

ABB EXCITATION SYSTEMS

UNITROL® 1000 Compact System

The optimal pre-engineered control solution for land-based and marine applications

When space and speed are of essence, a small pre-packaged and pre-tested excitation system is the key to a successful project delivery.

ABB UNITROL® 1000 Compact System is a pre-engineered excitation system, conveniently mounted on a backplate for easy installation and seamless integration with any generator control system.

As one of the smallest systems in its category, it is the perfect solution for locations where space is critical, making it ideal for new installations or upgrade projects.

Designed for applications requiring single or dual channel Automatic Voltage Regulators (AVR), every version of the new Compact System comes equipped with UNITROL® 1020 FULL.



This ensures all functionalities are inherited and compliant with the DNV Cyber Security Profile 1 (based on IEC 62443) regulations. Additionally, Power System Stabilizing (PSS) capabilities can be optionally included.

All UNITROL® 1000 Compact Systems are pre-mounted and wired on a backplate, and thoroughly tested before delivery, significantly reducing the need for onsite adjustments and minimizing wiring errors.

Certifications



DNV Cyber
Security Level 1

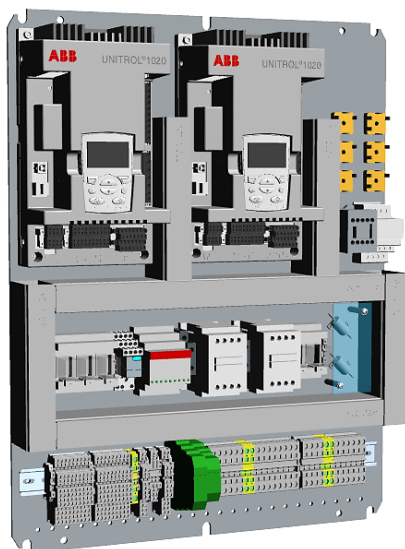


UL 6200



Easy to use and install

ABB UNITROL® 1000 Compact System comes equipped with an extensive number of technical highlights that make it easy to use and fast to install. Ideal for power plants and shipyards, very limited excitation expertise is required to handle it.



Advantages

- **Space-saving design:** Among the smallest in its class, perfect for compact spaces
- **Cost-effective:** Reduced installation, commissioning, and maintenance costs due to its compact, pre-engineered setup.
- **Cyber-Secure:** Compliant with DNV Cyber Security Profile 1.
- **High Availability:** Dual-channel version ensures continuous operation even if one channel fails.
- **Fast to commission,** even with limited experience with excitation systems through the AVR & PSS tuning assistant software.
- **Grid code compliant:** Embedded PSS functions ensure compliance without extra devices.
- **Experts support:** Experts available remotely or onsite for commissioning support. In-house expertise for regulation optimization and grid connection studies

Technical highlights

Single or dual channel systems

UNITROL® 1020 FULL functionalities:

- All regulation types available: AVR/FCR/PF/VAR/Limiters
 - Automatic Synchronization
 - MODBUS TCP Communication
 - Rotating Diode Monitoring (RDM)
 - Reactive Load Sharing via RS485
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Optional PSS – Power System Stabilizer function

AVR & PSS tuning assistant software

Cyber Security certified (DNV Cyber Security Profile 1)

Designed to meet any grid code compliance requirements.

Editable drawings for engineering modifications

Let's talk

ABB Excitation & Synchronization

Contact us: [Contact form](#)

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UNITROL® 1000 customer support line

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