



**MX-System**

# Invitation

The control system for renewable energy: PC-based control

HUSUM WIND 2023, Husum  
September 12 – 15, 2023  
Hall 5, Booth B28

# PC-based control – the perfect choice for everything from wind to hydrogen

Husum Wind is the most important event for renewable energy in the German-speaking realm, covering the full spectrum of energy sources from photovoltaics and wind to green hydrogen. Beckhoff will be appearing at Husum Wind from September 12 to 15, explaining how highly scalable control solutions can help manufacturers and operators of wind turbines, solar plants, and hydrogen plants. We will be presenting the highlights of PC- and EtherCAT-based control technology at our booth. Our focus will be on the MX-System for control cabinet-free automation, the TwinCAT Wind Framework, and our system-integrated condition monitoring, which provides operational management, wind farm networking, and big data handling all on a single platform. The figures speak for themselves: PC-based control is the automation technology behind over 100,000 wind turbines.

With our system-integrated solutions for explosion protection, we are also an excellent choice of partner for the hydrogen industry.

We're looking forward to seeing you at Husum Wind – come visit us at Booth B28 in Hall 5.



# Pluggable system solution for control cabinet-free automation

- modular system with IPC, coupler, I/O, drive, relay, and system modules on scalable baseplates for placing directly on the machine
- for control cabinet-free machine and system concepts in robust metal housings
- simple plug-and-play principle enables module exchange even by non-specialist personnel

▶ [Learn more](#)



reddot winner 2023  
best of the best

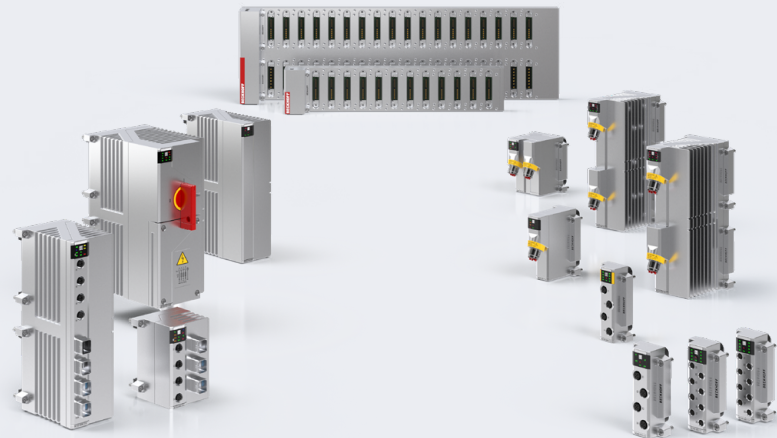


**MX-System**

The new  
MX-System:  
Integrated,  
modular, and  
compact

## MX-System

► [Learn more](#)



### Baseplates

Scalable baseplates:  
the foundation of the  
MX-System

### IPC modules

Robust IPC modules  
of various performance  
classes

### I/O modules

I/O modules for all  
signals in the automation  
environment

### Drive modules

High-performance  
servo drives and  
frequency inverters

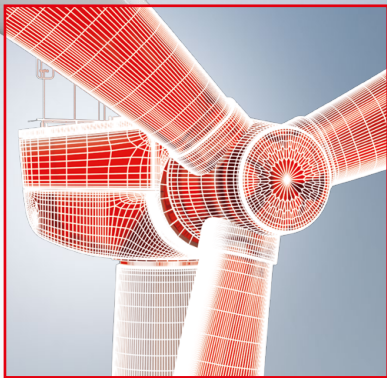
### Relay modules

Relay modules  
for switching low  
voltages

### System modules

Supplementary supply,  
power supply, coupler, and  
power output modules

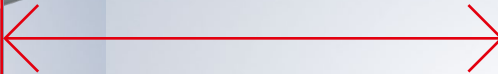




### Optimized condition monitoring

- optimized condition monitoring covering everything from power to speed
- increased wind turbine availability

▶ [Learn more](#)



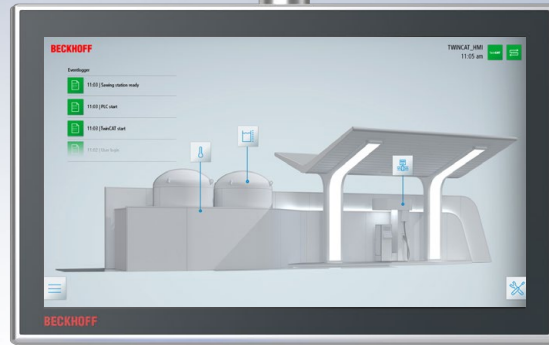
### Partner

- GfM: drive train monitoring, blade bearing monitoring
- Leine Linde: blade monitoring
- Wölfel: tower monitoring, foundation monitoring, noise cancelling
- cms@wind: drive train monitoring
- Pulse monitoring: foundation monitoring

## Automating hydrogen applications safely: system-integrated solutions for explosion protection

- end-to-end control platform from zone 0/20 to the cloud
- I/O modules for direct connection of field devices from zone 0/20
- CPX range: control panels and panel PCs for use in zone 2/22
- extensive HART protocol integration

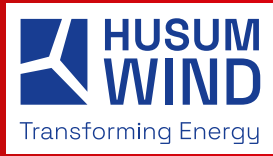
► [Learn more](#)



# H<sub>2</sub>



The Beckhoff team is looking forward to your visit!



HUSUM WIND 2023, Husum  
September 12 – 15, 2023  
Hall 5, Booth B28

Opening hours:  
Tuesday to Thursday: 10:00 a.m. to 6:00 p.m.  
Friday: 10:00 a.m. to 4:00 p.m.

Further information:  
[www.beckhoff.com/husumwind](http://www.beckhoff.com/husumwind)  
[www.husumwind.com](http://www.husumwind.com)