CIRTEM
POWER OPTIMISED

Electromobility

120 kW embedded DC/DC Converter
CDN230

Main features

- Reversible DC/DC
- Interlaced convertor with IGBTs
- Very high efficiency (up to 97%)
- Regulation according to voltage or current
- Advanced control algorithm for optimal power module usage and efficiency
- Insulated CAN2.0 connectivity
- Bootloader for field upgradeable firmware
- Liquid cooled
- Protection against thermal and overcurrent faults
- HV Easy plug connections with PowerLok™ system
- Wide input and output voltage range allows installation in 100 V and 700 V applications
- Fast integrity discharger for global safety

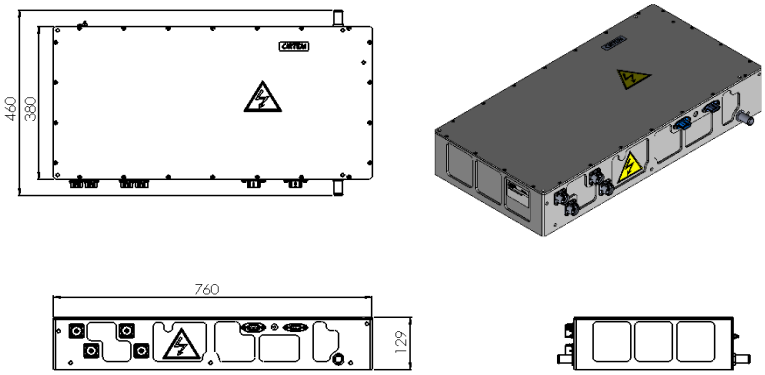
Applications

- Fuel cell power
- Smart Grids
- Battery systems
- Laboratory power supply
- DC Charging

Technical data

Voltage range high side input	40 - 750 Vdc
Voltage range low side output	40 – 450 Vdc
Output voltage ripple	500 mV
Max continuous output current	300 A
Max continuous output power	120 kW
Efficiency	Up to 97%
Auxiliary power supply	18 V to 36 V – 45 W
Insulation between HV and user interface	3600V – DC – 60s
MECHANICAL DATA / COOLING SYSTEM	
Weight	48,5 kg
IP protection	IP 5K4K
Operating temperature range	-20 to +75°C
Coolant	Water 50% / Glycol 50%
Maximum liquid temperature	55°C
Minimum coolant flow	20L / min
Load losses at 20 l/ms	<0,2 bars
STANDARDS	
EMC	R10 – revision 5 / ISO 7637-2
Shocks and vibrations	ISO 16750-3 and CEI 60068-2-27
Climatics environment	ISO 16750-4
CONNECTORS	
Input	Amphenol PowerLok – 2 cables (70 mm²)
Output	Amphenol PowerLok – 2 cables (70 mm²)
Signals	1 connector for CAN, inhibition signal and power supply (24V)
Cooling	2 pipes (external diameter 20 mm)

Dimensions



At CIRTEM we create, develop and manufacture innovative power converters for optimized electrical systems.
Through our renowned technological research, our high end engineering and our high skill production sized for growing markets, CIRTEM is your OEM partner from the concept to commercial success !

Electromobility Defense Electrical grids Industry

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