

Digital Safety Control TELEPERM XS

Framatome's Digital Safety Control for Emergency Diesel Generators (EDG)

The leading TELEPERM XS digital system platform manages safety protection and control systems

Challenge

EDG safety controls must be safe and reliable in order to assure emergency power during design base events in a nuclear power plant. Single failure and diversification considerations shall be fulfilled by such controls. In addition, self-monitoring, simple design, easy maintenance and repair must minimize the potential risk of outage times due to repairs.

Solution

TELEPERM XS (TXS) is Framatome's I&C system platform for digital EDG safety I&C. It comprises all the necessary hardware and software components, including the software tools required for engineering, testing, commissioning, operation and troubleshooting.

TXS is suitable for new EDGs as well as for upgrading and modernization of existing EDGs of all types and suppliers. The first TXS systems were put into operation more than ten years ago and have been working reliably ever since. More systems and new applications are implemented each year for various safety applications. TXS has promoted Framatome the market leader in the field of digital safety I&C.

This success confirms the advanced design principles. Building on this sound basis, TXS is subject to continuing development. The experience gained through engineering, installation and operation guides our development towards best EDG performance and optimum fulfillment of customer requirements.



Customer benefits

- Fit for initial setup and flexible for future modernizations
- Operation and monitoring in compact systems
- Keeps system qualification up to date in the long term
- Virtually no maintenance
- Extended test intervals
- Installation in third-party cabinets
- Included spare parts management

**Your performance
is our everyday commitment**

Technical information

TELEPERM XS fulfills the most stringent demands on system reliability, fault prevention and fault control by means of:

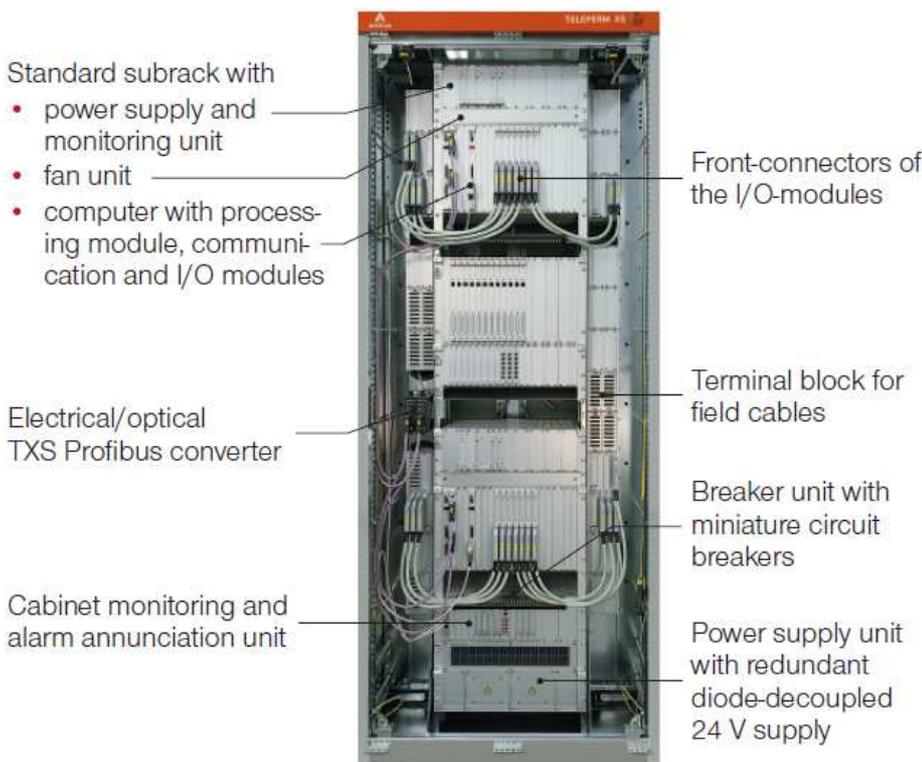
- The ability to implement structures with high levels of redundancy in accordance with plant requirements
- Proven software and manufacturing quality
- Early detection of faults due to extensive self-monitoring
- Isolation of redundant subsystems with fiber-optic cables
- Prevention of fault propagation by means of intelligent signal status processing
- Systematic handling of priorities between systems of different safety classes.
- Optimized footprint
- Robust hardware components

References

Framatome is a specialist for digital I&C technology in nuclear power plants. Vast experience on reactor protection systems from the last 35 years is tapped to build reliable EDG safety controls. Moreover, experience on different applicable regulations (IEEE, RCC-E, KTA) from all over the world allows a comprehensive design that covers various standards.

Framatome knows the requirements of all these environments and can offer you the optimum architecture for your plant, providing the highest system reliability, fault prevention and fault control.

The quality of TXS for all safety related systems has been demonstrated over the past 10 years in a wide variety of power plants worldwide. Thanks to high quality, reliability and robustness, TXS is a major contributor to increased EDG reliability.



TELEPERM XS
Processing module

Standard cabinet

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