



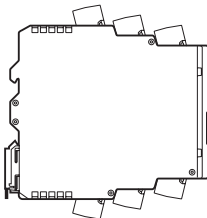
CE

Installation instructions  
Diagnostic electronics  
for vibration sensors

UK

**VSE150**  
**VSE151**  
**VSE152**  
**VSE153**

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## 1 Preliminary note

Technical data, approvals, accessories and further information at [www.ifm.com](http://www.ifm.com).

## 2 Safety instructions

- The device described is a subcomponent for integration into a system.
  - The manufacturer of the system is responsible for the safety of the system.
  - The proper function of the application programs lies in the responsibility of the system manufacturer.
  - The system manufacturer undertakes to perform a risk assessment and to create a documentation in accordance with legal and normative requirements to be provided to the operator and user of the system. This documentation must contain all necessary information and safety instructions for the operator, the user and, if applicable, for any service personnel authorised by the manufacturer of the system.
- Read this document before setting up the product and keep it during the entire service life.
- The product must be suitable for the corresponding applications and environmental conditions without any restrictions.
- Only use the product for its intended purpose (→ Functions and features).
- If the operating instructions or the technical data are not adhered to, personal injury and/or damage to property may occur.
- The manufacturer assumes no liability or warranty for any consequences caused by tampering with the product or incorrect use by the operator.
- Installation, electrical connection, set-up, operation and maintenance of the unit must be carried out by qualified personnel authorised by the machine operator.
- Protect units and cables against damage.

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## 3 Functions and features

The diagnostic electronics has 2 analogue inputs and 4 dynamic inputs. These inputs can be used for process value monitoring, vibration monitoring, vibration diagnostics or analysis of other dynamic signals.

## 4 Symbols used

- ▶ Instructions



Important note

Non-compliance may result in malfunction or interference.

## 5 Installation



- ▶ Disconnect the system from power before installation.

- ▶ Mount the unit in a control cabinet with a protection rating of at least IP 54 to ensure protection against accidental contact with dangerous contact voltages and against atmospheric influence. The control cabinet has to be installed in accordance with local and national regulations.
- ▶ Mount the unit vertically on a DIN rail.
- ▶ Leave enough space between the unit and the top or bottom of the control cabinet to enable air circulation and to avoid excessive heating.

### 5.1 Installation instructions

#### Electrostatic discharge

The device contains components that can be damaged or destroyed by electrostatic discharge.

- ▶ When handling the device, observe the necessary safety precautions against electrostatic discharge (ESD) according to EN 61340-5-1 and IEC 61340-5-1.
- ▶ In order to dissipate electrostatic charges, the unit may only be operated on a grounded DIN rail.

## 6 Electrical connection

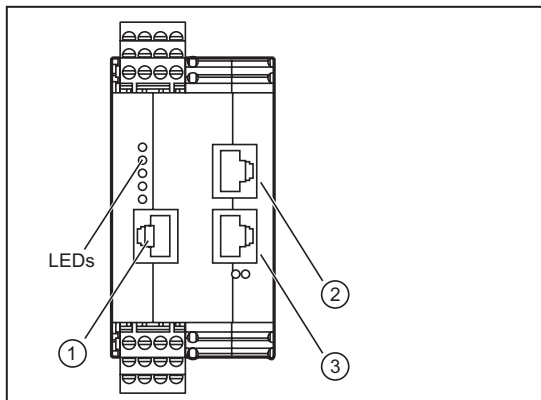


The unit must be connected by a qualified electrician.

The national and international regulations for the installation of electrical equipment must be adhered to.

- ▶ Disconnect the system from power and connect the unit.

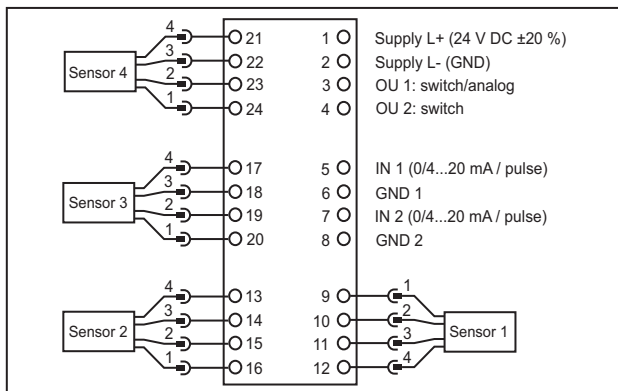
### 6.1 Interfaces



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1	Config: TCP/IP, IP address 192.168.0.1 (factory setting), parameter setting and data interface (e.g. VES004)			
2	IE 1: PROFINET IO	IE 1: EtherNet/IP	EC IN: EtherCAT Input	IE 1: Modbus TCP
3	IE 2: PROFINET IO	IE 2: EtherNet/IP	EC OUT: EtherCAT Output	IE 2: Modbus TCP

## 6.2 Wiring



Wiring of the sensors 1...4 (S1...S4) according to the connected unit

Sensor				VSA	IEPE/VSP	0...20 mA
S1	S2	S3	S4			
09	16	20	24	BN: L+ (+9 V)	not connected (n.c.)	not connected (n.c.)
10	15	19	23	WH: signal	IEPE +	signal
11	14	18	22	BU: GND	IEPE -	GND
12	13	17	21	BK: test	not connected (n.c.)	not connected (n.c.)



Terminal 1 supply L+

When using an IEPE input 24 V + 20% (Integrated Electronics Piezo Electric)

## 7 Parameter setting

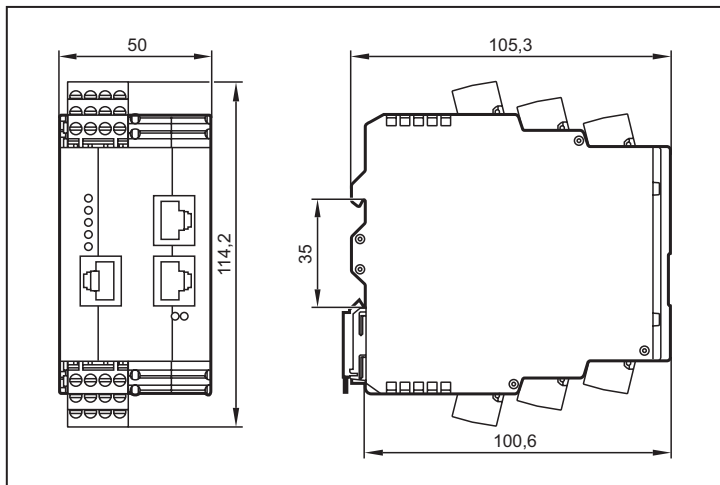
Parameter setting and configuration of the unit are exclusively made via the PC software VES004.

## 8 Maintenance and disposal

The unit is maintenance-free.

- ▶ Dispose of the device including the battery in accordance with the national environmental regulations.

## 9 Scale drawing



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