



Amphenol



Wind Energy



Wind market

At Amphenol we understand that the wind power industry has unique interconnect needs. We know that wind turbines are in service for more than 20 years in some of the harshest environments on the planet, whether on-land or off-shore.

Amphenol's Wind|Mate products withstand:

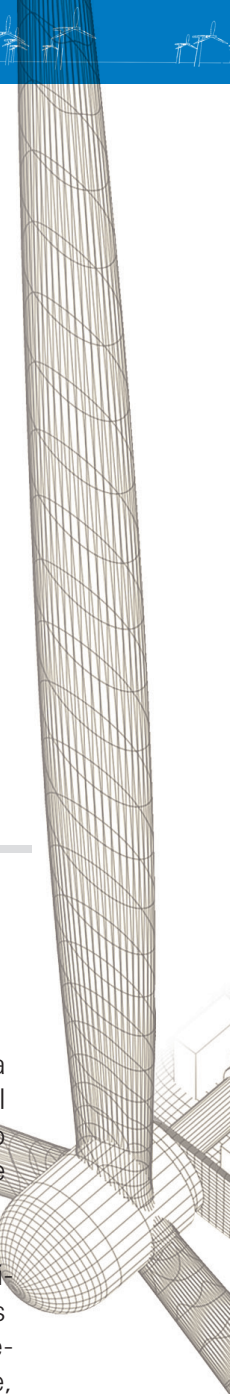
- vibration
- salt spray
- humidity
- dust
- EMI/EMC
- temperature extremes

Whether you need power connectors, signal connectors, backplane connectors, rugged data cables and switches, complete cable assemblies, fiber optic connectors and assemblies, or system attachments, we have the right solution for your wind power application.

We also know that you need a partner with a global footprint of service and support. Amphenol has over 85 facilities in 30 countries and due to our culture of cost control and operating discipline we are able to prosper in all economic climates.

Amphenol's background in producing high reliability connectors for the harshest environments on Earth and in Space gives us the unique experience needed to produce extremely reliable, cost effective, industry standard products for the wind energy industry. If you have the need for a customized solution our engineers will work with yours to produce the right customized interconnects for your application.

Amphenol connectors are approved by UL/CSA, VDE and other international standards.

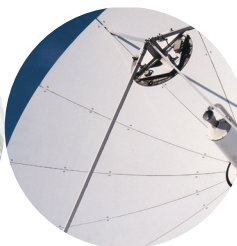
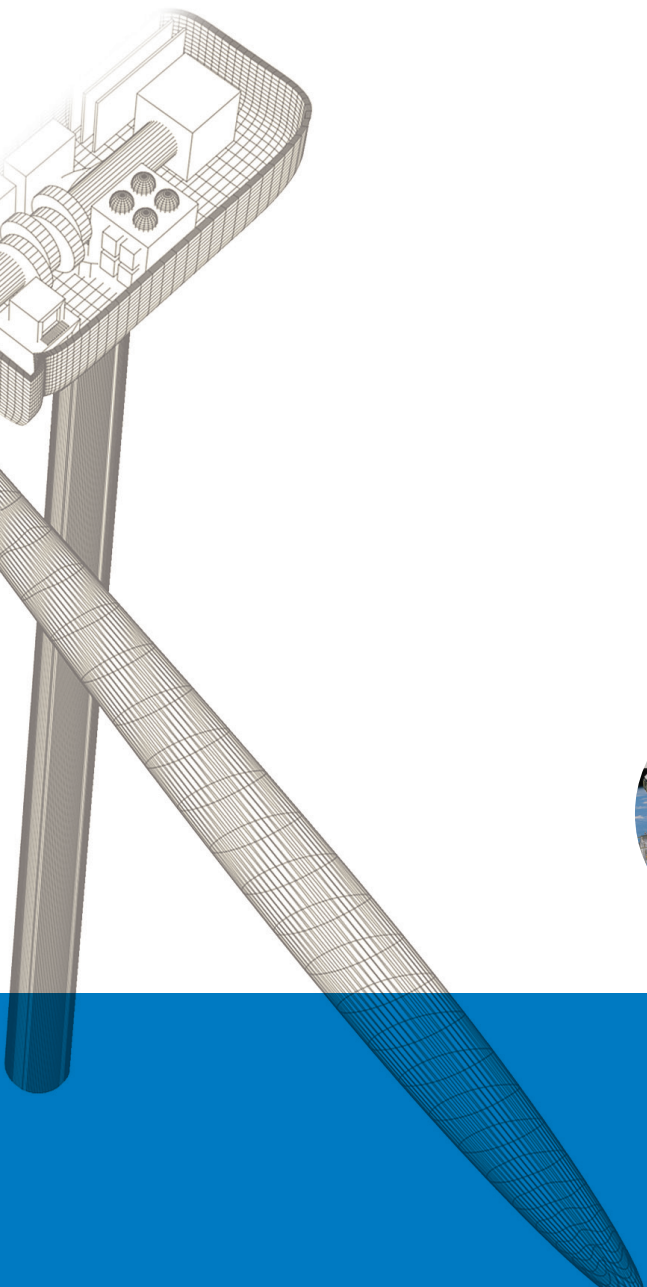




Amphenol

Since 1932 Amphenol has been the interconnect technology provider of choice to industry leading companies throughout the world. With a broad and diverse product portfolio, Amphenol is able to develop the right solutions for our customers across the diverse segments of the rapidly expanding electronics market.

With dedicated employees working at 85 facilities in more than 30 countries, Amphenol has the unique advantage of having both diversified global reach while still being a focused organization. Our focus comes from our entrepreneurial management team dedicated to specific markets and regions.



POWER

A

With Radsok, Amphenol provides a new generation of power contacts. Radsok's hyperbolic construction offers many advantages including contact coverage of 65%. This allows more power to pass through a given connector size or the use of a smaller sized connector for a given power level – saving space and weight.

Possible uses include the interconnection from generator to inverter and inverter to transformer station.

- Up to 1000 Amps per contact
- Vibration safe
- Self cleaning contacts
- Up to 75% quicker connection
- Extremely reliable
- Cost effective stamped & bent technology

Applications: Connecting generators, inverters and transformer stations.

Efficient installation of power cables.



VORTEX GT
High power connector



AMPHE POWER
Multi pole power connector



POWER BUS
High-amperage field connector



ADG & ADGC
High performance Power connector family

CONTROL

B

Amphenol's industrial Rectangular Connector Series provides a universal high-reliability modular interconnect system. Our rectangular C146 connectors are tailor made for harsh industrial environments and are designed specifically to resist salt mist, vibration, temperature extremes, and EMI. With modular inserts for high power, data, RJ45, optical, pneumatic, fiber optic, coaxial and USB. Covered in a solid full-metal shell with a robust locking system, the Amphenol Rectangular Series is a perfect solution for motion and servo control.

In addition, our proven M23, M40, and ACA-B circular connectors complete the series for motion and servo control.

Applications: Pitch control systems, servo motion control, rack and panel connections, and internal power supplies.



C 146 M
Modular rectangular system



C146 SEALED SERIES
EMC and IP67 protected



M23 & M40 SERIES
The professional standard for motion control



ACA -B SERIES
Bayonet style for harsh environments. Meets MIL-C-5015

SIGNAL

C

Amphenol provides a wide range of signal connectors for harsh environment applications.

From our industry standard threaded M12 connectors to our quick-mating Pulse – Plus connector we have a solution for every application.

In addition, we can produce filtered versions of our signal connectors to eliminate RF interference to guarantee trouble free data transfer. Plastic and full metal versions are available.

Applications: Connects sensors for wind speed, temperature, vibration, pressure and wind direction.



C091 SERIES

Professional industrial circular connectors



5015 SERIES

286 contact arrangements from 1 to 104 circuits possible



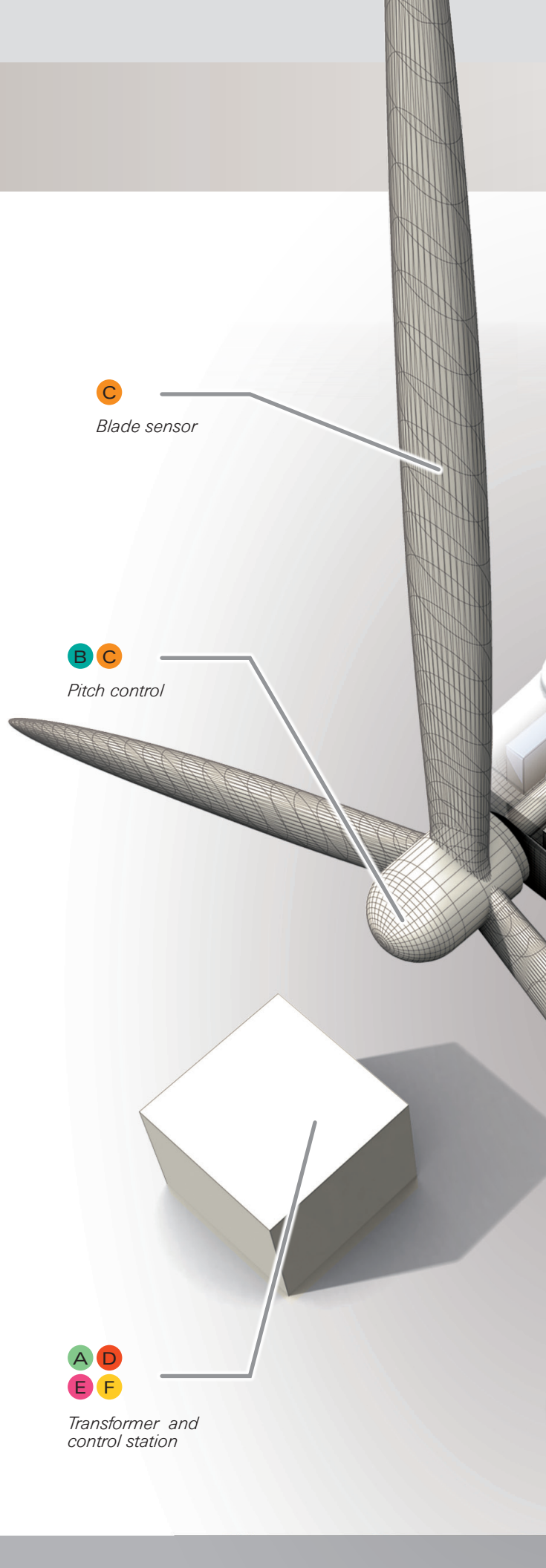
C16 – 3 SERIES

Universal high – performance signal and power connector



PULSE – PLUS

Easy quick-locking M12 connector system



C

Blade sensor

B C

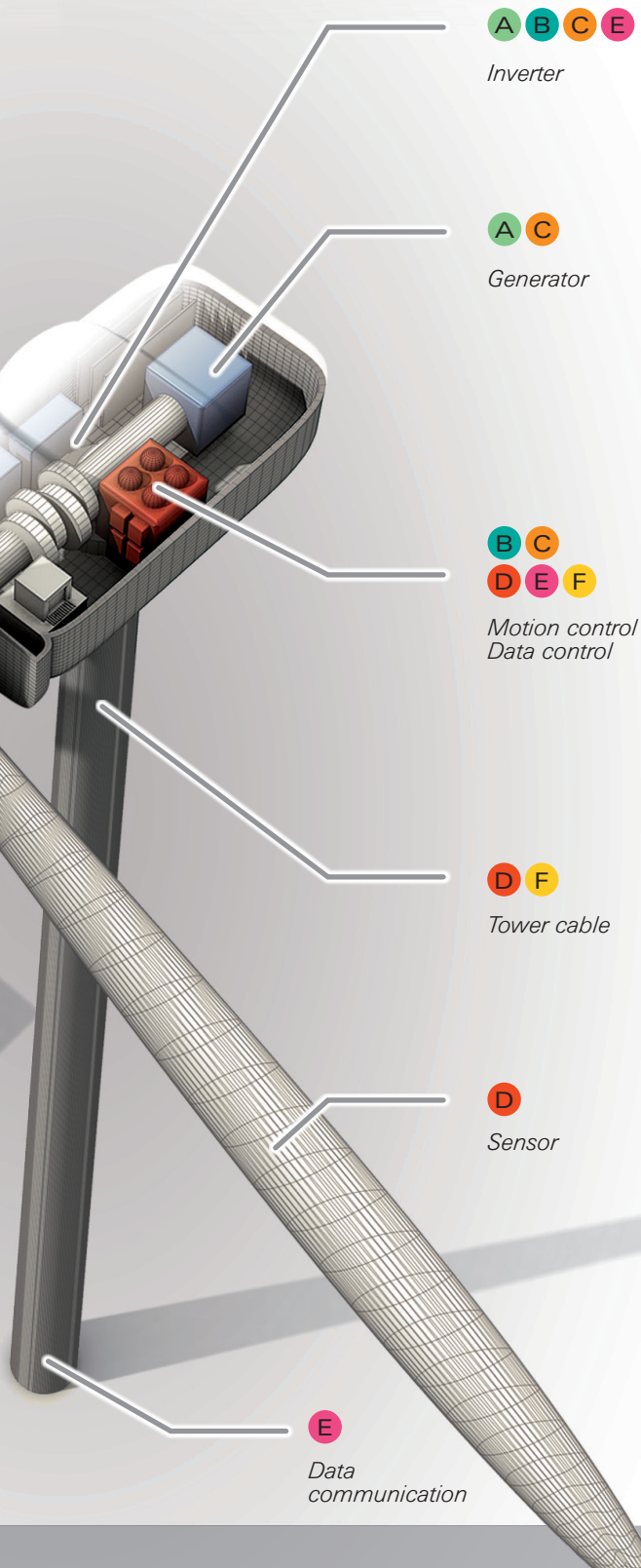
Pitch control

A D

E F

Transformer and control station

FIBER OPTIC



Amphenol's extensive range of fiber optic connectors and cable assemblies provide interconnect solutions for all situations and environments including: butt joint or expanded beam technology, single or multi-channel, single-mode or multi-mode fibers.

Amphenol supplies the complete interconnect assembly, including the connector, termination, fiber and optional accessories. Optimal for data communication in Wind Power where EMI / EMP protection is needed.

Application: Data transfer between sensors in the blades, between nacelle and base station, and for communication to the control center.



**HMATWO
HERMAPHRODITIC FIBER
OPTIC CONNECTOR**

Multi-mode fibers, dual wave-length, 1-4 way



TFOCA-II 4 - CHANNEL

Extreme harsh environment fiber optic series



M 28876 SERIES

Multi-channel fiber optic connector with Quickloc cable captivation system



CTOS SM

The lightest and most compact expanded single-mode system

COMMUNICATION

E

Amphenol's high performance connectors, switches and antenna systems for data networks guarantee uninterrupted performance in the harshest environments on the planet.

Amphenol data products are designed to provide the best interconnect solution in extreme conditions including: vibration, temperature extremes, salt mist, and EMI-RFI interference.

Applications: Data transfer between nacelle control unit and plant control.

Data distribution between wind generator and plant control.

Service interface for maintenance.

CABLE ASSEMBLIES AND TERMINATION

F

Amphenol is a world leader in cable assemblies for industrial applications. Our bus bar power distribution systems allow for more compact packaging and optimize air flow.

Amphenol termination blocks allow easy long term connections. Radsok based grounding systems decrease installation time by 75% and can be connected with one hand.

Applications: Power cables between generator and transformer.

Fiber optic connections between sensors and control units.

Motion control cables and internal power supplies.



RJ 45 SWITCH BOX

Vibration, temperature, oil, and water resistant



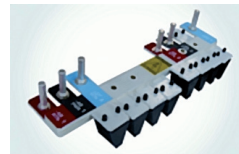
POWER BOSS SERIES

Overmoulded power distribution system



RJ 45 FIELD SERIES

Bayonett coupling, IP 67



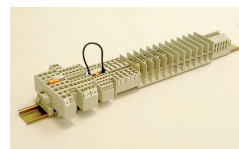
APIC BUS BAR

High density integrated system



USB SELF CLOSING CAP

Uses standard USB cables. IP 67.



PCB TERMINATION BLOCKS

individually configurable



MPA ANTENNA SERIES

High performance with compact size



GROUND|MATE SYSTEM

Highly effective, cost saving grounding system, Radsok based.

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