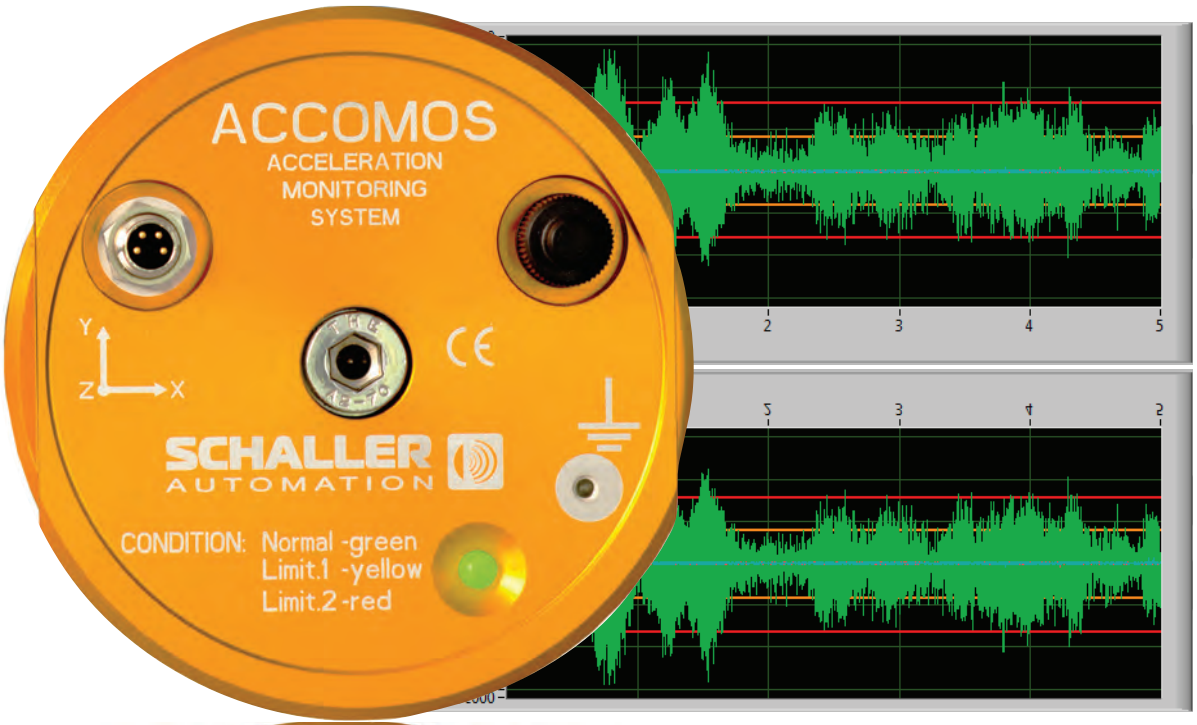
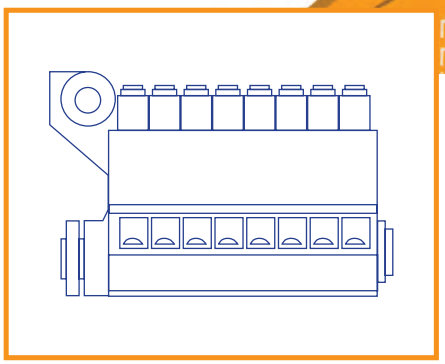
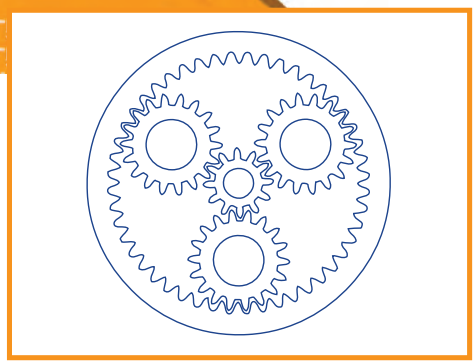
SCHALLER AUTOMATION

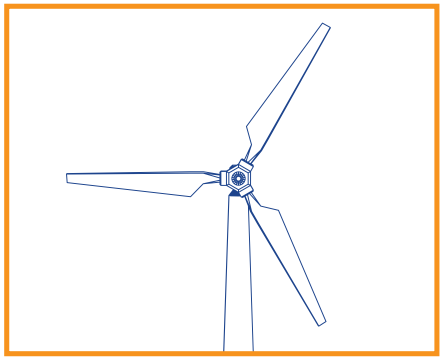
The key for Predictive Maintenance

Acceleration Monitoring System-ACCOMOS®







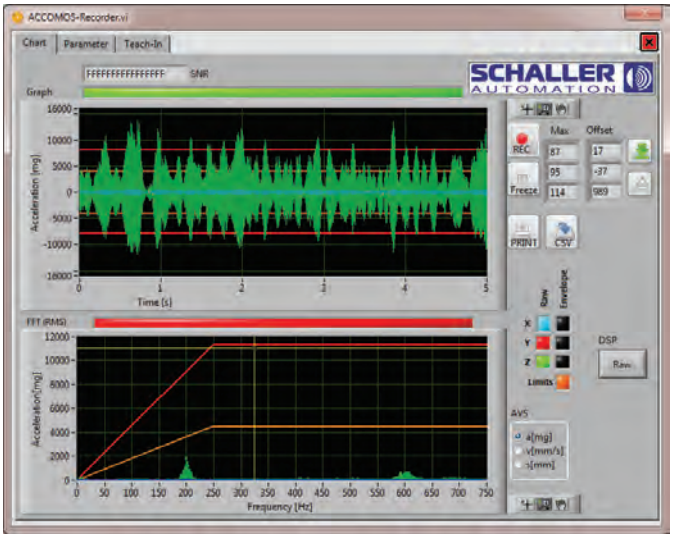


ACCOMOS®

Monitors vibration to prevent damages

A novel three-axis vibration sensor, specially adapted to the requirements of drive units with large engines and large wind turbines, including their components.

- Simple detection of incipient damages (e.g. on engine stands, clutches and foundations) and alignment errors with the generator or machine.
- Extremely easy installation: ultra-strong magnets allow installation of the system within minutes. In most cases, it is not necessary to machine the surfaces.
- Permanent installation allows for long-term analysis with storage of the most important data.
- A single sensor allows pre-alerts and main alerts for the vibration behaviour to be indicated with a colour LED on the sensor and in the software.
- It is possible to transfer the real-time data to the monitoring software via CAN or RS485 protocol. Display and storage of real-time data in all three axes, plus display of the frequency spectrum.
- The software offers a teach-in function, that enables the thresholds for pre-alerts and main alerts on the monitored machine to be determined.



- One sensor for three axes
- Early detection of incipient damages
- Permanent installation possible in minutes
- Software with teach-in function
- RS485 or CAN protocol

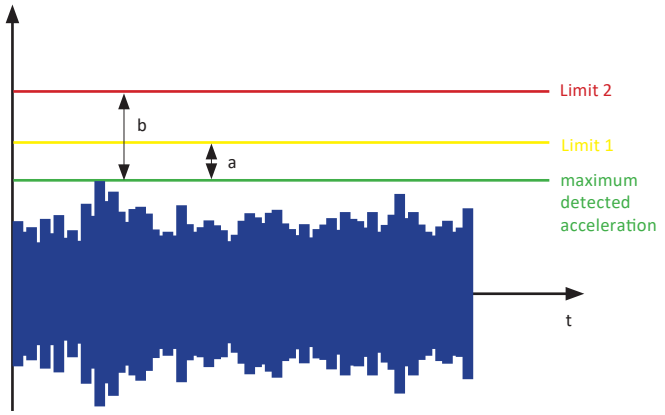
Engine Vibration Classification

ACCOMOS is ideal for ensuring the Engine Vibration Classification is adhered to according to the globally applicable DIN ISO 10816-6 standard for engines > 100 kW.

Set Up

Standard accessories may be used for the CAN connection, when available.

Teach-In-Function



a: value added to define Limit 1
b: value added to define Limit 2

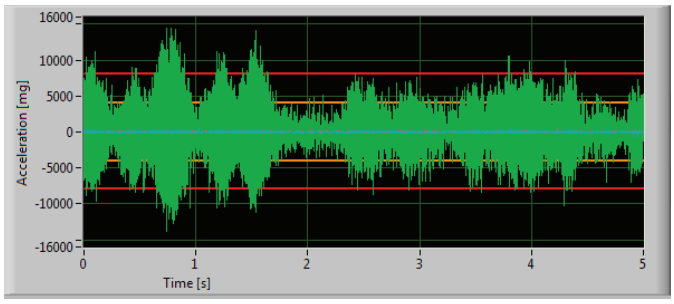
The teach-in function is a particularly method to set the parameters in the sensor according the monitored machine:

- Thresholds for the “Limit 1” and “Limit 2” values are generated automatically by ACCOMOS®.
- To do this, a monitoring period (e.g. 5 days) needs to be performed, the maximum measured value is specified automatically as the OK value. Safety margins may be applied to prevent false alarms.
- If the set limit has been exceeded, it will be displayed in the recorder software and on the sensor.
- Corresponding signals can also be output via the sound card of the computer.

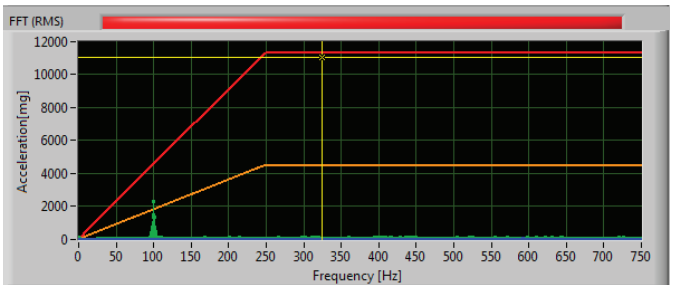
Software

The ACCOMOS Recorder Software allows for the following to be displayed:

- Live signal
- Maximum trend curve
- Frequency spectrum of the acceleration signal on the ACCOMOS sensor.



Life signal of the sensor, in this case in mg over time



A FFT frequency analysis is also permanently displayed

In order to signal critical accelerations, the ACCOMOS software has colour indicators that light up yellow or red when the thresholds are exceeded. Additionally, an alarm signal can be output via the sound card in such cases.
The maximum trend curve is saved automatically in the background, as the cases where the limits have been exceeded (including time stamp). The software also allows the recording of the live signal, to be initiated manually.

ACCOMOS®

Technical Data Sensor

Power supply	9 – 36 VDC
Consumption	Max. 110 mA
Temperature range	-25 °C bis +85 °C
Measure range	+/- 16,000 mg
Frequency range	0 – 750 Hz (1500 Hz for CAN BUS possible)
Sensitivity	4 mg
Data transfer	Digital via RS485 or CAN
Height incl. plug	80 mm
Weight	400 g
Diameter	89,5 mm

The following minimum system requirements apply for the software:

Microsoft Windows 7 with Service Pack 1
.NET Framework from Version 4
Intel Pentium Dual-Core 2.80 GHz or equivalent/better
Minimum 2 GB RAM
Minimum 3 GB hard disk space
Optional: Sound card (for acoustic signalling)
RS485 or CAN interface

Sensor Dimensions