

## Static Frequency Converter 30 kVA

*For Naval Application*



EUROATLAS 30 kVA Static Frequency Converter, Model 4062

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.

### **Standard Features**

- High efficiency
- Low noise
- High reliability
- Low weight and size
- Remote control
- Parallel switchable

### **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

### Output

Voltage.....	115 V, 3-ph delta (adjustment $\pm 5\%$ )
Quality of Output.....	Acc. to MIL-STD 1399, Section 300 A, Type III
Static Tolerance.....	$< \pm 1\%$ average of three line to line voltages
Voltage Unbalance .....	$\leq 5\%$ 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 $I_{nom}$ for 30 seconds

## Environmental Specification

Temperature Range.....	0°C to +50°C (operation), -25°C to +70°C (storage)
Humidity.....	$\leq 95\%$ , 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, $\pm 5\%$

## 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



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