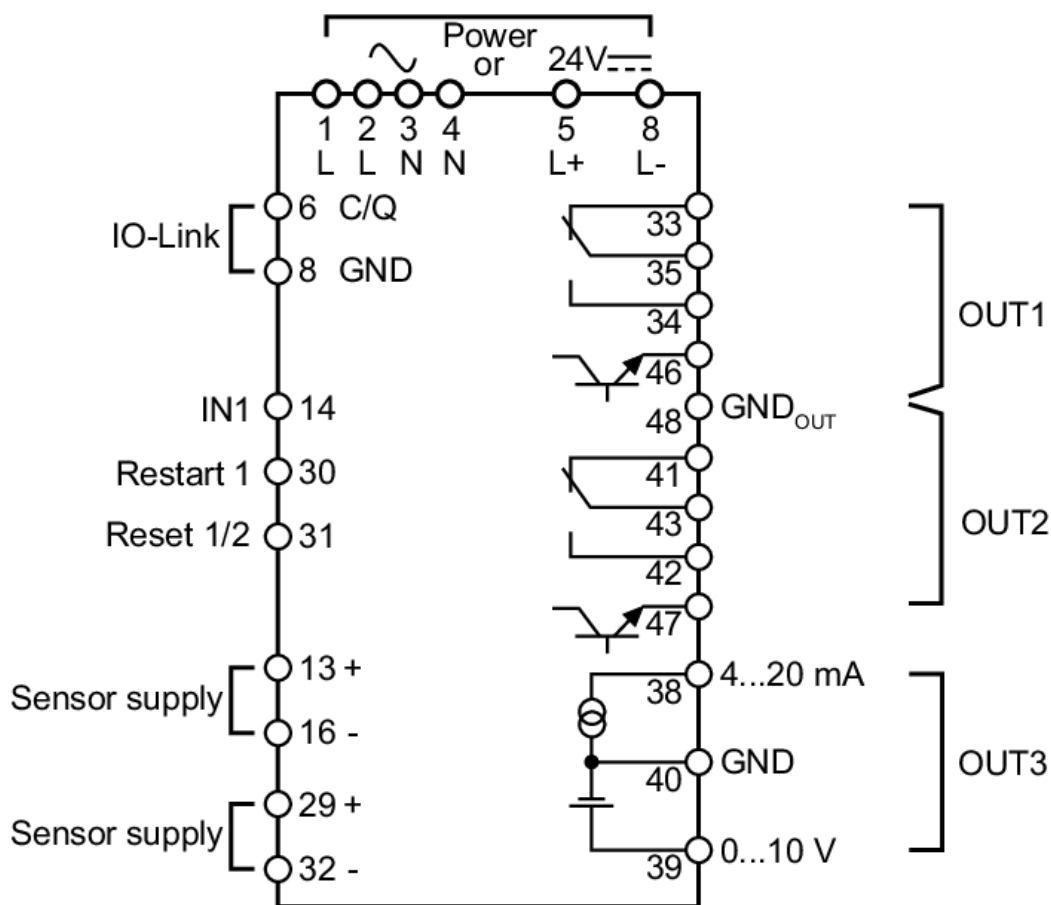
### Remarks

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

### Electrical connection

cage clamps: ...2.5 mm<sup>2</sup>

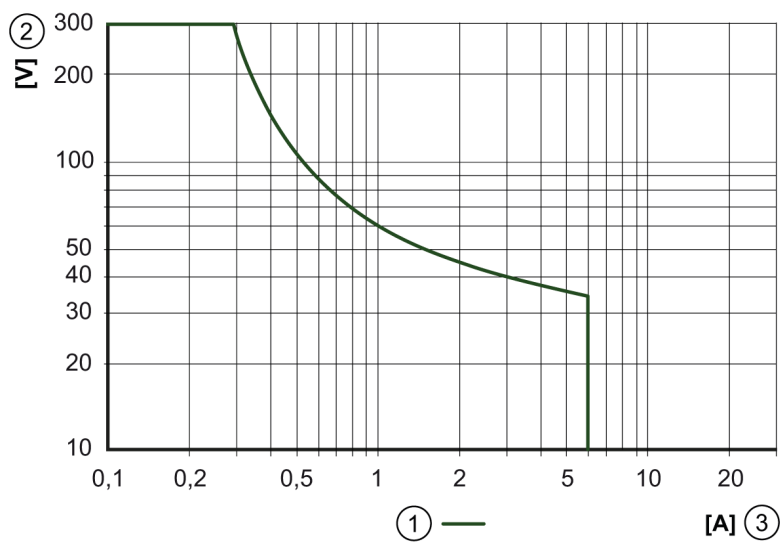
### Connection





### Diagrams and graphs

Contact rating



- 1 ohmic resistance
- 2 Voltage [DC]
- 3 Current [DC]