

Data Sheet Automatic Capacitor Bank



The GMKpb series Automatic Capacitor Banks are especially designed to compensate the reactive energy in power networks for the normal load or with harmonics content, permitting not only the correction of the fluctuation caused by lineal, but also the non-lineal electrical loads.

Out of the actual existing solutions for the customers, it is the best that adapts to both the technical viability and the economic efficiency of the investment, because it obtains strong results and commits among the results and the economical saving.

The product series is presented as the best effective solution for networks with high values of harmonics distortion,

Allowing a tangible improvement in the quality of the electrical supply, reducing to the minimum levels possible problems originated by harmonics distortions and according to the actual international electro-magnetic compatibility regulations.

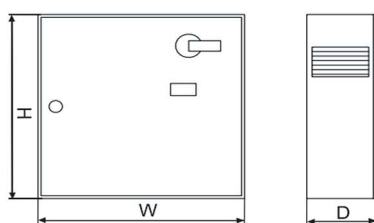
Model

SS : for the power of 25 Kvar to 100 Kvar
 NS : without main breaker switchgear
 WS : with main breaker switchgear

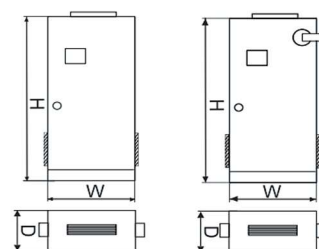
Sepecification

Rated voltage	Un	Main 400V, and 230V,480V,525V,690V(or on request),50/60Hz, AC power system
Power range	Qn	30 to 1000Kvar(special power range is available on request)
Maximum admissible current	I _{max}	>1.1 to 1,5 In
Tolerance of capacitance	Cn	0 to +10%uf
Power factor range		0.5 to 1
Type of harmonic filter		Reject type L-C and different detuning frequency of Hz.
Detuning factor	%	7%(f=189Hz), 14%(f=134Hz)etc.
Protection		Capacitor: dry technology, self-healing, overpressure disconnector, PCB free reactor: over temperature disconnector cabinet: over voltage, over current, over temperature etc.
Insulation test	U	Main power circuit: 2.500V between terminals and terminals to case. Auxiliary circuit: 2Un+1.000V, but not less than 1.500V between terminals and terminals to case. Capacitor: terminal to terminal of 2.15Un 10S, terminal to case 3000V AC 10S Un<660V, 6000V AC 10S Un>660V. Reactor: Un=3KV core to core, Un=5KV winging to core.
Temperature range inside the equipment:		Maximum temperature: 45°C. max. average over 24 hrs: 30°C. max. average over 365 days: 25°C. minimum Temperature: -5°C.
Switching model		Normal contactor switching or thyristor switching(<20ms)
Discharge device		<75V 3min. delivery within the capacitors
Cooling		Naturally air-cooled and assistant fan cooling system
Operation condition		Altitude 1000M(max.3000m on request),permissible humidity 95%, temperature -5°C to +50°C
Protection level		IP31 .indoor installation, outdoor/pole mounting is available on request
Life expectancy		Capacitors: >100,000 H to 150,000 H. capacitor duty contactors: >100,000 times, reactor:>150,000 times.
Colour		RAL 7032, other colour is available on request
Standard		IEC60439-1:1999 (UNE-EN 60439-1:2001) low-voltage switchgear IEC61921:2003 (UNE-EN 61921:2003),power capacitor: capacitor bank IEC60831-1+2:1995 (EN 60831-1+2: 1998), capacitors manufactured & test. CE certificate, UL marking is available on request.

Mounting draw



Mounting draw of the SS series



Mounting draw of the NS & WS series

Rates of GMKPb series Automatic Capacitor Bank

Power (Kvar)	Capacitor Step (Kvar)	Step NO.	Dimension (mm) H-W-D	Order No.(contactor)	model Code	Order No. (thyristor)
400V, 3phase, 50/60Hz, without reactors, automatic capacitor bank.						
25	5+2X10	3	425X470X230	GMKPb440-3-25	SS	GMKPb440-3-25
30	5+10+15	3	425X470X230	GMKPb400-3-30	SS	GMKPbt400-3-30
50	2X12.5+25	3	425X470X230	GMKPb400-3-50	SS	GMKPbt400-3-50
	5+10+15+20	4	600X850X280	GMKPb400-3-50	SS	GMKPbt400-3-50
75	2X12.5+2X25	4	425X470X230	GMKPb400-3-75	SS	GMKPbt400-3-75
100	2X12.5+25+50	4	800X650X280	GMKPb400-3-100	NS/WS	GMKPbt400-3-100
	2X25+2X50	4	800X650X280	GMKPb400-3-150	NS/WS	GMKPbt400-3-150
150	10+15+25+2X50	5	1100X760X320	GMKPb400-3-150	NS/WS	GMKPbt400-3-150
	25X25+50+100	4	1100X7600X325	GMKPb400-3-200	NS/WS	GMKPbt400-3-200
200	2X50+3X50	5	1700X800X500	GMKPb400-3-200	NS/WS	GMKPbt400-3-200
	2X25+4X50	6	1100X760X325	GMKPb400-3-250	NS/WS	GMKPbt400-3-250
250	5X50	5	1700X600X500	GMKPb400-3-250	NS/WS	GMKPbt400-3-250
300	2X25+50+2X100	5	1700X600X500	GMKPb400-3-300	NS/WS	GMKPbt400-3-300
350	50+3X100	4	1700X600X500	GMKPb400-3-350	NS/WS	GMKPbt400-3-350
500	2X50+4X100	6	1700X1200X500	GMKPb400-3-500	NS/WS	GMKPbt400-3-500
600	2X50+5X100	7	1700X1200X500	GMKPb400-3-600	NS/WS	GMKPbt400-3-600
800	2X50+7X100	9	1700X1200X500	GMKPb400-3-800	NS/WS	GMKPbt400-3-800
900	2X50+8X100	10	2200X1200X500	GMKPb400-3-900	NS/WS	GMKPbt400-3-900
1000	2X50+9X100	11	2200X1200X500	GMKPb400-3-1000	NS/WS	GMKPbt400-3-1000

Other rates are available on request

400V, 3phase, 50/60Hz, with 7%(f=189Hz) reactors, automatic capacitor bank.						
50	2X12.5+2X20	4	1700X600X500	GMKPbr440-3-50/7	NS/WS	GMKPBRT440-3-50/7
75	2X12.5+2X25	4	1700X600X500	GMKPbr440-3-75/7	NS/WS	GMKPBRT440-3-75/7
100	2X12.5+25+50	4	1700X600X500	GMKPbr440-3-100/7	NS/WS	GMKPBrt440-3-100/7
150	25+25+50X50	4	1700X600X500	GMKPbr440-3-150/7	NS/WS	GMKPBrt440-3-150/7
200	2X25+50+100	4	1700X600X500	GMKPbr440-3-200/7	NS/WS	GMKPBrt440-3-200/7
250	5X50	5	1700X1200X500	GMKPbr440-3-250/7	NS/WS	GMKPBrt440-3-250/7
300	2X25+50+2X100	5	1700X1200X500	GMKPbr440-3-300/7	NS/WS	GMKPBrt440-3-300/7
350	7X50	7	1700X1200X500	GMKPbr440-3-350/7	NS/WS	GMKPBrt440-3-350/7
400	2X50+3X100	5	1700X1800X500	GMKPbr440-3-400/7	NS/WS	GMKPBrt440-3-400/7
500	2X50+4X100	6	1700X1800X500	GMKPbr440-3-500/7	NS/WS	GMKPBrt440-3-500/7
600	2X50+5X100	7	1700X1800X500	GMKPbr440-3-600/7	NS/WS	GMKPBrt440-3-600/7
700	50+7X100	8	1700X1000X500	GMKPbr440-3-700/7	NS/WS	GMKPBrt440-3-700/7
800	2X50+7X100	9	1700X1000X500	GMKPbr440-3-800/7	NS/WS	GMKPBrt440-3-800/7
900	9X100	9	1700X1800X500	GMKPbr440-3-900/7	NS/WS	GMKPBrt440-3-900/7
1000	2X50+9X100	11	1700X1800X500	GMKPbr440-3-1000/7	NS/WS	GMKPBrt440-3-1000/7

Other rates are available on request

400V, 3phase, 50/60Hz, with 14%(f=134Hz) reactors, automatic capacitor bank.						
50	2X12.5+2X20	4	1700X600X500	GMKPbr440-3-50/14	NS/WS	GMKPBRT440-3-50/14
75	2X12.5+2X25	4	1700X600X500	GMKPbr440-3-75/14	NS/WS	GMKPBRT440-3-75/14
100	2X12.5+25+50	4	1700X600X500	GMKPbr440-3-100/14	NS/WS	GMKPBrt440-3-100/14
150	25+25+50X50	4	1700X600X500	GMKPbr440-3-150/14	NS/WS	GMKPBrt440-3-150/14
200	2X25+50+100	4	1700X600X500	GMKPbr440-3-200/14	NS/WS	GMKPBrt440-3-200/14
250	5X50	5	1700X1200X500	GMKPbr440-3-250/14	NS/WS	GMKPBrt440-3-250/14
300	2X25+50+2X100	5	1700X1200X500	GMKPbr440-3-300/14	NS/WS	GMKPBrt440-3-300/14
350	7X50	7	1700X1200X500	GMKPbr440-3-350/14	NS/WS	GMKPBrt440-3-350/14
400	2X50+3X100	5	1700X1800X500	GMKPbr440-3-400/14	NS/WS	GMKPBrt440-3-400/14
500	2X50+4X100	6	1700X1800X500	GMKPbr440-3-500/14	NS/WS	GMKPBrt440-3-500/14
600	2X50+5X100	7	1700X1800X500	GMKPbr440-3-600/14	NS/WS	GMKPBrt440-3-600/14
700	50+7X100	8	1700X1000X500	GMKPbr440-3-700/14	NS/WS	GMKPBrt440-3-700/14
800	2X50+7X100	9	1700X1000X500	GMKPbr440-3-800/14	NS/WS	GMKPBrt440-3-800/14
900	9X100	9	1700X1800X500	GMKPbr440-3-900/14	NS/WS	GMKPBrt440-3-900/14
1000	2X50+9X100	11	1700X1800X500	GMKPbr440-3-1000/14	NS/WS	GMKPBrt440-3-1000/14

Other rates are available on request