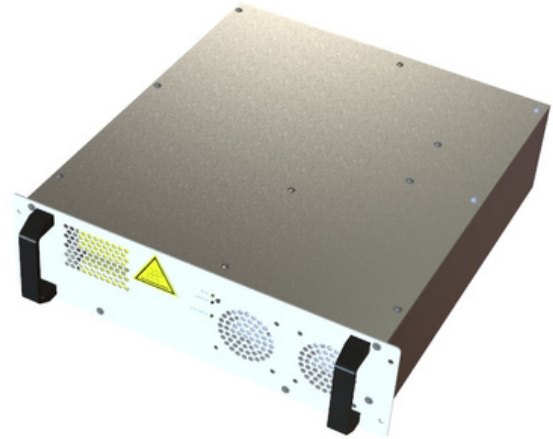




DC Fast charger module for electrified vehicles
500V -25 kW
DCM525

Main Features

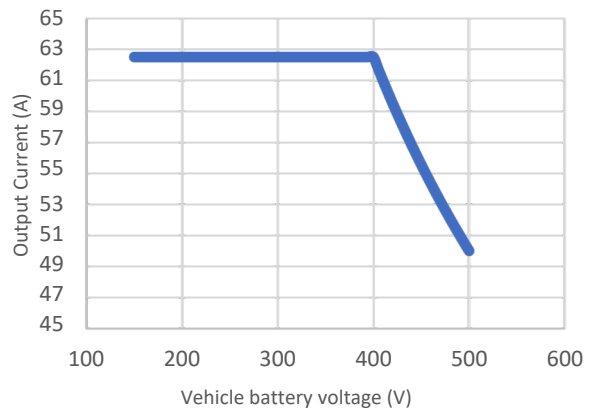
- DC Fast charger for electrical vehicles
- Power rating: 25 kW
- Output DC Voltage (single): 150-500V
- Serializable (up to 2 modules \equiv 1000 V)
- Parallelizable (up to 400 kW with 16 modules)
- 400V three phase grid
- Galvanic insulation
- Forced air cooling
- High efficiency
- Class A EMC compliant
- IP20
- CAN 2.0B
- Bootloader for field upgradeable firmware



DCM525-description

DCM525 is a DC-DC converter dedicated to electrical and hybrid vehicles charging. Connected to 400V line to line three phase grid, DCM525A provides an output DC voltage from 150V up to 500V dc. DCM525 have an extremely optimized design based on the most efficient power electronics leading to low energy losses and an efficiency up to 96,7%. The DCM525 module is air forced cooled and furthermore designed to be easy to install. Up to 16 DCM525A modules can be connected in parallel / series in order to deliver a maximum power of 400 kW. The modules are EMC compliant with the norm IEC 61851 class A (Emissions and conductions) for all the module configurations (25 kW to 400 kW).

Maximum output current for one DCM525A depending on the vehicle battery voltage



Technical data

GENERAL	
Weight	28 kg
Volume	135 x 450 x 505 mm
Sealing	IP20
Housing	Aluminum and iron
MTBF	105000 hours*
ELECTRICAL CHARACTERISTICS	
Input voltage	Three phases Line-to-Line 360 Vac to 440 Vac @45 -65 Hz
Output Voltage	150 V dc – 500 V dc
Power factor	> 0,99 @25 kW
Efficiency	> 96,7 % Peak
Auxiliary power	24 V, 45 W max
Acoustic noise	70 dB
Earthing mode	TT
Pollution degree	PD3
ENVIRONMENTAL AND COOLING FEATURES	
Operating temperature range	-15 to +55°C
Storage temperature range	-30 to +70°C
Coolant	Forced air cooling with integrated fans
Maximum environment temperature	55°C, DC current derating from 40°C to 55°C

* in standard usage conditions with properly ventilated cabinet

Connections

- **DC port** 4 ctsSPC 16/ 4-STF-10,16 (1711394). **AC port** 3 ctsSPC 16/ 3-STF-10,16 (1711381). **First signal port:** 1-794617-2 from TE connectivity. **Second signal port:** 1-794617-4 from TE connectivity.

Standards

- Designed according to IEC 61851-1-23
- EMC standards according to IEC 61851-1-21 EMC conducted emissions, Class A on AC port, radiated emission class A
- Mechanical vibrations & shock according to IEC 60068-2 & IEC60068-27
- NF EN 61000-3 Limitation of voltage variations, voltage fluctuations and flicker in public low-voltage supply networks.
- ROHS, REACH, WEEE

Protections

- Overcurrent protection (DC and AC).
- Short-circuit.
- Thermal protection.
- Over load.
- Output over-voltage
- Reverse polarity protection.
- CAN bus malfunction.
- Possibility to perform an auto test.

Why Cirtem ?

At CIRTEM we create, develop and manufacture innovative power converters for optimized electrical systems.

Since 1988, Cirtem drives your most ambitious projects
At CIRTEM you will find the most valuable expertise to support you through skill production for growing market. CIRTEM is your OEM partner from the concept to architecture choice and the overall system integration.

Our customers

Smart Grid system integrators / Smart Grid applications designers /
Storage manufacturers / B2B partner with PLC or EMS

Electromobility

Defense

Electrical grids

Industry



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