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ABB MOTORS AND DRIVES

# Drives and motors for scrubber systems

## Saving energy in exhaust gas cleaning process



# Efficiency. Reliability. Performance. Everything counts.

With the help of application expertise gained over many years, we've developed drives and motors that enable efficient, reliable and sustainable exhaust gas cleaning process. Because everything counts.

## Environmental sustainability

International Maritime Organization (IMO) has set the maximum allowable content of sulfur in fuel used by ships through MARPOL 73/78 'International Convention for the Prevention of Pollution from Ships' that entered into force in 2005.

All ships operating in SECA (Sulfur Emission Control Area) are required to use fuel with the sulfur content of 1% or less since July 2010 and to use fuel with the sulfur content of 0.1% or less since 2015. In addition, the requirement of using fuel with the sulfur content of 0.5% or less in all oceans throughout the world is to take effect in 2020.

## High efficiency

Pressures to reduce energy consumption and lower carbon dioxide emissions come from everywhere. Using ABB's variable speed drives and high efficiency motors to intelligently run applications increases energy efficiency. This has enormous positive financial, operational and environmental implications.

## Reliability

Using the highest quality solutions will ensure your vital equipment never lets you down, either at sea or on shore. At the same time, this reliability will lower the lifetime cost of your assets through reduced maintenance.



Our high-quality products are further enhanced through ABB Ability™ – our digital services that enable you to remotely monitor the performance of your equipment and predict when they need maintenance.

## Marine type approvals

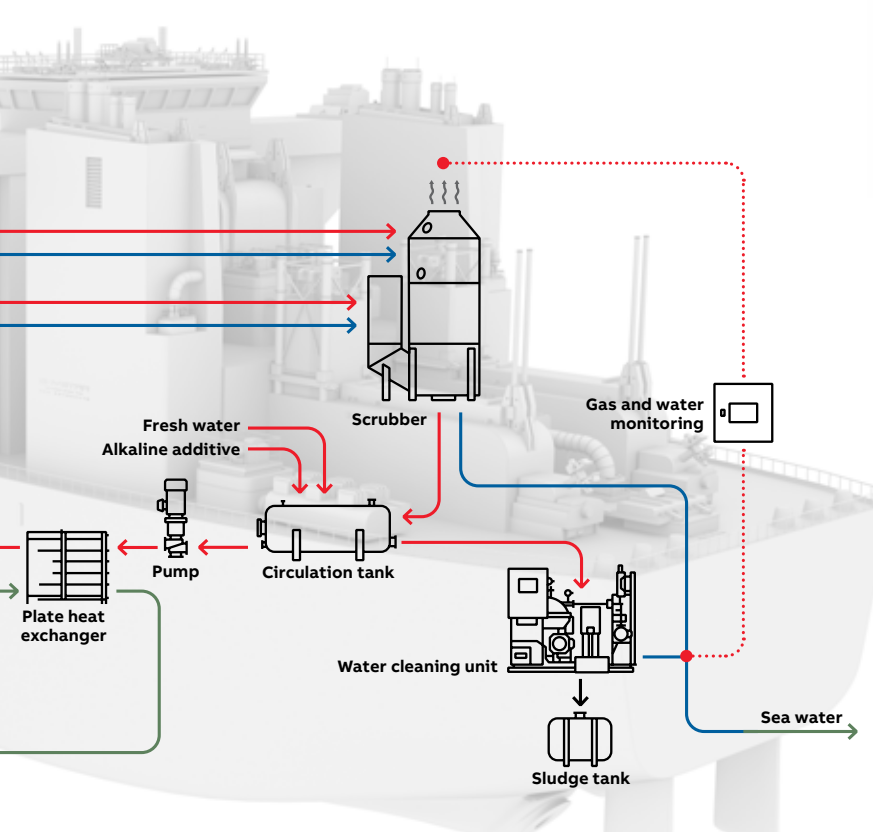
ABB's ACS880 drives, softstarters and motors fulfill marine and offshore requirements, and the design and operation comply with regulations from world's leading classification societies.



**ABB offers global coverage,  
always available wherever you are.**

Marine is a truly global industry and disruption can take place anywhere in the world. Our unrivalled global service network and local presence in all corners of the world means our performance and support are consistent, wherever you are.





In a hybrid scrubber arrangement, both open-loop and closed-loop modes are readily available. Open-loop operation reduces costs whenever possible, but a switch to closed-loop operation can be made whenever local water discharge regulations demand it.



**Frequency converter ACS880-01, ACS880-04, ACS880-04XT and ACS880-07 series**  
**0.55 - 2800 kW, 400, 440, 500, 690 VAC**

- Wallmounted AC-drives, IP21 or IP55 frames direct on the wall with vibration, dampers
- Robust and marine type approved design
- Stepless speed control for scrubber pump motors
- Inbuilt application PID controller for process scrubber pump control
- Redundancy control incase of multipump system
- Application data logging with inbuilt load analyzer
- Connectivity ABB Ability™
- Ready for any IO or FB gateway control
- Inbuilt free application block programming for taylor made functionality
- All parameters & sw in a removable memory stick
- Supporting induction, PM and SynRM motors



**High efficiency drive and motor packages for scrubber systems**

- Pumps
- Separators
- Compressors



**IEC low voltage Marine motors**  
**0.09 - 2000 kW, IEC frame sizes 56 to 500**

- Economical and reliable high performance in heavy duty operations
- IE3 efficiency to meet the tightened regulations
- Type approved and certified to all the major international classification societies
- Different motor technologies available providing fit-for-purpose solution
- Frame material: aluminum or cast iron
- Wide range of options for all applications

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For more information, please contact  
your local ABB representative or visit

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