



# STATIC FREQUENCY CONVERTER 15 KVA

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. The three phase Inverter stage is today either built up by IGBT's or MOS-FET's as power switches. High switching frequencies require only small L/C output filtering and enable quick regulation behavior. An output transformer is used for galvanic separation and voltage adaptation.

## For Naval Application

### Standard Features

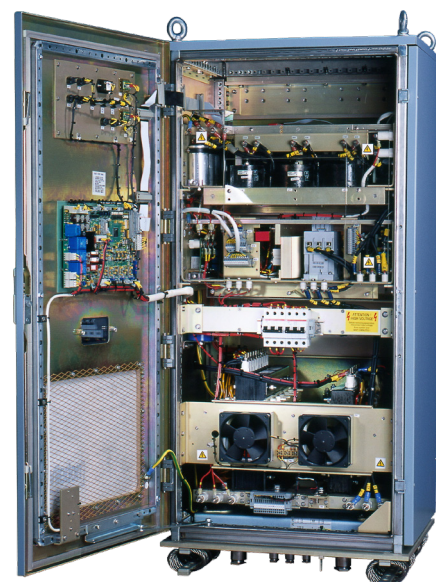
- High efficiency
- Low noise
- High reliability
- Low weight and size
- Remote control
- Input PFC

### Application

- Weapon Systems
- Sonar
- Radar
- Communication

### Support Service

- Complete Integrated Logistic Support (ILS)





## Electrical Specifications

### Input

Voltage.....	440 V, 3-ph
Frequency .....	60 Hz
Quality of Mains.....	Acc. to BV 30, Annex f, STANAG 1008
.....	Edition 8 and acc. to MIL-STD 1399, Section 300 A, Type I

### Output

Voltage.....	115 V, 3-ph (Other Voltage on request)
Quality of Output.....	Acc. to MIL-STD 1399, Section 300 A, Type III
Static Tolerance .....	± 0.5% at voltage sensing point and unsymmetrical load of 50%, or ± 3% at voltage sensing point and unsymmetrical load of 100% (one phase interrupted)
Voltage Unbalance .....	≥ 1% at voltage sensing point and unsymmetrical load of 50%, or ≥ 3% at voltage sensing point and unsymmetrical load of 100% (one phase interrupted)
Frequency .....	400 Hz
Frequency Tolerance.....	< 0.01%
Power .....	15 kVA
Power Factor .....	0.8 lagging to 1,0 to 0.8 leading
Efficiency .....	> 92% at 100% load
Short-Circuit Current.....	2 x Inom for 10 seconds

## Environmental Specification

Temperature Range .....	-5°C to +45°C (operation), -25°C to +70°C (storage)
Humidity .....	≤ 98%, non condensing
Airborne Noise .....	Approx. 58 dB (A)
Shock .....	Acc. to BV 043 (85)
Vibration .....	Acc. to BV 044 (87)
EMC.....	Acc. to MIL-STD 461 E, CE 101, CE 102, RE 102
Protection.....	IP 23 acc. to DIN 40050

## Physical Characteristics

Dimensions.....	1200 x 610 x 525 (HxWxD) mm without shock mounts
Weight.....	250 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
Cooling.....	Self-cooling by fans