The Static Frequency Converter is designed for naval application according to latest international standards. The converter has an integrated synchronisation circuit to operate two converter of the same model in parallel operation mode. Features for power distribution are provided. The unit is designed for air cooling by integrated fans - air inlets and outlets can be connected to the ships ventilation system. There are possibilities for local and remote monitoring and control. All important internal electrical parameters are monitored by an integrated Fault Detection and Location (FDL). The detected malfunctions are displayed on a 7-segment display on the monitoring panel of the converter for easy fault location and repair. The Frequency Converter is designed in PWM (Pulse Width Modulation) technique. An unregulated rectifier with transformer and multi-pulse rectification generates the DC-link voltage. This special designed and high reliable rectifier not only generates a sinusoidal input current, but also generates a nearly unity power factor.
**Electrical Specifications**

**Input**
- Voltage: 440 V, 3-ph
- Frequency: 60 Hz
- Quality of Mains: Acc. to BV 30, Annex f, STANAG 1008, Edition 8

**Output**
- Voltage: 115 V, 3-ph delta (adjustment ± 5%)
- Quality of Output: Acc. to MIL-STD 1399, Section 300 A, Type III
- Static Tolerance: < ± 1% average of three line to line voltages
- Voltage Unbalance: ≤ 5% at unsymmetrical load of 100% (one phase interrupted)
- Frequency: 400 Hz
- Frequency Tolerance: < 0.1%
- Power: 30 kVA
- Power Factor: 0.8 lagging to 1.0 to 0.8 leading
- Efficiency: > 90% at 100% load
- Short-Circuit Current: 2 x Inom for 30 seconds

**Environmental Specification**
- Temperature Range: 0°C to +50°C (operation), -25°C to +70°C (storage)
- Humidity: ≤ 95%, non condensing
- Airborne Noise: Approx. 65 dB (A)
- Shock: Acc. to BV 0430/1.89 (mounted on shock mounts)
- Vibration: Acc. to BV 0440/10.90
- EMC: Acc. to MIL-STD 461 D, CE 101, CE 102, RE 102
- Protection: IP 23 acc. to DIN 40050

**Physical Characteristics**
- Dimensions: 1600x610x702 (HxWxD) mm without shock mounts
- Weight: 550 kg, ± 5%

**Design Characteristics**
- Indicators: Converter stand-by/online, Input voltage out of range, Output over current, Air inlet temperature, Air flow (fan supervision), 7-segment fault display
- Controls: Start/Stop, Lamp test, Remote control
- Monitoring: Time counter, Output Voltage and Current, Insulation meter
- Cooling: Self-cooling by fans
- MTBF: >20.000 h
- MTTR: Up to 30 minutes

Specification subject to change without notice