



SPECIFICATION OF LOW VOLTAGE CAPACITOR BANK

DW-SERIE: DETUNED FILTER CAPACITOR BANK

BANK :

Type designation	DW47/3+6+12+25-400-50/189-0812
Rated power	47 kvar
Steps	3+6+12+25 kvar
Rated frequency	50 Hz
Tuning frequency	189 Hz (7 %)
Rated voltage	400 V
Rated current (rms)	80 A
Insulation level of bank	3 / - kV
Cabinet (W x H x D)	750x1150x320 mm
Total mass of bank	103 kg
Degree of protection	IP 20C
Mounting	indoor on the floor or wall
Temperature category	0 / + 40 °C
Colour	RAL 7035
Cooling fan	Ebm-papst W2S 130-BM
Cable entry from top or bottom	

STEPS 1-2: 3+6 kvar/400V

Harmonic currents (dimensioning)	50 / 150 / 250 / 350 f/Hz 5.0 / 0.2 / 1.7 / 0.6 I/A
Rated current (rms)	5.3 A
Harmonic currents (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)	12.264 mH
Rated inductance (iron core reactor)	6.132 mH
Contactor type	2 x CL45A300MN
Step fuses	3 x gG 25 A
<u>Capacitor unit :</u>	
Type of capacitor unit	ML1D 5/525-50 IP00
Rated voltage	525 V
Rated capacitance (Y)	57.9 µF
Discharging time 75 V	180 s
Reconnection time	60 s
Type of capacitor unit	ML1D 10/525-50 IP00
Rated voltage	525 V
Rated capacitance (Y)	115.6 µF
Discharging time 75 V	180 s
Reconnection time	60 s



STEPS 3: 12 kvar/400V

Harmonic currents (dimensioning)	50 / 150 / 250 / 350 f/Hz 19.8 / 0.7 / 6.7 / 2.4 I/A
Rated current (rms)	21.1 A
Rated inductance (iron core reactor)	3.067 mH
Contacteur type	CL45A300MN
Step fuses	3 x gG 25 A
<u>Capacitor unit :</u>	
Type of capacitor unit	FL1D 20/525-50 IP00
Rated voltage	525 V
Rated capacitance (Y)	231.2 µF
Discharging time 75 V	180 s
Reconnection time	60 s

STEPS 4: 25 kvar/400V

Harmonic currents (dimensioning)	50 / 150 / 250 / 350 f/Hz 39.9 / 1.4 / 13.4 / 4.8 I/A
Rated current (rms)	42.2 A
Rated inductance (iron core reactor)	1.533 mH
Contacteur type	CL45A300MN
Step fuses	3 x gG 50 A
<u>Capacitor unit :</u>	
Type of capacitor unit	SL1D 40/525-50 IP00
Rated voltage	525 V
Rated capacitance (Y)	462.5 µF
Discharging time 75 V	180 s
Reconnection time	60 s

Power factor controller:

Type	NC-12
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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	1.1 x Un
Harmonic voltages	U ₃ = 0,5 %, U ₅ = 6 %, U ₇ = 5%
Capacitor unit nominal voltage	525 V