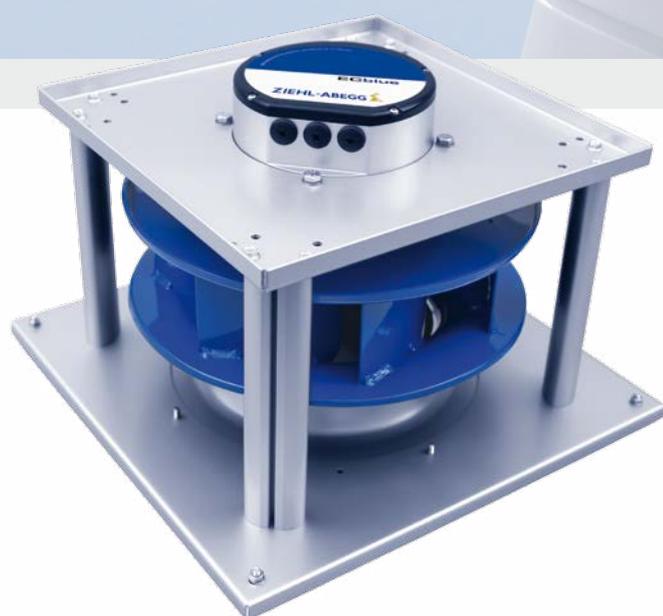


Movement by Perfection



The Royal League in ventilation, control and drive technology

## Fans for wind turbines

Innovative, customised, energy efficient

**ZAvblue**

# ZIEHL-ABEGG

Die Königs

*der Lufttech*

*Regeltechnik und Antriebs*

**Mehr  
Volumen**  
bei kleinerer  
Baugröße

*Bewegung durch Perfektion*





## Welcome to the world of ZIEHL-ABEGG



### Top technology "Made by ZIEHL-ABEGG"

A pioneering spirit and the courage of innovation were the driving forces behind Emil Ziehl's development of his first external rotor motor over 100 years ago. With this he laid the cornerstone for the success story of ZIEHL-ABEGG in 1910. Today, the family company ZIEHL-ABEGG, with its headquarters in Künzelsau, develops, produces and sells high quality, high-tech components: Fans, special electric motors and their perfectly adapted, state-of-the-art control technology. Still today, Emil Ziehl's pioneering spirit is the motivator for making good even better and finding new, revolutionary solutions.

ZIEHL-ABEGG is based in Southern Germany but is at home all over the world. Thousands of employees develop, produce and sell the latest technological, economic and ecological developments at production sites and sales offices worldwide.

Welcome to the world of ventilation, control  
and drive technology.

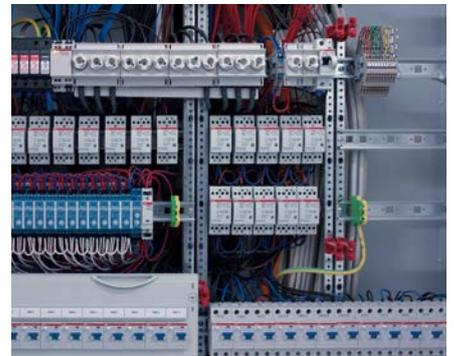
# Fans for wind turbine

ZIEHL-ABEGG, the world's leading fan and drive machine system supplier with matching control technology, provides innovative solutions for your wind turbines. As an innovation partner for many companies, we have many years of experience with products for wind turbines as well as application fields such as offshore industry, agriculture, chemical industry and transformer cooling. Combine our wide product range with our ability to take advantage of synergies, and we are ideally equipped to implement tailor-made solutions.





# Fans for wind turbines – Innovative, customised, energy efficient



## Fans for generator cooling and nacelle ventilation

- Double inlet housing fans from the RD series
- Robust design with welded housings for high dynamic/vibrating loads
- Excellent corrosion protection
- Rated for medium flow rates and medium static pressures
- For various oil coolers and air-air coolers
- Special models for restricted space installations

## Fans for tower recirculation cooling

- Series FC, FE2owlet, MAXvent axial fans along with series ER..C and GR..C plug fans with free-running impellers
- Rated for high flow rates and small to medium static pressures

## Fans for control cabinet ventilation (electronics cooling)

- Series GR ventilation modules
- Special designs for restricted space installations
- Special designs for high to medium static pressures



### Fans for blade heating

- Single inlet housing fans from the RG series
- Special housing for limited space requirements
- Special design for high centrifugal and gyroscopic forces along with high dynamic loads
- Rated for medium flow rates and medium static pressures

### Fans for transformer cooling

- Series GR ventilation modules
- Double inlet housing fans from the RD series
- High reliability and quality
- Rated for medium volume flow rates and medium static pressures

### Frequency inverters for fan speed control in wind turbines

#### **Fcontrol: Innovative frequency inverter with integrated all pole effective sine filter**

- Shielded motor power cables not required
- Operation that's easy on the motor, optimising motor service life
- Available in IP54 and IP20 protection-class

#### **Icontrol: Standard inverter without integrated sine filter**

- Design-to-cost optimized frequency inverter for IEC standard motors
- Also available in special, flat construction
- Available in IP54 and IP20 protection-class

# The Royal League

