

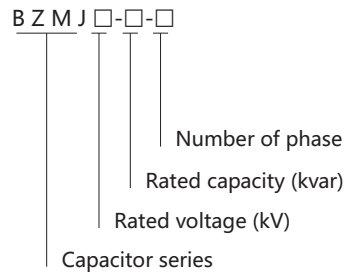


BZMJ Self-healing Shunt Capacitor

1. General

- 1.1 Electric ratings: \leq AC1000V;
- 1.2 Application: For improvement of power factor and power quality;
- 1.3 Standards: IEC/EN 60831-1:2014 IEC/EN 60831-2:2014.

2. Type designation



3. Operating conditions

- 3.1 Ambient temperature: $-25^{\circ}\text{C} \sim +50^{\circ}\text{C}$
- 3.2 Relative humidity: $\leq 50\%$ at 40°C , $\leq 90\%$ at 20°C
- 3.3 Altitude: $\leq 2000\text{m}$
- 3.4 Environmental conditions:
without dangerous gas & steam, insulated and explosive dust and dramatic mechanical vibration.

4. Technical data

- 4.1 Rated voltage: AC(0.23~1.0)kV;
- 4.2 Rated frequency: 50Hz or 60Hz;
- 4.3 Rated capacity: 1~60Kvar;
- 4.4 Capacity error: $-5\% \sim +10\%$;
- 4.5 Dielectric loss tangent value:
 $\leq 30\text{kvar } \text{tgs} \leq 0.0012$
 $> 30\text{kvar } \text{tgs} \leq 0.0015$
at rated power frequency voltage;
- 4.6 Max. Allowed over-voltage: $1.1U_n$;
- 4.7 Max. Allowed over-current: $1.3I_n$ (1.6 In, 2h/24h; $2.0 I_n$, 30min/24h);
- 4.8 Having Self-discharging property: power off, voltage reduces from $2 U_n$ to 75V and below within 3min;
- 4.9 Specific data;
- 4.10 Inrush current: $200I_n$;
- 4.11 Withstand voltage: interelectrode, power frequency $2.15U_n$, 10s;
- 4.12 Withstand voltage: pole-to-case, power frequency 3.6kV, 60s;
- 4.13 Losses : $\leq 0.3\text{W/kvar}$.

Main product models and data sheet

Serial number	Type and Specification	Rated voltage (kV)	Rated capacity (kvar)	Rated frequency (Hz)	Rated capacitor (µF)	Rated current (A)	Enclosure height (mm)	Figure
1	BZMJ 0.23-5-3	0.23	5	50	301	12.5	140	Fig.1
2	BZMJ 0.23-6-3	0.23	6	50	361	15.1	190	Fig.1
3	BZMJ 0.23-7.5-3	0.23	7.5	50	451	18.8	190	Fig.1
4	BZMJ 0.23-10-3	0.23	10	50	602	25.1	195	Fig.2
5	BZMJ 0.23-12-3	0.23	12	50	722	30.1	220	Fig.2
6	BZMJ 0.23-15-3	0.23	15	50	903	37.7	250	Fig.2
7	BZMJ 0.23-20-3	0.23	20	50	1203	50.2	295	Fig.2
8	BZMJ 0.23-30-3	0.23	30	50	1805	75.3	315	Fig.3
9	BZMJ 0.4-3-3	0.4	3	50	60	4.3	95	Fig.1
10	BZMJ 0.4-5-3	0.4	5	50	99	7.2	95	Fig.1
11	BZMJ 0.4-6-3	0.4	6	50	119	8.7	120	Fig.1
12	BZMJ 0.4-7.5-3	0.4	7.5	50	149	10.8	120	Fig.1
13	BZMJ 0.4-8-3	0.4	8	50	159	11.5	120	Fig.1
14	BZMJ 0.4-10-3	0.4	10	50	199	14.4	140	Fig.1
15	BZMJ 0.4-12-3	0.4	12	50	239	17.3	190	Fig.1
16	BZMJ 0.4-14-3	0.4	14	50	279	20.2	190	Fig.1
17	BZMJ 0.4-15-3	0.4	15	50	298	21.7	190	Fig.1
18	BZMJ 0.4-16-3	0.4	16	50	318	23.1	190	Fig.1
19	BZMJ 0.4-18-3	0.4	18	50	358	26.0	220	Fig.1
20	BZMJ 0.4-20-3	0.4	20	50	398	28.9	220	Fig.1
21	BZMJ 0.4-25-3	0.4	25	50	497	36.1	220	Fig.2
22	BZMJ 0.4-30-3	0.4	30	50	597	43.3	250	Fig.2
23	BZMJ 0.4-40-3	0.4	40	50	796	57.7	250	Fig.3
24	BZMJ 0.4-50-3	0.4	50	50	995	72.2	315	Fig.3
25	BZMJ 0.4-60-3	0.4	60	50	1194	86.6	315	Fig.3
26	BZMJ 0.45-3-3	0.45	3	50	47	3.8	120	Fig.1
27	BZMJ 0.45-5-3	0.45	5	50	79	6.4	120	Fig.1
28	BZMJ 0.45-6-3	0.45	6	50	94	7.7	120	Fig.1
29	BZMJ 0.45-7.5-3	0.45	7.5	50	118	9.6	120	Fig.1
30	BZMJ 0.45-8-3	0.45	8	50	126	10.3	120	Fig.1
31	BZMJ 0.45-10-3	0.45	10	50	157	12.8	140	Fig.1
32	BZMJ 0.45-12-3	0.45	12	50	189	15.4	190	Fig.1
33	BZMJ 0.45-14-3	0.45	14	50	220	18.0	190	Fig.1
34	BZMJ 0.45-15-3	0.45	15	50	236	19.2	190	Fig.1
35	BZMJ 0.45-16-3	0.45	16	50	252	20.5	190	Fig.1
36	BZMJ 0.45-18-3	0.45	18	50	283	23.1	220	Fig.1
37	BZMJ 0.45-20-3	0.45	20	50	314	25.7	220	Fig.1
38	BZMJ 0.45-25-3	0.45	25	50	393	32.1	220	Fig.2
39	BZMJ 0.45-30-3	0.45	30	50	472	38.5	250	Fig.2
40	BZMJ 0.45-40-3	0.45	40	50	629	51.3	250	Fig.3
41	BZMJ 0.45-50-3	0.45	50	50	786	64.2	315	Fig.3
42	BZMJ 0.45-60-3	0.45	60	50	943	77.0	315	Fig.3
43	BZMJ 0.525-5-3	0.525	5	50	58	5.5	120	Fig.1
44	BZMJ 0.525-10-3	0.525	10	50	115	11.0	140	Fig.1
45	BZMJ 0.525-15-3	0.525	15	50	173	16.5	190	Fig.1
46	BZMJ 0.525-20-3	0.525	20	50	231	22.0	220	Fig.1
47	BZMJ 0.525-25-3	0.525	25	50	289	27.5	220	Fig.2
48	BZMJ 0.525-30-3	0.525	30	50	346	33.0	250	Fig.2
49	BZMJ 0.525-40-3	0.525	40	50	462	44.0	250	Fig.3
50	BZMJ 0.525-50-3	0.525	50	50	577	55.0	315	Fig.3
51	BZMJ 0.525-60-3	0.525	60	50	693	66.0	315	Fig.3



Serial number	Type and Specification	Rated voltage (kV)	Rated capacity (kvar)	Rated frequency (Hz)	Rated capacitor (μF)	Rated current (A)	Enclosure height (mm)	Figure
52	BZMJ 0.69-5-3	0.69	5	50	33	4.2	95	Fig.1
53	BZMJ 0.69-10-3	0.69	10	50	67	8.4	140	Fig.1
54	BZMJ 0.69-15-3	0.69	15	50	100	12.6	190	Fig.1
55	BZMJ 0.69-20-3	0.69	20	50	134	16.7	220	Fig.1
56	BZMJ 0.69-25-3	0.69	25	50	167	20.9	220	Fig.2
57	BZMJ 0.69-30-3	0.69	30	50	201	25.1	250	Fig.2
58	BZMJ 0.69-40-3	0.69	40	50	267	33.5	250	Fig.3
59	BZMJ 0.69-50-3	0.69	50	50	334	41.8	315	Fig.3
60	BZMJ 0.69-60-3	0.69	60	50	401	50.2	315	Fig.3
61	BZMJ 1.14-10-3	1.14	10	50	25	5.1	220	Fig.1
62	BZMJ 1.14-15-3	1.14	15	50	37	7.6	250	Fig.2
63	BZMJ 0.4-7.5-3YN	0.4	7.5	50	149	10.8	195	Fig.2*
64	BZMJ 0.4-10-3YN	0.4	10	50	199	14.4	195	Fig.2*
65	BZMJ 0.4-15-3YN	0.4	15	50	298	21.7	250	Fig.2*
66	BZMJ 0.4-20-3YN	0.4	20	50	398	28.9	295	Fig.2*

Note: The specifications marked with " *" are used for compensating the individual phase, the bigger one of the four terminals should be connected to the neutral line.

5. Features

- 5.1 Compact design and reliable quality thanks to advanced technology and excellent imported material;
- 5.2 Available for use in places with higher ambient temperature and voltage variation;
- 5.3 Having good sealing properties; and outgoing terminals for convenient wiring and reliable connection;
- 5.4 Fixed type, convenient for mounting and elegant appearance due to novel mounting pins;
- 5.5 No painting thanks to coated metal Enclosure used.

6. Note

- 6.1 Please guarantee that the capacitors are operated under specified conditions, including the proper temperature, voltage and current, as over-voltage and over-current may shorten the life of the capacitor;
- 6.2 Please pay attention to the points following when the capacitor is shuntly connected in the system
 - a. For the system of current regulating system and the electric equipments system, the capacitor should not be directly connected;
 - b. Operational current of the capacitor should be less than the off-load current of the shuntly connected motor;
 - c. When the transformer is off-load, the capacitor should stop operating.
- 6.3 Specific switches, contactors and over-current relays should be adopted when the capacitor is shuntly connected in the system.

7. Mounting dimensions (mm)

Figure 1

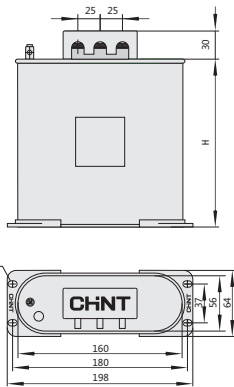


Figure 2

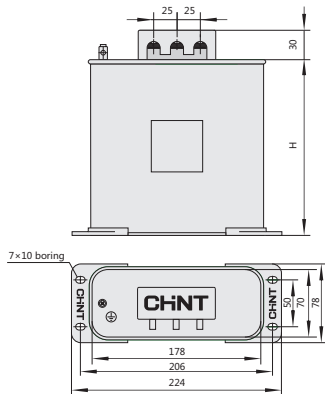


Figure 3

