



SPECIFICATION OF LOW VOLTAGE DETUNED FILTER CAPACITOR BANK

BANK :

Type designation	D50/2x6+12+25-400-50/189-0618E
Rated power	50 kvar
Steps	2x6+12+25 kvar
Rated frequency	50 Hz
Tuning frequency	189 Hz (7 %)
Rated voltage	400 V
Rated current	85 A
Insulation level of bank	3 / - kV
Cabinet (W x H x D)	600x1800x600 mm
Total mass of bank	162 kg
Degree of protection	IP 20C
Mounting	indoor
Temperature category	0 / + 40 °C
Colour	RAL 7035
Maximum power losses at rated values	700 W

STEPS 1-2: 6+6 kvar/400V:

Harmonics dimensioning	50 / 150 / 250 / 350 f/Hz 9.9 / 0.3 / 3.4 / 1.2 I/A
Rated current (rms)	10.6 A
Rated inductance (iron core reactor)	2 x 6.132 mH
Contacteur type	2 x CL45A300MN
Step fuses	3 x gG 25 A
<u>Capacitor unit :</u>	
Type of capacitor unit	ML2D 10+10/525-50 IP00
Rated voltage	525 V
Rated capacitance (Y)	111+111 µF
Discharging time 75 V	180 s
Reconnection time	30 s

STEPS 3-4: 12+25 kvar/400V:

Harmonics dimensioning	50 / 150 / 250 / 350 f/Hz 19.8 / 0.7 / 6.7 / 2.4 I/A
Rated current (rms)	21.1 A
Harmonics dimensioning	50 / 150 / 250 / 350 f/Hz 39.7 / 1.4 / 13.4 / 4.8 I/A
Rated current (rms)	42.2 A
Rated inductance (iron core reactor)	3.067 mH
Rated inductance (iron core reactor)	1.533 mH
Contacteur type	2 x CL45A300MN
Step fuses	3 x gG 80 A
<u>Capacitor unit :</u>	
Type of capacitor unit	SL2D 20+40/525-50 IP00
Rated voltage	525 V
Rated capacitance (Y)	231.3+462.5 µF
Discharging time 75 V	180 s
Reconnection time	30 s



Power factor controller:

Type

NC-12

STANDARDS :

SGS FI 26351 certificate
IEC/EN 61439-1&2 (bank)
IEC/EN 60831 1&2 (capacitors)
IEC/EN 60529 (IP-code)

Voltage dimensioning :

Suitable for continuous overvoltage
Harmonic voltages
Capacitor unit nominal voltage

1.1 x Un
U₃= 0,5 %, U₅= 6 %, U₇= 5%
525 V