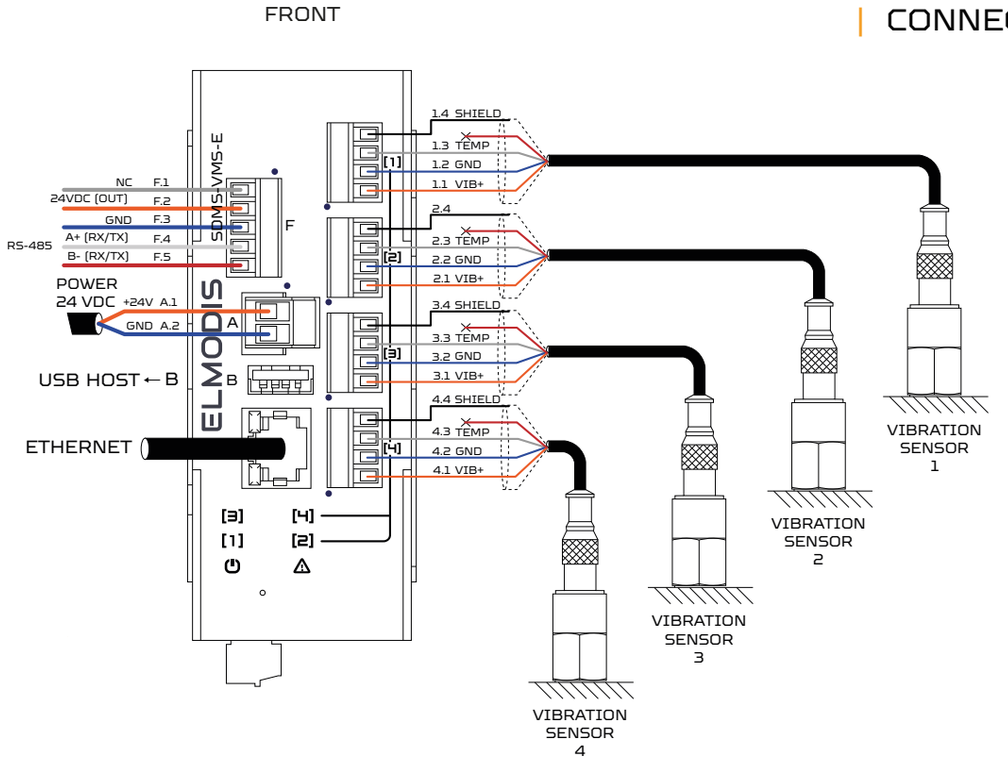
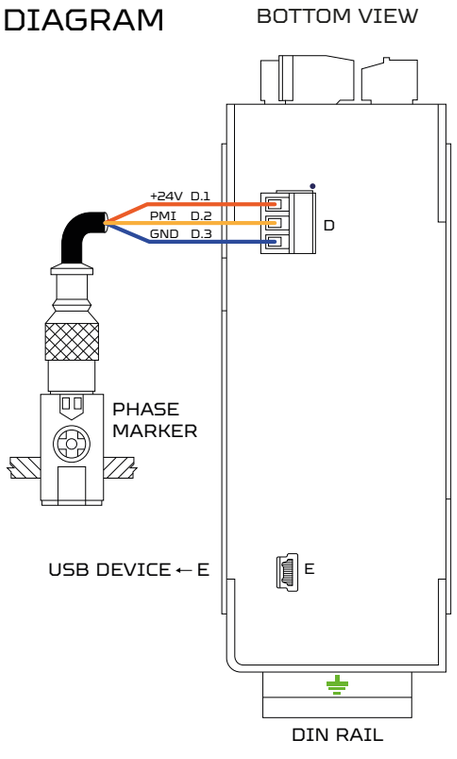
CONNECTION DIAGRAM





22.03.20

ELMODIS

WE MAKE INDUSTRY SMARTER

SDMS-VMS-E

Vibration Module

Quick Reference Guide

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The SDMS-VMS-E module is part of the Elmodis system dedicated for vibration monitoring of machines driven by electric motors. The SDMS-VMS-E module is an extension of the system to measuring vibration and temperature. The function of the SDMS-VMS-E module is to measure and process signals from vibration sensors. The measured signals are sampled at a frequency of 32kHz, which provide high quality data. Rotation marker allows to perform measurements in reference to a specific angular position of the shaft. The module's parameters allow for broadband spectral analysis and dedicated indicators of the measured vibration signal. The SDMS-VMS-E has an Ethernet TCP/IP interface used for local data distribution and sharing informatons to the Elmodis cloud based app.

MAIN FEATURES

- Support for up to four vibration sensors
- IEPE (Integrated Electronic Piezoelectric) sensors support
- Temperature measurement from vibration sensors with integrated temperature sensor
- Sampling of sensor signal at a frequency of 32kHz
- Ethernet interface
- Support for MQTT and MODBUS TCP/IP protocol
- Power supply 24 VDC
- DIN rail mounting

SAFETY

Installation can be performed only by qualified personnel.

Before starting installation work, read the installation and commissioning manual of the ELMODIS system. Before starting installation work, it is strictly required to turn off the electrical power supply in the switchgear of the machine at which the Elmodis system is installed. Not complying with the above requirement may result in an electric shock dangerous to humans. During installation, take special care not to damage existing equipment or interrupt its operation.

The symbol designating selective collection of electronic equipment. It is forbidden to dispose used equipment with other waste.

Symbol	Status	Description
	✸	Failure-free operation of the system
	●	Service required - contact Elmodis customer service
	●	Stable communication with the Cloud
	●	No communication with the Cloud
	✸	No Internet access
[1]	✸	Collecting vibration measurements
[2]	●	Sensor properly connected, in stand-by mode
[3]	●	No vibration sensor or open circuit
[4]	✸	Sensor circuit shorted / sensor damaged
CASING BACK-LIGHT	●	Machine OK
	✸	Module identification
	✸	Machine-related alarm

OPERATION

✸ Intermittent ● Static

TECHNICAL DATA

Vibration sensor standard:	IEPE (Integrated Electronic Piezoelectric)
Vibration measurement range:	±50 [g] (for a sensor with the sensitivity of 100 mV/g)
Nominal supply current of vibration sensors:	4.7 mA
Measurement track according to:	ISO 2954 standard
Temperature measurement range:	10 ÷ 120 [°C] (for a sensor with the sensitivity of 10 mV/°C)
Temperature measurement accuracy:	±0.5 °C
Power supply [SELV]:	24 VDC
Power consumption:	< 7.5W
Communication:	10/100 Mbit Ethernet
Operation temperature:	-20 ÷ 50 [°C]
Storage temperature:	-20 ÷ 70 [°C]
Operating humidity range:	5% to 90% without condensation
Maximum altitude:	2000 m
Mounting method:	TH35 rail (acc. to PN-EN 60715 standard)
Dimensions:	46 x 115 x 125 [mm]
Weight:	0.4 kg