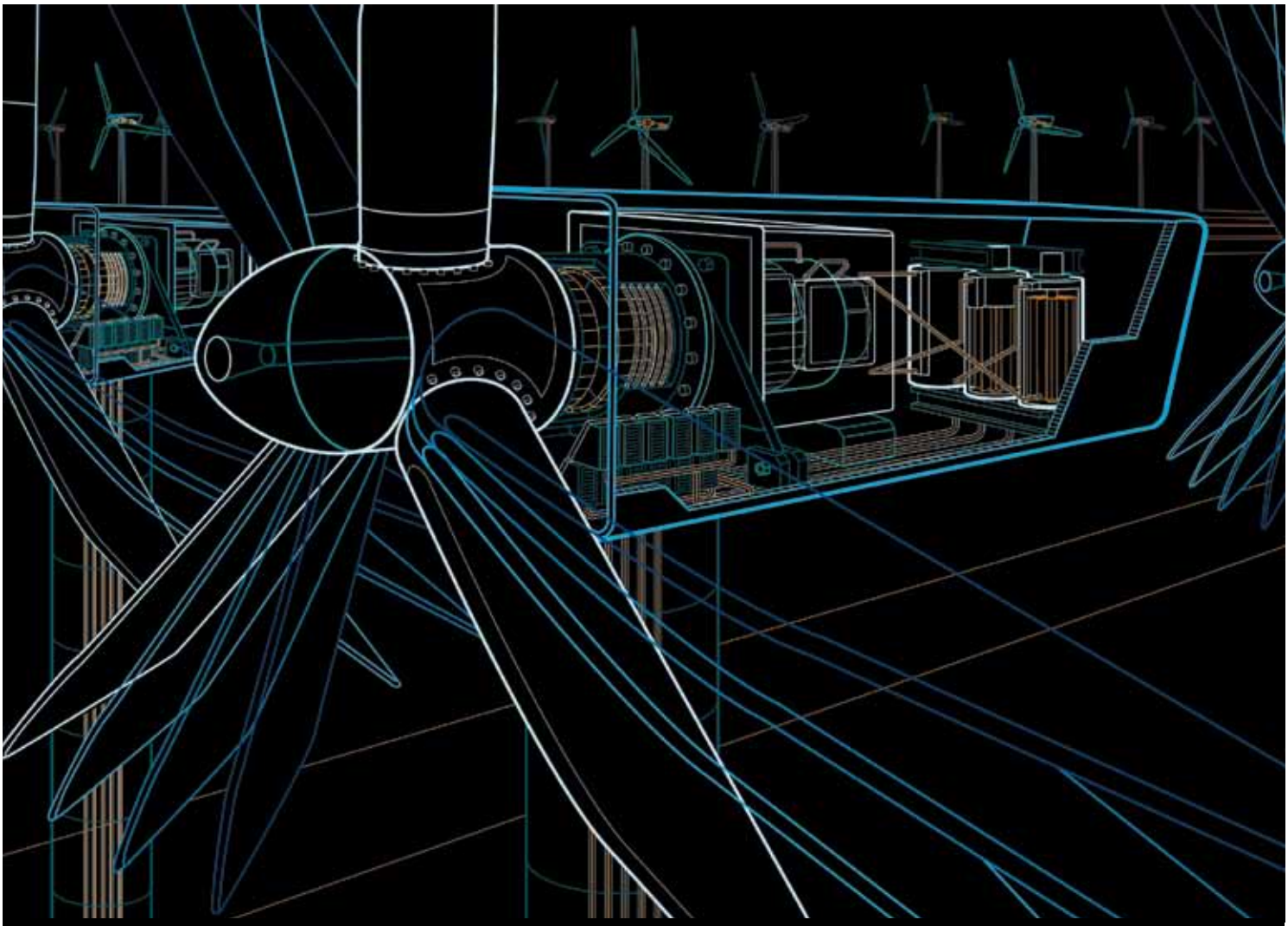
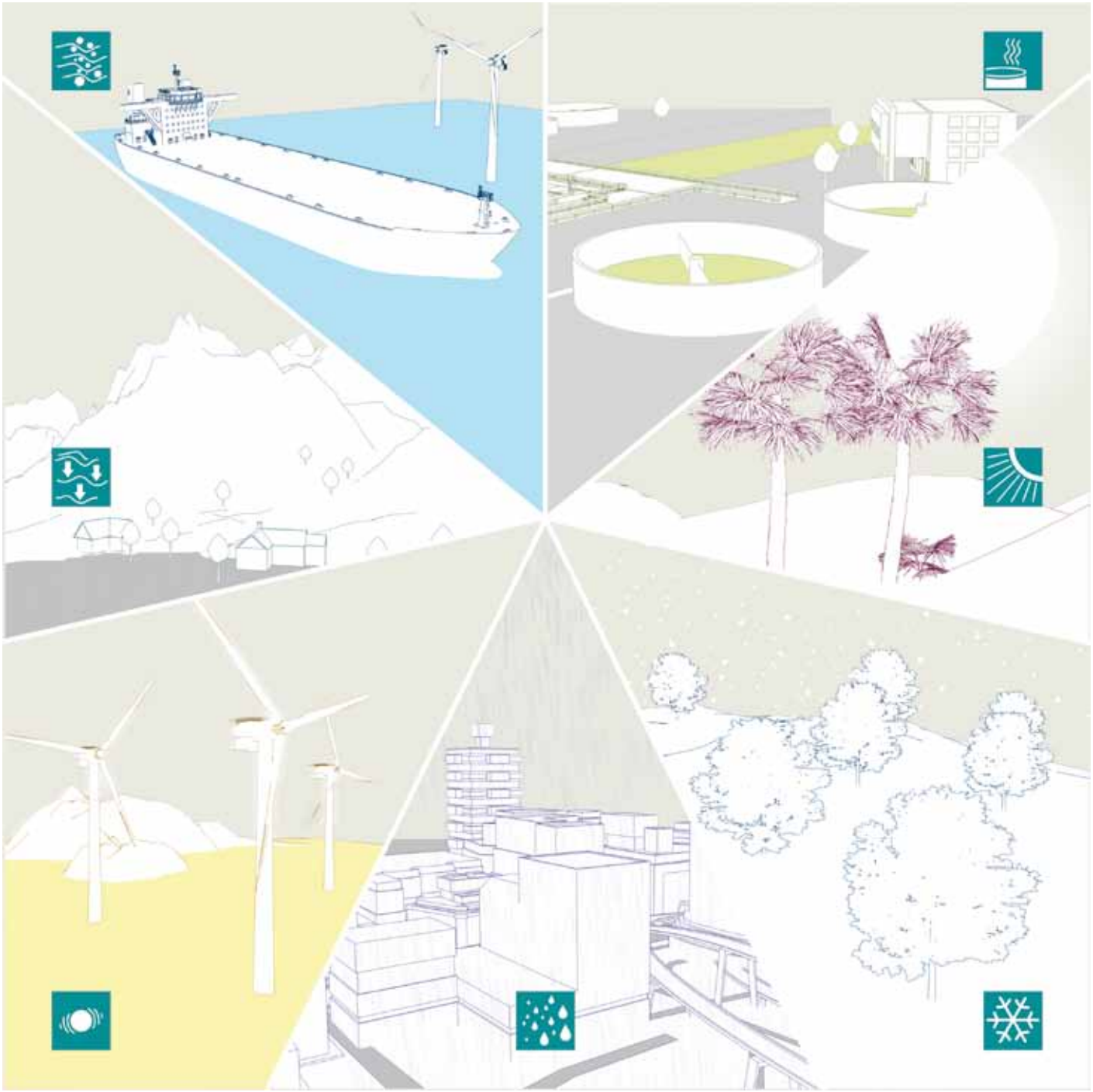


ABB PLC AC500-XC

For extreme conditions at indoor and outdoor

Power and productivity
for a better world™



PLC AC500-XC for extreme conditions at indoor and outdoor
Ruggedized variants for those fighting with the elements wind, solar, water, pumping, crane, robot, marine, glass

PLC AC500 introduction
AC500 is ABB's highly scalable PLC offering lots of different I/O, all major fieldbus interfaces and a wide range of powerful CPU modules. Built-in internet technology allow remote maintenance and remote programming as well and much more. There is always an AC500 configuration which takes care of costs. Anyway, those looking for highest performance as for motion control or closed-loop control via PROFINET find affordable solutions, too.

XC stands for extreme conditions
ABB expands the AC500 applications from factory automation to renewable energy, waste water treatment and offshore. Many other application benefit from XC as well. Almost any AC500 item is available as XC version.

Physical dimensions, basic electrical characteristics and software compatibility correspond with the standard assortment.

Extreme conditions details
AC500-XC withstands harsh conditions during operations and storage. In many cases, this makes engineering and operations much more cost-efficient.

Specification details
Extended operating temperature
- operating temperature -30 °C up to +70 °C (two couplers, regular mounting, display readable above 0 °C)
- reliable system start at -40 °C

Extended immunity to vibration
- 4 g root mean square random vibration up to 500 Hz
- 2 g sinusoidal vibration up to 500 Hz, including SD-card

Extended immunity to hazardous gases and salt mist
- G3, 3C2 immunity
- salt mist EN 60068-2-52 / EN 60068-2-11

Hazardous gases from the standard IEC60721-3.3 3C2 mean for example:
- H_2S
- SO_2/SO_3
- CL_2
- NO_X

Use at high altitudes
- operating altitude up to 4,000 m above sea level

Extended EMC requirements
- EN 61000-4-5 surge immunity test
- EN 61000-4-4 transient / burst immunity test

Benefit
AC500-XC benefit is cost saving in engineering and operations. Many extras become obsolete:
- sealing at cable entrances and doors
- shock absorbers
- HVAC for the panel
- cooling fins and cut-outs
- EMC protection

Without HVAC, energy and maintenance costs can be kept at a minimum.

So the efforts to design, purchase, install and argue for expensive housings are fully gone. Everybody affected with special cabinets or panels will save time and money thanks to the now possible straight-forward cabinet design.

Savings in cable infrastructure
Plain components are often placed in buildings for protection, while the I/O port is needed elsewhere. The then required cabling requires relative complex fieldbusses, cables and ducts. The better way can be the robust AC500-XC, placed at the point where the I/O is needed. AC500-XC eliminates the cable hassle.

Benefits for design engineers
Mechanical dimensions and electrical specifications of connections are the same as for AC500. Panel layouts and wiring harnesses can be re-used.

Mechanical design effort is mostly as for plain control gear. Time and complexity are saved.

Benefits for operators
Investments can be kept at minimum due to smaller engineering efforts. Maintenance and repair efforts are lower than with special expensive cabinets carrying plain components.

Product range
Please refer to newest AC500 catalog which presents PLC, HMI, high availability, operations and wireless.

Applications
Wind turbines, solar trackers, water treatment, sewage, construction equipment, mobile and fixed cranes, robot cell automation, vessels, navigational lights and guidance equipment, beacons, billboard, display, tunnel safety, rail-borne automatic vehicles.

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