

Fuel Cell DC/DC Converter (FCDD)

For Submarines



FCDD - 120 kW

Standard Features

- Completely qualified
- Remotely controllable
- Easy programmable
- Low noise
- High efficiency
- High reliability
- Low life cycle costs
- Short circuit protected

Support Service

- Complete Integrated Logistic Support (ILS)

State of the art submarines having DC-mains as their primary source are today more and more fitted out with Fuel Cells as their Air-Independent Propulsion (AIP) System. These Systems require their own right sized controllable power supply to be integrated within the DC-main supply.

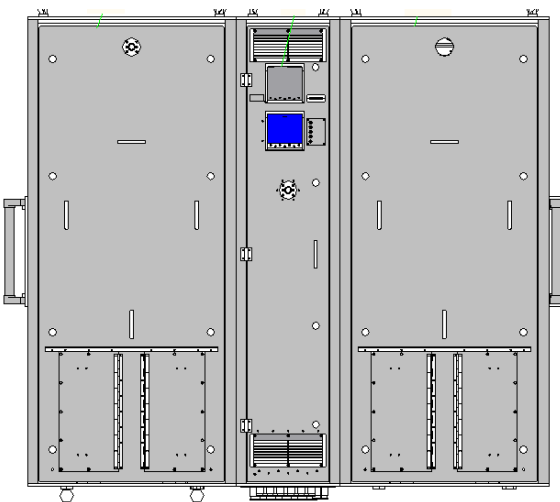
All parameters of the FCDD for driving a motor can be programmed by a parameterization console integrated in the Local Operation Plant (LOP). A certain number of parameters are factory settings to be programmed by using a password. Output over current and short current detection as well as the general remote control of a number of equipment parameters via the interfaced ship control system are given.

Fuel Cell DC/DC Converter (FCDD)

Bulletin 6420

Electrical Characteristics	120 kW (240 kW)
Input Voltage	210 - 290 VDC
Dynamic Range	160 - 360 VDC
Input Current	0 - 560 A (0 - 1120 A)
Voltage Spikes	400 V for 0,1 ms
Output Voltage	520 - 750 VDC
Output Current	0 - 216 A (0 - 432 A)
Efficiency	93,5% at 100% load
Output Power	120 kW (240 kW)
External Communication	Digital and analog
Physical Characteristics	
Dimensions (H x W x D) mm	1800x1200x600 (1800x2000x600)
Weight (kg)	800 kg (1400 kg)
Protection Grade	IP 23 / IP 43
Cooling	Seawater cooled with integrated water/air heat exchanger
Environmental Characteristics	
Operation Temperature	0°C to +50°C
Storage Temperature	-30°C to +70°C
Relative Humidity	Max. 90%
Shock	Half sinus 22g for 30 ms
EMI/EMC	MIL-STD 461E: CE101, CE102; RE 101, RE102

240 kW Version - Fuel Cell DC/DC Converter



Specification subject to change without notice



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