

THE SWITCH SINGLE DRIVE FOR MARINE





STANDARD DRIVE FOR SPECIFIC MARINE **APPLICATIONS UP TO 6 MW**

With over 1,500 rugged marine-specific drives now in operation, The Switch single drive has been thoroughly certified and proven in all types of challenging AC power distribution applications.



MARINE-SPECIFIC DESIGN

No compromises in features, materials or solutions

- Very simple and robust cabinet structure
- Fast connectors in the power module enables fast and easy maintenance
- Allows system-level optimization
- Vessel's freshwater cooling system connection
- Rigid foundation with vibration dampers for smooth operation
- IP44 enclosure for both power module and cabinet robust for the environment and fast maintenance

Propulsion

Drive to connect electric propulsion or other motors to AC system. Both passive and active rectifier available. Support for tandem configuration.

Power range from 800 A to 5,600 A.





Shaft generator

Drive to connect shaft generator to AC system. Both inline and geared solutions available. PTI-PTO and PTH functionality.

Power range from 800 A to 5,600 A.

Drive to connect battery to AC system, enabling effective battery use for multiple purposes. Load sharing with other energy sources.

Power range from 800 A to 1,600 A. Several units can be connected to the same system.









Inline PTI-PTO

Geared PTI-PTO-PTH

Battery

Fuel cells and solar

Drive to connect fuel cells, solar or other DC source to AC system. Configurable amount of DC outputs.

Power range from 800 A to 1,600 A. Several units can be connected to the same system.







WIDEST RANGE OF **PERMANENT MAGNET (PM) MACHINES AVAILABLE**







PMM1000M direct-drive systems

PMM1500M Up to 250 rpm / 230 kNm Up to 220 rpm / 630 kNm Typically used in 1–2 MW Typically used in 2–4 MW direct-drive systems

PMM2000M Up to 130 rpm / 2,100 kNm Typically used in 4–12 MW direct-drive systems

Our wide range of PM machines improves overall efficiency for propulsion and onboard electricity generation, helping reduce CO₂ emissions and operating expenses.

Advantages of PM technology

- Higher efficiency, lowering fuel consumption and emissions
- Simple construction
- Higher reliability
- Less maintenance
- Reduced space requirements
- Enhanced shaft line dynamics





The Switch PMM can be used as a direct-drive propulsion motor, either conventionally with its own bearings and shaft or as a novel concept, utilizing the common bearings between the propulsion shaft and motor. A tandem configuration is also possible on request.

FULL-POWER TESTING UP TO 18 MW



Complete full-power testing with machines and drives up to 18 MW is available at our Large Drive Test Center in Lappeenranta, Finland.

All tests fulfill international standards and class requirements.



The Switch is now part of the BEMAC Group whose products are unified under the BEMAC brand.



www.theswitch.com