## **MAN Energy Solutions**

### Future in the making

# SaCoS 5000

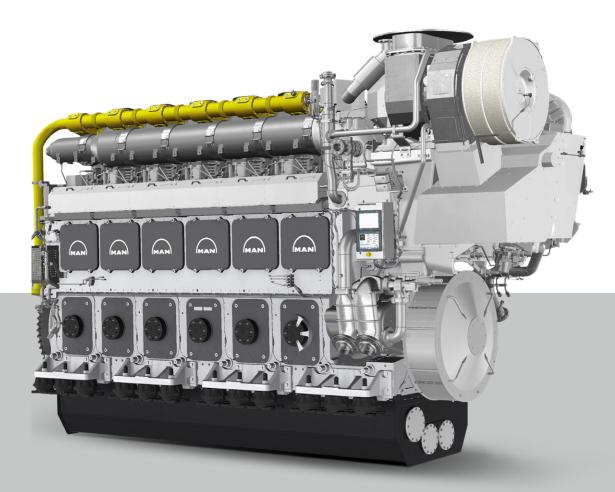
## **Engine control system**

#### Ready for the future:

SaCoS 5000 is the evolution of the well-known SaCoSone control system with proven reliability, robustness, tailored functionality for the demands of MAN Energy Solutions engines and extended safety features.

#### Benefits at a glance

- Reliability and safety
- Performance
- Long-term support
- Modular-kit approach



## SaCoS 5000 platform Key benefits



#### **Reliability and safety**

SaCoS 5000 is the evolution of the well-known SaCoSone control system with proven reliability, robustness, tailored functionality for the demands of MAN Energy Solutions engines and extended safety features.

- Proven technology and schematics
- Extended temperature range (-10°C...80°C)
- New SIL-proven redundant emergency stop feature



#### Long-term support

The newly developed hardware modules can be produced as new SaCoS 5000 device as well as a compatible SaCoSone device in order to ensure the availability of spare parts for the next decade.



#### Performance

The introduction of a new processor architecture enables a scalable increase in CPU performance and memory in order to be prepared for constantly increasing requirements.



#### Modular-kit approach

Through the consistent development of a holistic modular building kit concept, all SaCoS product lines will always be based on exactly the same hardware and software components.





#### Modern user interface

A modern user interface was developed together with external design experts to ensure a consistent user experience for all users of our four-stroke and two-stroke engines.

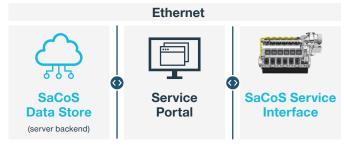


#### Improved service functions & usability

All essential operating functions and work steps are brought together in the new SaCoS 5000 ServicePortal in order to install, configure and diagnose the automation system of our engines via one interface.



Main overview page of the SaCoS 5000 local operating panel



SaCoS 5000 ServicePortal architecture



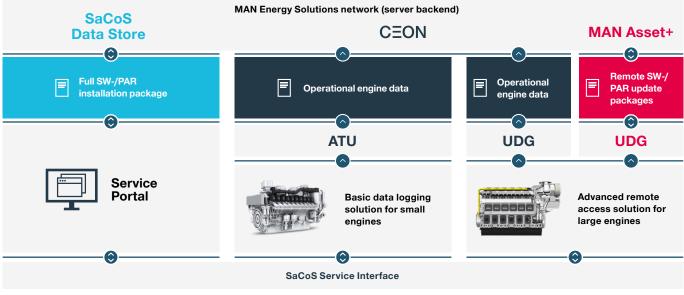
#### **Digital connectivity**

SaCoS 5000 is prepared to implement the necessary interfaces to be able to quickly adapt to the newly planned and important future digital business models via remote access solutions.



#### Cyber security by design

SaCoS 5000 is developed based on a "Cyber Security by Design" approach and features all relevant technological prerequisites in order to be able to meet the highest security standards in the future.



Connectivity and security architecture

ATU: Analytics Telemetry Unit | UDG: United Data Gateway | SW: Software | PAR: Parameter

## SaCoS 5000 roll-out timeline 2023



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