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 sucessfully used in the following applications:

- High voltage smoothing
- Induction heating
- 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

1000 V_{DC} to 100 000 V_{DC}

TEST VOLTAGE

Terminal/terminal (Vt/t)

For DC rating < 20 kV

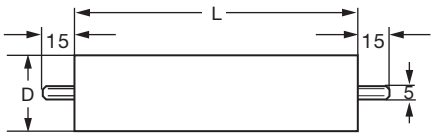
Vt/t = 2.0 x rated voltage 60 s

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	0.01	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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