DC Feedthrough Capacitor

Technical specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td>Maximum continuous operating voltage</td>
<td>130 DC (UL, ENEC)</td>
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<tr>
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<td>130 VAC, 50/60 Hz (UL, ENEC)</td>
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<tr>
<td></td>
<td>650 VDC max.</td>
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<tr>
<td>Rated currents</td>
<td>10 to 200 A @ 60°C max.</td>
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<tr>
<td>Capacitor class</td>
<td>Y4</td>
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<tr>
<td>High potential test voltage</td>
<td>1700 VDC for 2 sec</td>
</tr>
<tr>
<td>Insulation resistance (100VDC after 60 sec)</td>
<td>&lt;0.33 µF, R &gt;1500 MΩ</td>
</tr>
<tr>
<td></td>
<td>&gt;0.33 µF, t &gt;5000 s</td>
</tr>
<tr>
<td>Temperature range (operation and storage)</td>
<td>-40°C to +100°C (40/100/21)</td>
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<tr>
<td>Flammability corresponding to MTBF @ 60°C/130 V (MIL-HB-217F)</td>
<td>UL 94 V-2 or better</td>
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<tr>
<td></td>
<td>&lt;200 A: &gt;1,400,000 hours</td>
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<tr>
<td></td>
<td>≥200 A: &gt;450,000 hours</td>
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Features and benefits

- Very low internal series inductance
- Very high self-resonant frequency
- Self-healing dielectric
- High quality and reliability
- Through-bulkhead mounting
- Anti-twist protection
- Custom-specific or dual-versions on request

Typical applications

- Power line filter for 48 VDC battery power
- Increasing system and information security
- Telecom base stations
- Switching and cellular equipment
- Computer servers
- UPS power supplies
- Medical equipment

Typical electrical schematic

C
# Feedthrough selector table

<table>
<thead>
<tr>
<th>Feedthrough</th>
<th>Rated current @ 60°C [A]</th>
<th>Leakage current* @ 130 VAC/50 Hz [mA]</th>
<th>Capacitance** C [nF]</th>
<th>DC resistance*** R @ 25°C [mΩ]</th>
<th>Weight [g]</th>
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* Tolerance +20%
** Tolerance ±20%
*** Tolerance +15%

## Typical filter attenuation

**Full load, 50 Ω system**

### 10 A types

- A = FN 7560-10-M3
- B = FN 7562-16-M4

### 16 A types

- A = FN 7563-16-M4
- B = FN 7562-16-M4

### 32 A types

- A = FN 7563-32-M4
- B = FN 7562-32-M4

### 63 A types

- A = FN 7563-63-M6
- B = FN 7562-63-M6
- C = FN 7561-63-M6
- D = FN 7560-63-M8

### 100 A types

- A = FN 7563-100-M8
- B = FN 7562-100-M8
- C = FN 7561-100-M8
- D = FN 7560-100-M8

### 200 A types

- A = FN 7563-200-M10
- B = FN 7562-200-M10
- C = FN 7561-200-M10
- D = FN 7560-200-M10
## Mechanical data

### Mechanical drawing

![Mechanical drawing](image)

### Panel cut out 10 A types

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### Panel cut out other types

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**Tolerances**

±2 ±0.2

All dimensions in mm; 1 inch = 25.4 mm

Tolerances according: ISO 2768-m/EN 22768-m

### Recommended torque

#### Terminal thread

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<th>Thread Size</th>
<th>M3</th>
<th>M4</th>
<th>M6</th>
<th>M8</th>
<th>M10</th>
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#### Mounting thread

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<th>M20x1</th>
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<th>M27x1.5</th>
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<td>7 Nm</td>
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Headquarters, global innovation and development

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