Capacitor & Filter Banks

LV & HV Solutions
BC | SM | OBH series
LV Capacitor & Filter Banks
BC Series

**BC series** Capacitor Banks are used for Power Factor Correction and consist of C7 contactor switching or C7s thyristor switching modular compensation racks with detuned harmonic filters.

### Application Areas
Low Voltage Reactive Power Compensation and Harmonic Filtration at
- Power distribution
- Industrial plants
- BCT Series for fast changing loads like Electrical Cranes, Spot / Seam Welding Machines, Harbours, etc...

### Advantages
- Modular rack structure which allows simple design and easy installation according to the desire power
- Long-lasting and safe use thanks to the perfect matching of all equipment and high quality
- Safety design against touch and electric shock
- Installation up to 5 modular racks in a single panel
- Less than 20 ms fast response time for BCT series

### Technical Specifications
- Rated Voltage : 220 ... 720 Vac
- Rated Frequency : 50 / 60 Hz
- Tuning Frequency : 134 ... 225 Hz (at 50 Hz Network)
- Standard Steps : 6.25 ... 75 kVAR, 400 V, 50 Hz
- Switching Element : Contactor / Thyristor
- Standards : EN 61439-1/2, EN 60831-1/2
  - EN 60076-6, EN 60529
  - EN 60255-1, EN 60947-4-1

<table>
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<tr>
<th>Standard Types</th>
<th>Switching Types</th>
<th>Fast Switching Types</th>
<th>Net Power (at 400 V, 50 Hz)</th>
<th>Steps (400V, 50 Hz)</th>
<th>Dimensions</th>
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</thead>
<tbody>
<tr>
<td>BCF 100.400</td>
<td>BCT 100.400</td>
<td>100 kVAR</td>
<td>2 x 12.5 + 25 + 50 kVAR</td>
<td>800 x 600 x 2100 mm</td>
<td></td>
</tr>
<tr>
<td>BCF 150.400</td>
<td>BCT 150.400</td>
<td>150 kVAR</td>
<td>2 x 12.5 + 25 + 2 x 50 kVAR</td>
<td>800 x 600 x 2100 mm</td>
<td></td>
</tr>
<tr>
<td>BCF 200.400</td>
<td>BCT 200.400</td>
<td>200 kVAR</td>
<td>2 x 12.5 + 25 + 3 x 50 kVAR</td>
<td>800 x 600 x 2100 mm</td>
<td></td>
</tr>
<tr>
<td>BCF 250.400</td>
<td>BCT 250.400</td>
<td>250 kVAR</td>
<td>2 x 25 + 50 + 2 x 75 kVAR</td>
<td>800 x 600 x 2100 mm</td>
<td></td>
</tr>
<tr>
<td>BCF 300.400</td>
<td>BCT 300.400</td>
<td>300 kVAR</td>
<td>25 + 50 + 3 x 75 kVAR</td>
<td>800 x 600 x 2100 mm</td>
<td></td>
</tr>
<tr>
<td>BCF 400.400</td>
<td>BCT 400.400</td>
<td>400 kVAR</td>
<td>2 x 25 + 50 + 4 x 75 kVAR</td>
<td>(2 x 800) x 600 x 2100 mm</td>
<td></td>
</tr>
<tr>
<td>BCF 500.400</td>
<td>BCT 500.400</td>
<td>500 kVAR</td>
<td>25 + 2 x 50 + 5 x 75 kVAR</td>
<td>(2 x 800) x 600 x 2100 mm</td>
<td></td>
</tr>
<tr>
<td>BCF 750.400</td>
<td>BCT 750.400</td>
<td>750 kVAR</td>
<td>25 + 10 x 75 kVAR</td>
<td>(2 x 800) x 600 x 2100 mm</td>
<td></td>
</tr>
<tr>
<td>BCF 1000.400</td>
<td>BCT 1000.400</td>
<td>1000 kVAR</td>
<td>2 x 50 + 12 x 75 kVAR</td>
<td>(3 x 800) x 600 x 2100 mm</td>
<td></td>
</tr>
<tr>
<td>BCF 1250.400</td>
<td>BCT 1250.400</td>
<td>1250 kVAR</td>
<td>50 + 16 x 75 kVAR</td>
<td>(4 x 800) x 600 x 2100 mm</td>
<td></td>
</tr>
<tr>
<td>BCF 1500.400</td>
<td>BCT 1500.400</td>
<td>1500 kVAR</td>
<td>20 x 75 kVAR</td>
<td>(4 x 800) x 600 x 2100 mm</td>
<td></td>
</tr>
</tbody>
</table>

Please contact us for different range of power and voltage levels.
HV Capacitor & Filter Banks
SME.CC Series

SME.CC series Metal Enclosed Capacitor & Filter Banks are manufactured based on SME series type tested Metal Enclosed Cabinet, designed for indoor use, tested according to IEC 62271-200 standard.

SME.CC Capacitor Banks consist of capacitors, current-limiting reactors (or harmonic filter reactors), protection, control and switching elements used in the switchgear. The design incorporates natural convection or forced draft cooling according to the application with anti-condensation heaters to assist in controlling the effects of fluctuating ambient temperatures and humidity.

SME.CC Capacitors Banks, have an electrical and mechanical interlocking safety systems. These systems eliminate the possibility of a technician accessing live equipment under the high voltage level.

The enclosure incorporates fork and crane lifting facilities. This assists with trouble-free handling and assembly of modules on site.

Advantages
• Type tested Enclosure
• Modular, compact, and robust design optimized for possible future expansion, easy transport, storage, and installation
• Ensures high reliability and low maintenance costs with simplified design and proven components usage
• Fully assembled units, factory tested and ready for connection

Application Areas
High Voltage Reactive Power Compensation and Harmonic Filtration at:
• Power Generation
• Power T&D
• Industrial plants

Standards
• IEC 60871-1
• IEC 60076-6
• IEC 62271-200

Technical Specifications
• Rated Voltage : 3 - 46 kVac
• Rated Frequency : 50 / 60 Hz
• Rated Power : on demand
• Steps Power : on demand
• Switching element: Vacuum Contactors, Circuit Breaker, Disconnector
• Dimensions : Varies with power and voltage
SMB.CC series Kiosk type Capacitor & Filter Banks consist of metal or concrete kiosks, designed for all weather conditions and harsh environmental factors as according to IEC 62271-202 standard.

SMB.CC consist of HV Capacitors, Harmonic filter / current-limiting reactors, Switching, Protection and Control equipment. The design incorporates natural or forced cooling according to the application with smart anti-condensation relay and heaters to assist in controlling the effects of fluctuating ambient temperatures and humidity.

SMB.CC Capacitors Banks, have electrical and mechanical interlock to eliminate the risk of technician accessing live equipment under the voltage.

The enclosure base frame incorporates fork and crane lifting facilities. This assists with trouble-free handling and assembly of modules on site.

Advantages
• Compact, and robust design, easy transport, storage, and installation
• Ensures high reliability and low maintenance costs with simplified design and proven components usage
• Fully assembled units, factory tested and ready for connection
• High resistance to environmental factors

Application Areas
High Voltage Reactive Power Compensation and Harmonic Filtration at
• Power generation
• Power T&D
• Industrial plants

Technical Specifications
• Voltage : 3 - 46 kVac
• Frequency : 50 / 60 Hz
• Steps & Power : Depends on request
• Dimensions : Varies with power and voltage

Standards
• IEC 62271-202
• IEC 60871-1
• IEC 60076-6
OBH Open Series

**OBH Series Capacitor Banks** are manufactured to be used at indoor and outdoor PFC (Power Factor Correction) applications over 1 kV with high quality power capacitors and filter or damping reactors on aluminium or galvanized steel construction.

Our construction design combines easy and fast assembly. The systems are shipped in wooden cases as modular parts for the fastest and easiest assembly, taking into account the ease of transportation, storage and assembly.

OBH Series Capacitor Banks are used for tuned or detuned harmonic filter bank applications, SVC systems and classical power factor correction systems.

OBH Series Capacitor Banks are suitable for applications of transformer fixed bank or motor fixed bank or multistep central automatic capacitor bank system at different voltage and frequency.

OBH Series Capacitor Banks can be designed to be used indoors or outdoors in a suitable outdoor area such as steel kiosks or concrete kiosks, depending on demand and requirements.

**Advantages**

High Voltage Reactive Power Compensation, Harmonic Filtration, Voltage regulation and other PFC application at:

- Power Generation
- Power T&D
- Renewable Power Plants
- Industrial plants

**Advantages**

- Nominal Voltage : from 3 kV to 170 kV
- Nominal Frequency : 50 Hz or 60 Hz
- Nominal Power : from 250 kVAR to ... MVAR
- Standards : IEC 60871-1

**Standards**

- IEC 60143-1
- IEC 60871-1

The modular, compact, and robust design is optimized for easy future expansion of the system, simplifying transportation, storage, and installation.

Proven equipment uses with documents and references from internationally accredited laboratories.

- High quality and low maintenance design with simplified and high quality product.
- Simplified modular structure offering easy installation, maintenance and easy and fast replacement of parts when needed.
- Design suitable for external or internal, galvanized steel or aluminum construction with high resistance to rust and corrosion.
- Design and factory tests that meet the requirements of the latest version of the relevant standards and the special requirements set by the customers.
- Tailor made design and application for each one plant.
- Licensed and safe packaging that facilitates long-term storage, international transportation and stacking.
- Factory test reports, transport, storage, installation, commissioning, maintenance, and operating instructions delivered electronically and in hard copy.
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