

High Voltage DC Filter Capacitors



TYPE EC

The EC range of capacitors are similar in design to the ET range but are housed in a more robust container. They are manufactured using a mixed dielectric material that consists of polyester / polypropylene film and capacitor tissue. They are impregnated and filled with a mineral oil. The container is a Synthetic Resin Bonded Paper (SRBP) tube sealed at both ends with resin assuring a hermetic seal. The capacitors may be used in air, oil or SF6. They are terminated with M6 studs x 15 mm long or tinned copper wire.

Note

- The impregnant used is a non toxic highly purified and inhibited mineral oil

APPLICATIONS

The EC range of capacitors are specifically designed for high voltage filters and can be successfully used in the following applications:

- High voltage smoothing
- RT transmitter power supplies
- X-ray power supplies

TEMPERATURE RANGE

Temperature range is -40 °C to +85 °C. Derating is required for operation at higher temperatures.

TEMPERATURE COEFFICIENT

Capacitance will increase by 2 % per 100 °C temperature rise.

CAPACITANCE RANGE

0.001 μF to 2 μF. The tolerance is ± 10 %. Other tolerance are available on request. Normal values measured at 1 kHz.

VOLTAGE RANGE

10 000 V_{DC} to 120 000 V_{DC}, other values on request.

TEST VOLTAGE

Terminal/terminal (Vt/t)

For DC rating < 20 kV

Vt/t = 2.0 x rated voltage 60 s

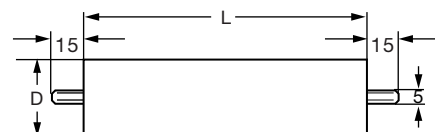
For DC rating > 20 kV

Vt/t = 1.5 x rated voltage 60 s

TYPE DESCRIPTION

| PART NUMBER | CAP. (μF) | L (mm) | D (mm) |
|---------------|-----------|--------|--------|
| 10 kV | | | |
| EC100-104 | 0.1 | 115 | 65 |
| EC100-254 | 0.25 | 140 | 75 |
| EC100-504 | 0.5 | 205 | 95 |
| 20 kV | | | |
| EC200-503 | 0.05 | 180 | 65 |
| EC200-104 | 0.1 | 230 | 65 |
| EC200-254 | 0.25 | 280 | 75 |
| EC200-504 | 0.5 | 360 | 95 |
| 30 kV | | | |
| EC300-253 | 0.025 | 245 | 65 |
| EC300-503 | 0.05 | 320 | 65 |
| EC300-104 | 0.1 | 395 | 65 |
| EC300-254 | 0.25 | 510 | 75 |
| 40 kV | | | |
| EC400-253 | 0.025 | 305 | 65 |
| EC400-503 | 0.05 | 410 | 65 |
| EC400-104 | 0.1 | 345 | 95 |
| EC400-124 | 0.12 | 440 | 95 |
| 50 kV | | | |
| EC500-103 | 0.01 | 270 | 65 |
| EC500-253 | 0.025 | 335 | 65 |
| EC500-503 | 0.05 | 430 | 75 |
| EC500-104 | 0.1 | 430 | 95 |
| 60 kV | | | |
| EC600-502 | 0.005 | 310 | 65 |
| EC600-103 | 0.01 | 310 | 75 |
| EC600-253 | 0.025 | 390 | 75 |
| EC600-503 | 0.05 | 500 | 75 |
| EC600-104 | 0.1 | 615 | 95 |
| 80 kV | | | |
| EC800-502 | 0.005 | 400 | 65 |
| EC800-103 | 0.01 | 400 | 75 |
| EC800-253 | 0.025 | 500 | 95 |
| EC800-503 | 0.05 | 650 | 95 |
| 100 kV | | | |
| EC1000-502 | 0.005 | 485 | 65 |
| EC1000-103 | 0.01 | 485 | 75 |
| EC1000-253 | 0.025 | 610 | 95 |
| 120 kV | | | |
| EC1200-502 | 0.005 | 425 | 75 |

DIMENSIONS in millimeters





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