



# STATIC INVERTER FOR NAVAL APPLICATIONS

**The fully solid-state 60 Hz and 400 Hz Inverter is built according to most advanced technology. Unique design with modular configuration covers versatile applications with shipborne operation.**

The technology is based on pulse width modulation (PWM) technique using a 3ph IGBT (insulated gate bipolar transistor) power stage for active rectification for the input voltage, and a PWM half-bridge topology for generating the DC voltage via an output transformer and a rectifier.

The output voltage control is of type average current mode providing excellent line and load regulation.

State-of-the-art control electronics are used providing power factor correction control and output voltage control as well as a build-in fault detection and an RS485 interface for remote control.

Overload and short circuit situations are managed by accordant derating of the power stage.

For battery testing and supervision of external batteries there are several inputs for evaluation of the battery condition. The connection of the batteries and the load is controlled by the converter using external power relays.

Constant current mode is used to charge the batteries until the maximum battery voltage is reached. The fully charged battery will be maintained by a trickle charging mode. Charging parameters can be adjusted on the user interface (LCD display and push buttons) on the front panel of the converter. The maximum charging current



can be adjusted, the adjustment is password protected. A fast charging mode can be selected manually by the user interface.

## For Submarine Type 209

### Standard Features

- ✘ High efficiency
- ✘ Low noise
- ✘ High reliability
- ✘ Modular design

### Application

- ✘ U 209 rotating inverter replacement

### Support Service

- ✘ Complete Integrated Logistic Support (ILS)

