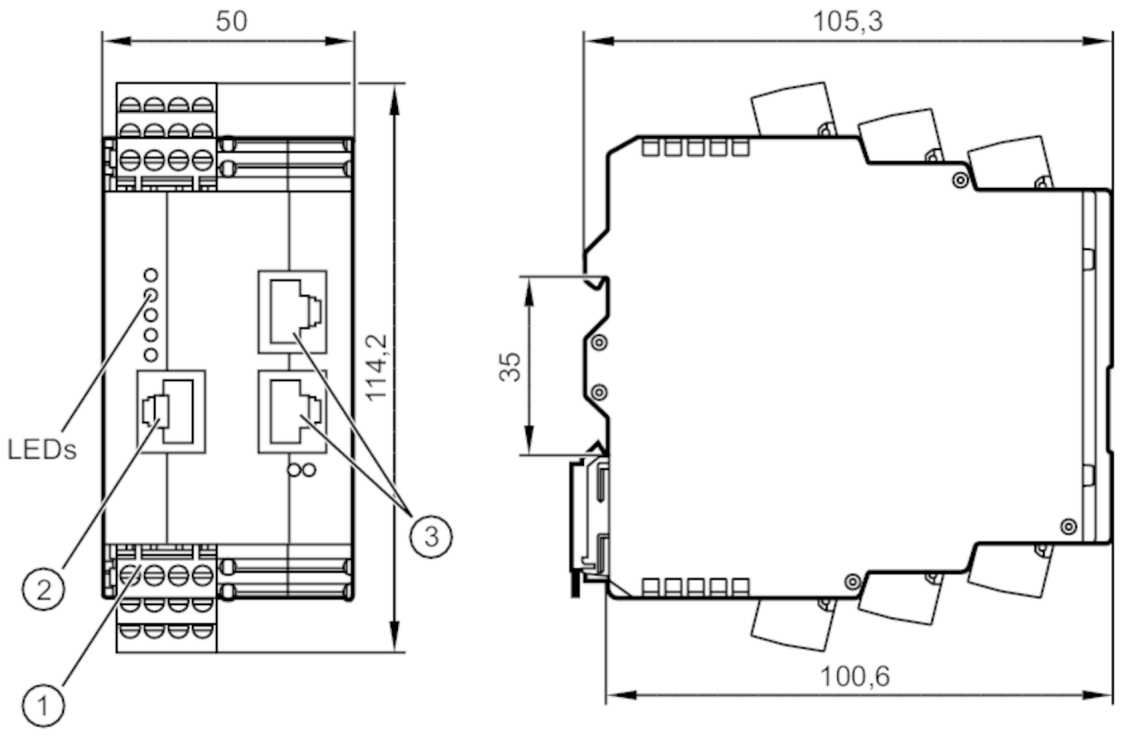
VSE153

Diagnostic electronics for vibration sensors

DIAGNOSTIC ELECTRONICS



1 COMBICON connector
2 Ethernet interface
3 fieldbus interface

Product characteristics		
Frequency range	[Hz]	0.1...12000
Communication interface		Ethernet
Application		
Design		parameter setting via PC software VES004
Application		continuous vibration monitoring
Electrical data		
Operating voltage tolerance	[%]	20
Operating voltage	[V]	24 DC; (when using the IEPE input: 24 V + 20%; IEPE = Integrated Electronics Piezo Electric)
Current consumption	[mA]	200; ((24 V DC))
Protection class		III
Inputs / outputs		
Total number of inputs and outputs		8; (configurable)
Number of inputs and outputs		Number of analogue inputs: 2; number of dynamic inputs: 4; Number of digital outputs: 2; Number of analogue outputs: 1
Inputs		
Total number of inputs		6
Number of analogue inputs		2
Analogue input (current)	[mA]	4...20

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Resolution of analogue input		12
Number of dynamic inputs		4
Dynamic input - signal		0...10 mA / IEPE / 4...20 mA
Dynamic input - resolution	[bit]	16
Dynamic input - frequency range	[Hz]	0,1...12000
Dynamic input - sampling rate	[kSamples]	100
Outputs		
Total number of outputs		2
Output signal		switching signal; analogue signal
Electrical design		PNP
Number of digital outputs		2; (configurable)
Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	100
Number of analogue outputs		1; (configurable)
Analogue current output	[mA]	4...20
Max. load	[Ω]	500
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes
Measuring/setting range		
Frequency range	[Hz]	0.1...12000
Interfaces		
Communication interface		Ethernet
Transmission rate		10 MBaud; 100 MBaud
Protocol		Modbus TCP
Operating conditions		
Ambient temperature	[°C]	0...60
Storage temperature	[°C]	0...60
Protection		IP 20
Tests / approvals		
EMC		EN 61000-4-2 ESD: 4 kV contact discharge / 15 kV air discharge
		EN 61000-4-3: 10 V/m (80...2700 MHz)
		EN 61000-4-4 Burst: 4 kV capacitive coupling probe, earthed
		EN 61000-4-6: 10 V 0,15...80 MHz
		EN 61000-6-4: industrial environments
MTTF	[years]	91
UL approval		Ta: 0...60 °C
		Enclosure type: open Type
		power supply: Limited Voltage/Current
		UL Approval no.: L001

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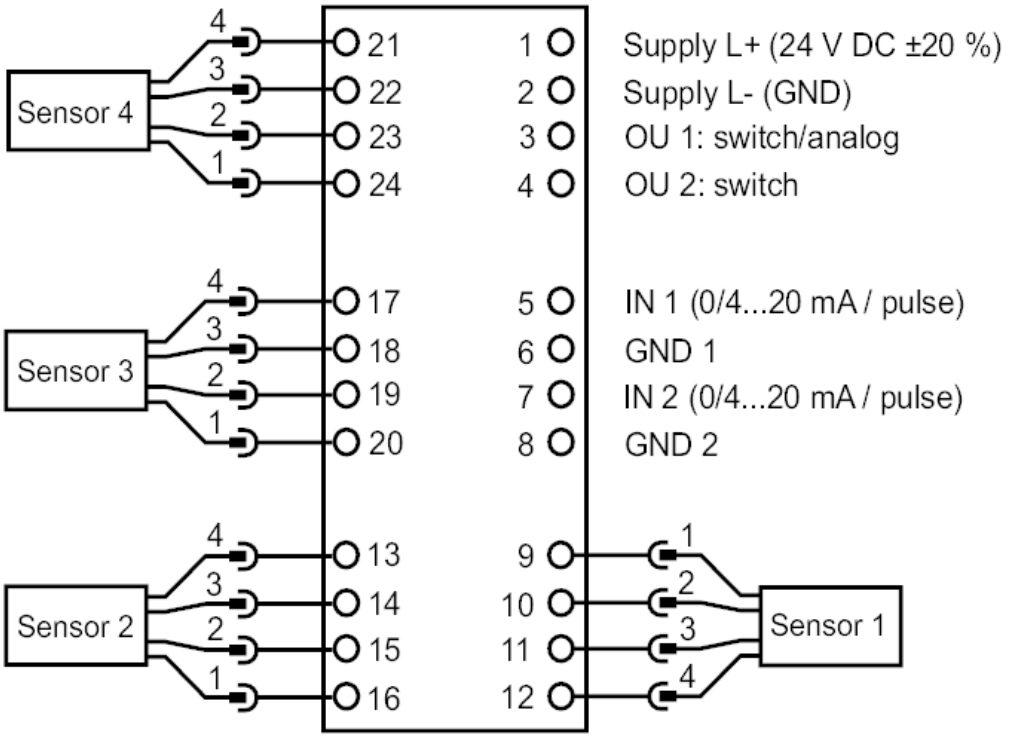
Mechanical data		
Weight	[g]	414.6
Housing		plastic housing
Type of mounting		rail; (TH35/EN60715)
Dimensions	[mm]	114.2 x 50 x 105.3
Materials		PA
Data memories		
Real-time clock		yes
Accessories		
Accessories (optional)		cross-over Ethernet patch cable for the direct connection to the PC
Remarks		
Pack quantity		1 pcs.
Electrical connection		

COMBICON:

Connection