

Static Frequency Converter 15 kVA

For Naval Application



EUROATLAS 15 kVA Static Frequency Converter, Model: 4063

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.

Standard Features

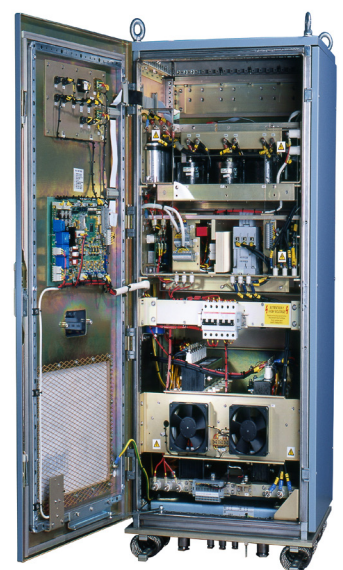
- High efficiency
- Low noise
- High reliability
- Low weight and size
- Remote control
- Input PFC

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	$\pm 0.5\%$ at voltage sensing point and unsymmetrical load of 50%, or $\pm 3\%$ at voltage sensing point and unsymmetrical load of 100% (one phase interrupted)
Voltage Unbalance	$\leq 1\%$ at voltage sensing point and unsymmetrical load of 50%, or $\leq 3\%$ 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 I_{nom} for 10 seconds

Environmental Specification

Temperature Range.....	-5°C to +45°C (operation), -25°C to +70°C (storage)
Humidity.....	$\leq 98\%$, 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, $\pm 5\%$

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
Cooling	Self-cooling by fans

Specification subject to change without notice



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