

Converter / UPS System 30 kVA / 60Hz

For Naval Surface Vessel



Standard Features

- Compact size
- High efficiency
- High reliability
- 19" modular design
- STANAG 1008 /DNV/GL

Application

- Naval Surface Vessel

Support Service

- Complete integrated Logistic Support (ILS)

3-phase Converter 440 VAC/ 60 Hz to 3x 115 VAC/ 60Hz, Model: 4079

This efficient and compact Converter / UPS System is designed for use on front line Naval combatants. The equipment was designed and developed by EUROATLAS for use by Thyssen Krupp Marine Systems on their latest generation of MEKO®-200A type general purpose vessel for which it converts and maintains power on essential equipment for up to 1 minute at 100% load. The Converter takes 440 VAC / 60 Hz 3-phase and outputs a secure 115 VAC / 60 Hz 3-phase supply.

Key features of the Converter / UPS System:

- Technology based on pulse width modulation (PWM)
- 3-phase IGBT power stage
- Soft start circuit
- Start / stop / local / remote - management
- 3-phase voltage sense with active rectifier and averager
- Automatic bypass
- Aux supplies for +/-15V, 5V and 24V
- Design according to DNV, GL ,STANAG 1008
- 36 kW battery capacity
- 10 Years battery lifetime



Electrical Specifications:

Input

Voltage..... 440 V, 3-phase acc.
..... to STANAG 1008 e8
Frequency..... 60Hz +/- 5%
Power Factor > 0,9

Output:

Output specification..... STANAG 1008 e8
Voltage..... 115 VAC, 3-phase
..... +/- 5% adjustable
Frequency..... 60 Hz with
..... < ± 0,1% tolerance
Power 30 kVA
cooling requirement..... 700 m³ /h
Overload..... 30 % for 10 min.
Short circuite current..... 300 % of nom.
..... current for 3sec.
Power Factor 1,0...0,8 ind
Distortion (THD)..... < 5%
Efficiency ≥ 90 % at full load

Battery:

Typ..... Hermetically sealed
..... lead acid battery
Qty. of batteries..... 17, each 12 VDC
Capacity of one cell 352W / 2 min.
Capacity battery bank... 36 kW / 2min.
Lifetime:..... min. 10 Years

Environmental Specifications:

Temperature Range..... -5° C to 50° C
Storage-
Temperature -20° C to +70° C
Humidity..... nom. 85%
..... max. 100% for 1 h
..... non condensing
Shock..... Acc. to BV 0430
RFI / EMI acc. to EN55011
..... and EN61000
Noise < 65 db(A) 20 uPa
..... in 1m distance
Insulation Class acc. to VDE 0110,
..... Part 1
Protection IP 23

Physical Characteristics:

Dimensions..... D = 610 mm
..... W = 1020 mm
..... H = 1400 mm
Weight 790 kg +/- 5%

Design Characteristics:

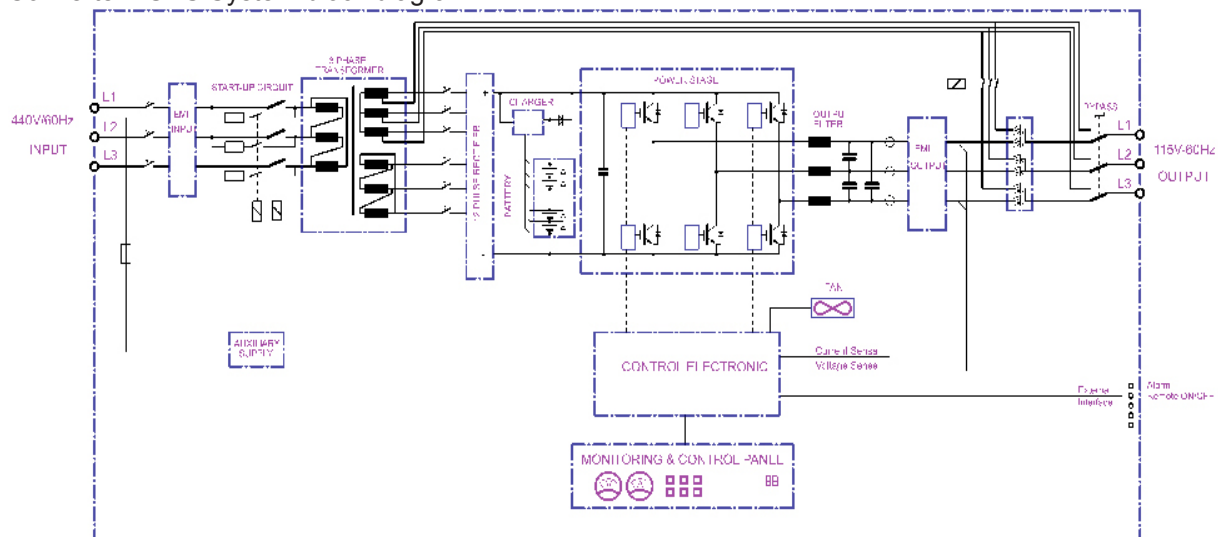
Design Modular
MTBF..... 18,000 h
MTTR..... < 20 min.
Design standard DNV, respectively
..... GL, Electrical
..... GL III-1-3a

Failure System..... Fault detection,
..... fault analysing
..... and display

Control & Monitoring

- Input voltage
- charging voltage
- Output voltage
- Over load
- Temperature
- 24V aux voltage
- Fan

Converter / UPS System block diagram



Specification subject to change without notice



WÄRTSILÄ JOVYATLAS EUROATLAS GmbH
Zum Panrepel 2
28307 Bremen
Germany

Phone +49-421-486930
Fax +49-421-4869341
info@euroatlas.de
www.euroatlas.de