



## **ELECTRIC DRIVES**

FOR EVERY DEMAND



### **VEMoDiAC - VEM makes your drive system smart**

- ▶ digital twin
- ▶ energy monitoring
- ▶ operating data acquisition
- ▶ needs-based maintenance

# VEMoDiAC makes your drive systems fit for Industry 4.0

All over the world millions of direct on line (D.O.L) operated motors are running without being monitored. Operators cannot track current energy consumption, and they are not informed about an imminent machine failure. VEM has the right solution for this problem: VEMoDiAC is not only a simple and flexible monitoring system for your drive system, it also helps you manage your motors.

## Higher efficiency and availability of your units

VEM developed VEMoDiAC with this in mind. With VEMoDiAC, you get insights into the operation of your motor, your machine, your process and thus into your entire factory. Get to know your plant in a whole new way. VEM offers a simple system for condition monitoring, operating data acquisition and needs-based maintenance. This helps you to evaluate the efficiency and availability of your plant.



### Technical specifications

Power range:	0.75 kW to 500 kW
Voltage range:	230 V to 400 V
Ambient temperature:	-20 °C to +40 °C
Frequency:	20 to 60 Hz

VEMoDiAC Sens increases the efficiency and availability of your asset.



[vemodiac-portal.vem.info](http://vemodiac-portal.vem.info)



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# Four components - one system

VEMoDiAC consists of four basic components. Whether all or only some components are needed depends on your operation scenario. Describe your operation to us and we will help you select the components. VEMoDiAC can also be integrated into your existing monitoring system.

## VEMoDiAC Sens

### Measuring, not guessing

The energy is measured directly at the motor.

- active power with accuracy class 5
- measurement of the winding temperature via PT1000
- measurement of acceleration and vibration velocity

### Sustainable

VEMoDiAC Sens does not need batteries. Supply via the motor connection offers many advantage:

- No regular replacement of batteries is necessary. This saves on staff and helps the environment.
- Using NFC, VEMoDiAC Sens can be configured even though there is no power supply to the unit.

### Flexible

The measurement data is transmitted via WLAN and enables various use cases:

- evaluation online via VEMoDiAC Cloud
- visualisation locally via VEMoDiAC Gate or through customer application
- network protocol Modbus TCP or MQTT

## VEMoDiAC Gate

The gateway as a local node for:

- data transmission to the VEMoDiAC Cloud
- local visualisation of the operating data
- internet connection via LTE possible

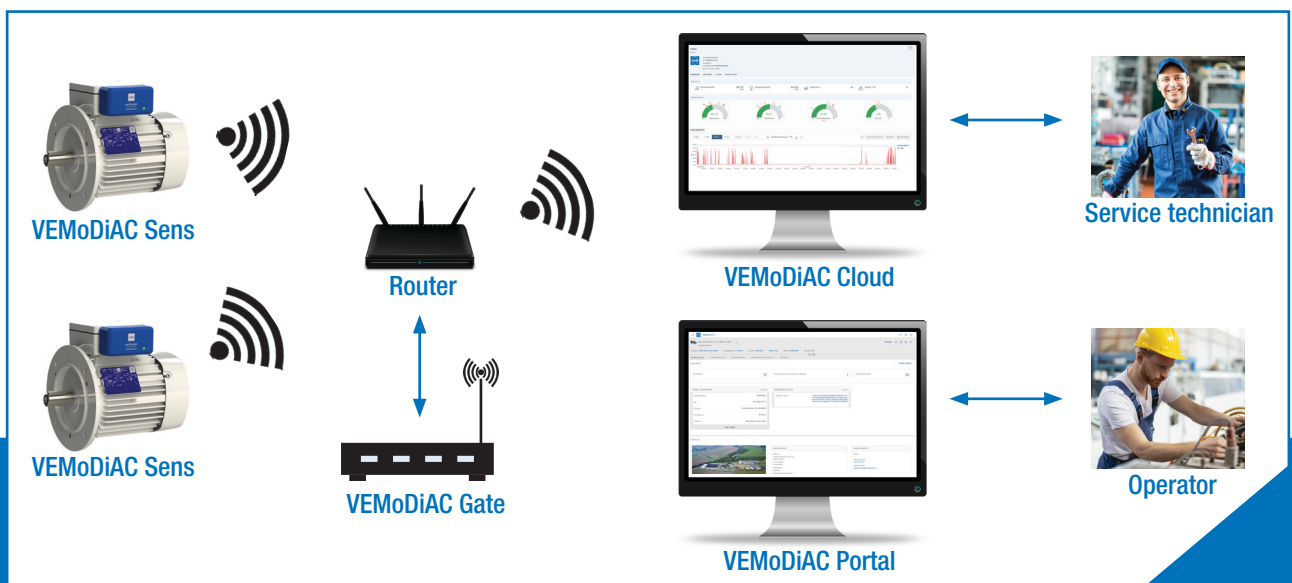
## VEMoDiAC Cloud

VEMoDiAC-Cloud displays the status of your unit. The cloud platform stores, exports, displays and analyses all measurement data collected by VEMoDiAC Sens. Alarm settings allow your motors to be monitored individually. Simply let us notify you by email.

## VEMoDiAC Portal

The VEMoDiAC Portal allows you to manage the digital twin of your motor. There you will get access to the most important information, such as:

- drawings, CAD-models
- spare parts
- nameplate information
- location information
- work instructions, damage reports and scheduling



- one system
- full overview



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