



Ferraz Shawmut | Eldre | Idealec | FTCAP

SOLUTIONS FOR POWER
CONVERSION SYSTEMS

DC LINK CAPACITORS



DC LINK CAPACITORS: A CRUCIAL ROLE IN POWER CONVERSION SYSTEMS

Understanding the role and characteristics of DC capacitors is essential for designing efficient and reliable power conversion systems.

DC capacitors are located at different stages in the power conversion system.

+ Input stage

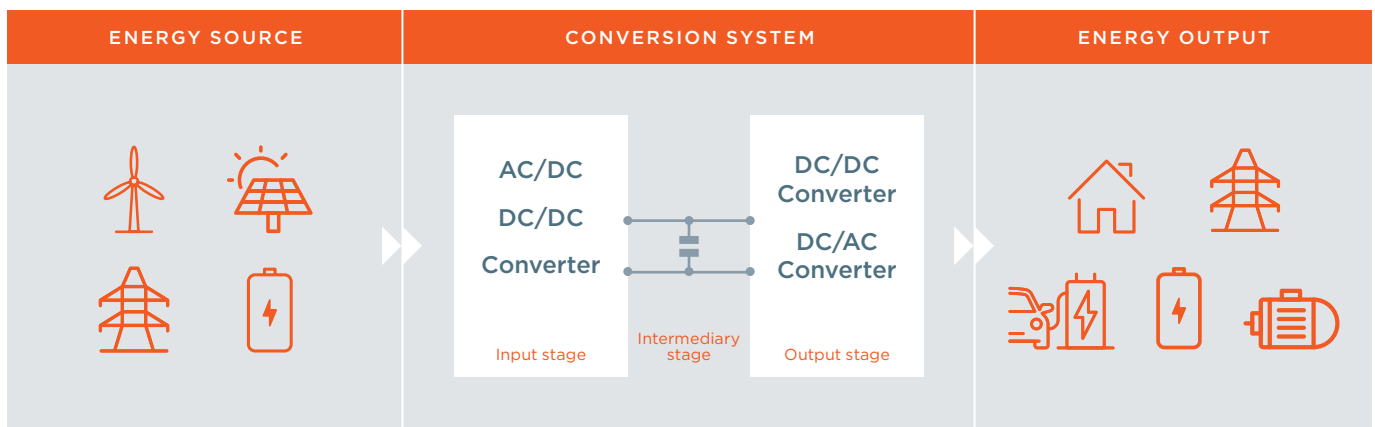
DC capacitors filter the voltage to provide a clean and consistent energy source to the conversion system.

+ Intermediary stage

DC link capacitors allow for smoothing the DC voltage and supply power very quickly.

+ Output stage

DC filter capacitors are present on DC/DC converter stage.



Energy Storage

- DC Link Capacitors store electrical energy and release it when needed.
- Particularly useful in applications requiring quick bursts of power or smoothing out voltage fluctuations.

Voltage Stabilization

- Help stabilize the DC bus voltage in power conversion systems, such as inverters and converters.
- Essential for maintaining the quality and reliability of the power output.

Filtering

- Filter out ripple currents and voltages that can arise from the switching action of power electronic devices.
- Helps in providing a cleaner DC voltage.

ENGINEERED TO FIT, DESIGNED TO PERFORM

Mersen's expertise in design and manufacturing of DC capacitors is backed by advanced R&D capabilities and a strong commitment to customer-specific solutions. Manufactured in Husum, Germany, our capacitors benefit from state-of-the-art engineering, ensuring high performance, reliability, and compliance with industry standards. Our dedicated teams work closely with customers to develop tailor-made designs that meet the most demanding electrical and mechanical requirements, providing optimized solutions for a variety of application, such as energy storage, power electronics, and high-power applications.

MERSEN DC LINK CAPACITOR OFFER

CX SERIES



CAPACITANCE
20 μ F – 800 μ F



VOLTAGE
600 VDC – 1000 VDC

Self-sealing polypropylene dielectric



Optimized bottom surface for good cooling connection

FEATURES

- Very low inductance** <10.5nH
- Adapted to high currents** up to 100A
- Standard connections:** M6 female or M8 male
- Diameter:** 85 mm
- Height:** from 40 mm up to 100 mm

EC SERIES



CAPACITANCE
130 μ F – 3000 μ F



VOLTAGE
600 VDC – 1500 VDC

Robust design, aluminum housing



Self-sealing polypropylene dielectric

FEATURES

- Low inductance** <35nH
- Adapted to high currents** up to 91 A
- Standard connections:** M6 female or M8 male
- Diameter:** 85 mm, 116 mm or 136 mm
- Height:** from 93 mm up to 168 mm

PL SERIES



CAPACITANCE
6 μ F – 150 μ F



VOLTAGE
400 VDC – 1500 VDC

Self-sealing polypropylene dielectric



Connection: 4 pins x 1,2 mm

Compact design for PCB assembly

FEATURES

- Very low inductance** <10.5nH
- Adapted to high currents** up to 100A
- Standard connections:** M6 female or M8 male
- Rectangular shape,** 4 x standard casings
- PCB mounting**

ALUMINIUM ELECTROLYTIC CAPACITORS



CAPACITANCE
56 μ F – 300 000 μ F



VOLTAGE
16 VDC – 500 VDC

Standalone or capacitor banks



FEATURES

- High CV**
- Climatic category IEC 60068:** 40/85/56 or 40/105/56
- Diameter:** from 22 mm to 90 mm
- Heights:** from 25 mm up to 230 mm
- Snap-in, screw terminals, solder terminals**

Mersen, FTCAP, Leclanché Capacitors... it's all the same

Mersen has 130+ years' experience in electrical power and advanced materials.

Fischer & Tausche was founded 1948 in Husum and has generations of experience designing and manufacturing aluminum electrolytic and film capacitors.

In 2004, the German manufacturer acquired Leclanché Capacitors, the Swiss company specializing in manufacturing film capacitors.

In 2018, Mersen acquired both companies: FTCAP and Leclanché Capacitors

Mersen expanded its existing range of ultra-fast fuses, cooling and laminated bus bars with capacitors. All these products are key components in the design of efficient and high-performance power electronics systems.

FTCAP facilities in Germany are now Mersen's unique center of expertise for capacitors.



MERSEN IS A GLOBAL EXPERT
IN ELECTRICAL POWER
AND ADVANCED MATERIALS

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