

DC - DC Converters

For Navy Service and Ground Applications



EUROATLAS small DC - DC Converters

This series of small but powerful solid-state DC to DC Converters are designed especially for harsh environmental conditions.

Originally applied in high quantity for German and Norwegian torpedoes, the Converters are very well suitable for extreme military requirements in mobile systems, naval ships and submarines.

The DC/DC Converters are overload capable, short circuit protected and the housing is hermetically sealed. The output is isolated from the input and these units are capable to withstand a wide input voltage range and are prepared for mounting on Printed Circuit Boards. An optional Synchronization-PCB allows parallel operation of up to 16 Converters.

Standard Features

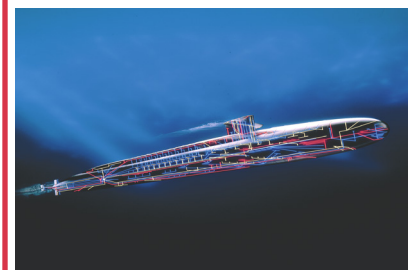
- Overvoltage Protection
- External Sense
- MTBF > 50.000 h
- Parallel Operation with additional Sync.-PCB

Application

- Weapon systems
- Military Vehicles

Support Service

- Complete Integrated Logistic Support (ILS)



Model 5023

Electrical Specifications:

Input:
Voltage Range 17 to 42 VDC
Spikes 50 V / 100 μ s
Inrush Current < 4.5 A (limited)

Output:
Rated Voltage 5 VDC
Static Voltage
Tolerance \pm 1%
Ripple typ. 50 mV pp
Rated Power 32.5 W
Current Limitation > 6.5 A
short-circuit
protected
Max load capacity 2200 μ F
Efficiency > 82%

Physical Characteristics:

Dimensions D = 94 mm
W = 66 mm
H = 42 mm
Weight 550 g \pm 10%
Protective System IP65
Painting jet black
RAL9005

Model 5022

Electrical Specifications:

Input:
Voltage Range 17 to 42 VDC
Spikes 50 V / 100 μ s
Inrush Current < 3.5 A (limited)

Output:
Rated Voltage \pm 15 VDC
Static Voltage
Tolerance \pm 0.5%
Ripple typ. 20 mV pp
Rated Power 30 W
Current Limitation > 1 A
short-circuit
protected
Max load capacity 1000 μ F
Efficiency typ. 83%

Physical Characteristics:

Dimensions D = 94 mm
W = 66 mm
H = 42 mm
Weight 580 g \pm 10%
Protective System IP65
Painting jet black
RAL9005

Model 5014

Electrical Specifications:

Input:
Voltage Range 17 to 32 VDC
Spikes 50 V / 100 μ s
Inrush Current < 1.3 A , < 200 μ s

Output:
Rated Voltage \pm 15 VDC
Static Voltage
Tolerance \pm 0.5%
Ripple < 10 mV pp
Rated Power 3 W
Current Limitation > 0.3 A
short-circuit
protected
Max load capacity 1000 μ F
Efficiency typ. 70%

Physical Characteristics:

Dimensions D = 53 mm
W = 53 mm
H = 31 mm
Weight 170 g
Protective System IP65
Painting jet black
RAL9005

Common Environmental Specifications:

Operating Temperature -25° C to +80° C
Storage Temperature -55° C to +85° C
Rel. Air Humidity < 95%
Low Pressure > 0.12 bar
Shock acc. BV043, 94 g / 4,5 ms, 35 g / 14 ms
Vibration according to MIL-STD 810C/514.2
EMC: according to MIL-STD 461A, CE01, CS01,
MI-STD 461B, RS01, VG 95373,
T.20LAA01G, T.22SA01G, T.24LF01G,
LF02G, LF03G, BV3012, SA 1

Specification subject to change without notice



WÄRTSILÄ JOVYATLAS EUROATLAS GmbH
Zum Panrepeel 2
28307 Bremen
Germany

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