

Customer Information

Your Direct Line to EICHLER

24/7 service on spare parts and equipment excess stock in case of emergency

+49 8196 9000-247

Our telephone service is available 24 hours a day, 365 days a year, including Sundays and public holidays. We supply fully tested spare parts from stock. Please contact us for further details. In case of machine breakdown, you can contact our technical support team directly.

Questions about sales, maintenance and repair

+49 8196 9000-0

Due to the high quality standards we set ourselves, you will receive all repaired, replacement or exchange devices cleaned, refurbished and function-tested, with at least a 24-month guarantee and warranty. Ask at any time about maintenance orders on-site or for a detailed cost estimate. **If you have any basic questions, please arrange a personal consultation appointment with your EICHLER sales representative.**

Life Cycle Management

+49 8196 9000-350

When it comes to ensuring system availability, Configuration Management with an on-site inventory or the right supply strategy – then you've come to the right place. We will be happy to answer your questions or arrange an appointment for a detailed consultation.

Training schemes – EICHLERakademiE

+49 8196 9000-366

Do you have any questions about contents, hotel bookings, how to reach us? Are you in need of specific technical consultations or do you wish to join our training schemes? We will be happy to help you!

Sell excess stock

+49 8196 9000-550

We are constantly on the lookout for devices and units from the fields of HMI, PLC assemblies, drive technology and robotics. Across all manufacturers, we offer you an uncomplicated and fast way to reduce your automation technology stocks.

K-Info 10-en



Wind power

Siemens PDPM and DLC Modules

Pitch Drive Power Modules

Siemens Wind Power

What is a Pitch System?

The Pitch System is of crucial importance for the performance of the wind turbine. It is located in the hub and consists of the pitch control unit (PLU), the motors (pitch drive), the pitch drive power module and the backup units (DLC). Each individual rotor blade has its own pitch drive system, consisting of a power module and seven DLC (Double Layer Capacitors) modules.

What is the task of the pitch system?

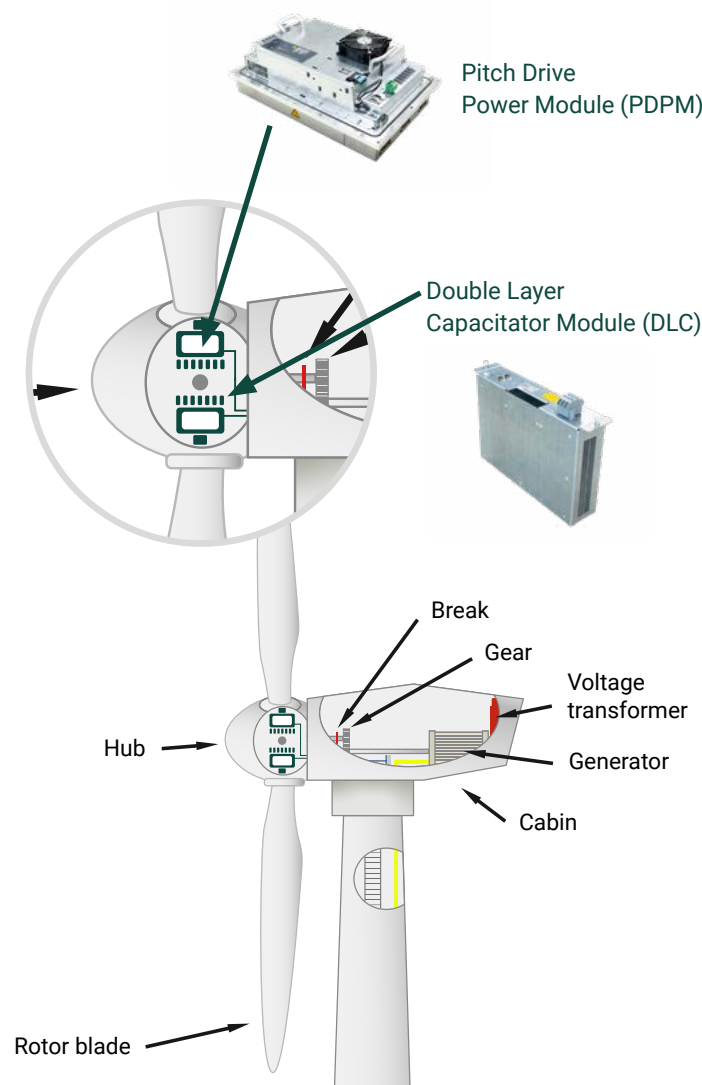
The task of the Pitch Drive System is to dynamically adjust the orientation of the rotor blades to the current wind situation, so that optimum power consumption is achieved. In situations with extrem flat or heavy airflow, the pitch motors (Pitch Drive) set all rotor blades to the so-called vane position (pitch angle = 90°). This right-angled position prevents inefficient energy generation as well, as damage to the wind turbine.

Load on the pitch systems

Due to the constant rotation, pitch systems are exposed to permanent mechanical stress caused by accelerations and vibrations. In addition, there are thermal loads (-40 °C to +70 °C), moisture and corrosion depending on the region and location (onshore or offshore). Offshore turbines are generally exposed to greater loads than onshore turbines. They can also reach significantly larger dimensions, which means that the installed pitch drive systems and motors have to apply more power to align the larger and heavier blades. Higher wind speeds, in combination with cold, humidity and the influence of salt water, place a particular strain on the mechanics and electronics installed in the pitch systems.

Hazards due to the failure of the pitch system

Failure of the pitch system can cause the rotor blades to spin out of control and severely damage the wind turbine. To prevent this, the DLC backup modules are equipped with special capacitors. As a independent energy storage device, they help to position the rotor blades in the vane position when there is a power failure. The capacitors wear out with increasing runtime.



Type number

SIEMENS DLC module:
A5E03430263 or
successor 9HK1510-0AA00-0AA0 (partially compatible)

Siemens Pitch Drive Power Module (PDPM):
A5E03430486

Teststation Pitch Drive
PDP/DLC-Module

Why choosing EICHLER

- ✓ More than 40 years experience
- ✓ All together from a single source: repair, maintenance, refresh, life cycle and warehouse management
- ✓ Used and new equipment directly from stock
- ✓ Automated inspection and test procedures
- ✓ 24 months warranty and guarantee

+49 8196 9000-0

Unique Testing Technology for Pitch Drive Power Modules and DLC Modules

Service with quality and passion – Every repaired PDPM or DLC module is tested for functionality in our in-house developed, automated test bench before shipment.

All functions and interfaces of the modules are checked in defined and standardized cycles. Only after successful completion of the functional test, you will receive your PDPM or DLC modules back in ESD-protected packaging and incl. 24 months warranty and guarantee.



EICHLER Services for Pitch Drive Power Modules and DLC Modules

Repair on component level

- ✓ Accurate cost estimates
- ✓ Short repair turnaround times
- ✓ Use of original spare parts
- ✓ Compliance with machinery directive 2006/42/EC
- ✓ 24 months warranty and guarantee

Sale

- ✓ Function-tested used assemblies
- ✓ Advance replacement of defective devices
- ✓ Immediately available from stock
- ✓ 24 months warranty and guarantee
- ✓ Optional express and courier delivery

Maintenance and preventive maintenance

- ✓ Analysis of high-risk components
- ✓ Professional technical cleaning
- ✓ Replacement of wear parts
- ✓ Renewal of protective and operating materials
- ✓ Strategic maintenance planning

Life Cycle Management

- ✓ Full-service warehouse management
- ✓ Creation of configuration files on-site
- ✓ Component-specific risk analyses
- ✓ Tailored supply strategies
- ✓ Ensuring system availability