High And Low Voltage Capacitor

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Low Voltage Shunt Power Capacitors of the Self-healing Type

General Description

ZHIYUE brand of self-healing type low voltage shunt capacitor made of the advanced metallized film, is produced strictly in accordance with the National standard and IEC standard by the introduced advanced foreign techniques and equipment. The device is suitable for low voltage power network to improve power factor, reduce reactive loss and better the voltage quality.

Main Characteristics

1. **Small volume, light weight and convenient installation**
   Its volume and weight are only 1/4 and 1/5 of the old product because of the using of a new dielectric metallized polypropylene film and special design.
2. **Low loss, little radiation and low temperature rise.**
   The new gold-spray process makes and unique metallized poly upropylene film with thickened zino-aluminum edge, the capacitor passessed with good property of surge-proof. The real figure is lower than 0.08%, so the loss of the capacitor itself is extremely low, the heat it gives out is little and the rise of temperature is low, so its service life is very long and it can save energy at the same time.
3. **Excellent self-healing performance**
   When a part of the medium is spark over due to the over-voltage it is capable of self-healing so as to continue the normal operation, therefore the reliability is improved greatly.
4. **Safety**
   Equipped with self-discharging resistant and safety devices inside, it is safe and reliable.
5. **No oil leakage, no-toxic and environment protection**
   In order to avoid oil leakage during operation so as to protect the environment, it employs the microcrystalline wax as the impregnate, which remains solid at ordinary temperature and has a drip melting point higher than 70℃. The unique soaking process has made the capacitor possess both the structure of dry capacitor and the advantages of impregnated capacitor.

Model and its meanings

B S MJ L 0.4 - 15 - 3

- Phase(3: three-phase ,1: single-phase)
- Rated output(15kvar)
- Rated voltage (0.4kV)
- With reactance coil, no mark for that without reactance coil
- Code of medium (metallized PP film)
- Saturant code (S:wax, Z:rape oil, G:silione oil, C:castor oil)
- Serial code (B represents shunt capacitor; M represents energy-storage capacitor)

Main Technical Characteristics

1. **Service conditions:** Ambient temperature -25℃~50℃, humidity ≤85%, and altitude lower than 2000m.
2. **Rated voltage:** 230VAC,400VAC,525VAC,690VAC,750VAC, 1050VAC,1200VAC.
3. **Rated output:** 1~60kvar.
4. **Rated frequency:** 50Hz or 60Hz.
5. **Capacitance Tolerance:** -5%~+10%.
6. **Tangent of the loss angle:** With the power frequency rated voltage, tg δ ≤0.1%, at 20℃.
7. **With stand voltage:** Between terminals 2.15 times rated voltage for 5 seconds, between terminals and container 2Un+2kV or 3kVAC choose the higher one for10 seconds.
8. **Max permissible over-voltage:** 110% rated voltage.
9. **Max permissible over-current:** 130% rated current.
10. **Self-discharge feature:** It is less than 50V in 3min after power broke down when the DC is 2 Un as the before increased by the capacitors.
11. **Applicable standard:** GB/T 12747-2004, IEC60831-2002.

Low Voltage Shunt Power Capacitors of the Self-healing Type

Notification of use and order

1. User shall select the rated voltage of the capacitor according to network voltage, and consider whether the switching of capacitor will step up the voltage. In general, the network actual voltage is much higher than the network nominal voltage, so the voltage of capacitor is more than 5% of network nominal voltage at least, for example, 400V capacitor is available for 380V electric network at least, and 690V capacitor is available for 660V electric network at least. Especially, when the circuit of capacitor is connected with a reactor in series, the voltage of capacitor terminal will step up with the reactance ratio of such reactor, thus, the rated voltage of capacitor shall be determined according to the calculated reactance ratio. In addition, a high rated voltage of capacitor is not always the best choice, because the voltage is high but the actual service voltage is low that causes the decline of capacitor actual output capacity.
2. A capacitor is qualified or not can't be appraised according to actual-measurement current. User shall evaluate the capacitor by measuring the capacitance value with a microfarad meter. Three-phase capacitor: Actual-measurement capacitance value of any two terminals shall be 1/2 of total capacitance value marked on the nameplate of capacitor, its error shall be within the range of -5%～+10%; Single-phase capacitor: Actual-measurement capacitance value of both terminals shall be equal to the total capacitance value marked on the nameplate of capacitor, its error shall within the range of -5%～+10%.
3. We supply the capacitor of class C (temperature class), which is used in the location where max environment temperature is not beyond 50℃, and the average temperature shall not exceed 40℃ within 24 hours.
4. Capacitor is a low impedance channel of harmonic wave, is charged with overmuch harmonic wave, it will be result in over-current and over-voltage, to make matters worse, capacitor may enlarge the harmonic wave and finally threaten the safety of power grid and reduce the service life of capacitor. When the harmonic wave is very large, please apply the capacitor (especially the metallized capacitor whose structure is weak in standing against the harmonic wave) with a reactor in series. In some developed countries, the capacitor is always used with a reactor in series. Such products as intermediate frequency furnace, arc furnace, electronic device (frequency controller, silicon controlled voltage regulator, control equipment, inversion current, switching power supply, rectifier of sunlight lamp, duplicating machine, computer, facsimile set and so on), magnetic iron cored equipment (transformer, line frequency induction furnace, electric welding machine, poor quality motor) are all harmonic generators.
5. During the moment of switching on, the rush current can reach hundreds times of rated current of the capacitor. Consequently, a special contactor that used for limiting rush current and a thyristor equipment are necessary for switching in a capacitor, also you may connect it with a rush-current-withstanding reactor, however, it is not allowed to cut in/off the capacitor directly by knife switch or common contactor.
6. When the capacitor is cut off from circuit network, only when the residual voltage of it falls to 10% of rated voltage that it can be put in again.
7. When it is under condition of light duty, i.e. no load or light load, please remember to cut off the capacitor, and it is forbidden to put in it again without any protective measures, otherwise, the harmonic wave may be enlarged, and capacitor, even the transformer, may be damaged.
8. The capacitor is of capacitive. When connecting with inductive load of power grid, the two parameter of capacitive and inductive may cause resonance in some point, which must be take into consideration when applying capacitor, and make resonance checking computations for each group of capacitance of capacitor, try to avoid the resonance point.
9. When the capacitor is permanent connected to motor (also called local compensation), capacitance selection of the capacitor must be in line with the rule that its current should be lower than 0.9 times of exciting current of the motor (this rule can be taken out of consideration for special equipment that have no inertia in motor's stopping).
10. When the motor is equipped with Y/△ starting device, the local compensated capacitor can only be wired in special way, but not simply connected in parallel with the motor.
11. It is apt to cause switching oscillation to power factor controller when it is connected with capacitor of large capacitance under condition of light load, considering of this, please choose reactive current or reactive power controller that would not make switching oscillation.

Low Voltage Shunt Power Capacitors of the Self-healing Type (Three-phase)

Main specification

Model BSMJ、BCMJ、BZMJ	Rated Voltage (kV)	Rated Output (kvar)	Rated capacity (μF)	Rated Current (A)	H (mm)	Output Terminal	Shell type
0.4-1-3	0.4	1	19.9	1.4	105	M6	A1
0.4-2-3	0.4	2	39.8	2.9	105	M6	A1
0.4-3-3	0.4	3	59.7	4.3	125	M6	A2
0.4-4-3	0.4	4	79.6	5.8	125	M6	A2
0.4-5-3	0.4	5	99.5	7.2	125	M6	A2
0.4-6-3	0.4	6	119.4	8.7	125	M6	A2
0.4-7.5-3	0.4	7.5	149.2	10.8	125	M6	A2
0.4-8-3	0.4	8	159.2	11.6	125	M6	A2
0.4-10-3	0.4	10	198.9	14.4	180	M6	A2
0.4-12-3	0.4	12	238.7	17.3	180	M6	A2
0.4-14-3	0.4	14	278.5	20.2	210	M6	A2
0.4-15-3	0.4	15	298.4	21.7	210	M6	A2
0.4-16-3	0.4	16	318.3	23.1	210	M6	A2
0.4-18-3 A2(B2)	0.4	18	358.1	26.0	245(210)	M6	A2(B2)
0.4-20-3 A2(B2)	0.4	20	397.9	28.9	245(210)	M6	A2(B2)
0.4-22-3	0.4	22	437.7	31.8	210	M8	B2
0.4-24-3	0.4	24	477.5	34.6	210	M8	B2
0.4-25-3	0.4	25	497.4	36.1	210	M8	B2
0.4-28-3	0.4	28	557.3	40.4	260	M8	B2
0.4-30-3	0.4	30	596.8	43.3	260	M8	B2
0.4-35-3	0.4	35	696.3	50.5	260	M8	B2
0.4-40-3	0.4	40	796.2	57.7	320	M8	B2
0.4-45-3	0.4	45	895.2	65.0	210	M10	C
0.4-50-3	0.4	50	995.2	72.2	210	M10	C

Main specification

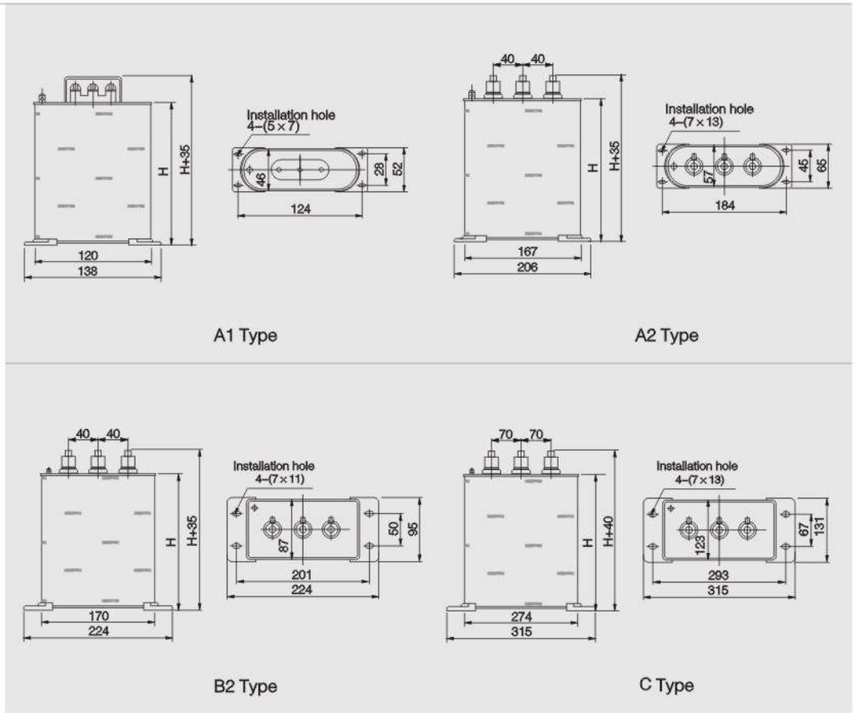
Model BSMJ、BCMJ、BZMJ	Rated Voltage (kV)	Rated Output (kvar)	Rated capacity (μ F)	Rated Current (A)	H (mm)	Output Terminal	Shell type
0.4-55-3	0.4	55	1094.2	79.4	260	M10	C
0.4-60-3	0.4	60	1194.3	86.6	260	M10	C
0.45-1-3	0.45	1	15.7	1.3	105	M6	A1
0.45-2-3	0.45	2	31.4	2.6	105	M6	A1
0.45-3-3	0.45	3	47.2	3.8	125	M6	A2
0.45-4-3	0.45	4	62.9	5.1	125	M6	A2
0.45-5-3	0.45	5	78.6	6.4	125	M6	A2
0.45-6-3	0.45	6	94.3	7.7	125	M6	A2
0.45-7.5-3	0.45	7.5	117.9	9.6	125	M6	A2
0.45-8-3	0.45	8	125.8	10.3	125	M6	A2
0.45-10-3	0.45	10	157.2	12.8	180	M6	A2
0.45-12-3	0.45	12	188.6	15.4	180	M6	A2
0.45-14-3	0.45	14	220.1	18.0	210	M6	A2
0.45-15-3	0.45	15	235.8	19.2	210	M6	A2
0.45-16-3	0.45	16	251.5	20.5	210	M6	A2
0.45-18-3 A2 (B2)	0.45	18	282.9	23.1	245(210)	M6	A2(B2)
0.45-20-3 A2 (B2)	0.45	20	314.4	25.7	245(210)	M6	A2(B2)
0.45-22-3	0.45	22	345.8	28.3	210	M8	B2
0.45-24-3	0.45	24	377.3	30.8	210	M8	B2
0.45-25-3	0.45	25	393.2	32.1	210	M8	B2
0.45-28-3	0.45	28	440.3	35.9	210	M8	B2
0.45-30-3	0.45	30	471.8	38.5	210	M8	B2
0.45-35-3	0.45	35	550.2	44.9	260	M8	B2
0.45-40-3	0.45	40	629.1	51.3	260	M8	B2
0.45-45-3	0.45	45	707.4	57.7	210	M10	C
0.45-50-3	0.45	50	786.3	64.2	210	M10	C
0.45-55-3	0.45	55	864.5	70.6	210	M10	C
0.45-60-3	0.45	60	943.6	77.0	210	M10	C
0.525-5-3	0.525	5	57.7	5.5	125	M6	A2
0.525-10-3	0.525	10	115.5	11.0	180	M6	A2
0.525-15-3	0.525	15	173.2	16.5	210	M6	A2
0.525-16-3	0.525	16	184.8	17.6	210	M6	A2
0.525-18-3	0.525	18	207.9	19.8	210	M6	B2
0.525-20-3	0.525	20	231.0	22.0	210	M6	B2
0-525-25-3	0.525	25	288.7	27.5	210	M8	B2
0.525-30-3	0.525	30	346.5	33.0	260	M8	B2
0.525-40-3	0.525	40	461.9	44.0	320	M8	B2
0.525-50-3	0.525	50	577.4	55.0	210	M10	C
0.525-60-3	0.525	60	692.9	66.0	260	M10	C
0.69-5-3	0.69	5	33.4	4.2	125	M6	A2
0.69-10-3	0.69	10	66.9	8.4	180	M6	A2
0.69-15-3	0.69	15	100.3	12.6	210	M6	A2
0.69-16-3	0.69	16	107.0	13.4	210	M6	A2
0.69-20-3	0.69	20	133.8	16.7	210	M6	B2
0.69-25-3	0.69	25	167.2	20.9	210	M6	B2
0.69-30-3	0.69	30	200.7	25.1	260	M8	B2
0.69-40-3	0.69	40	267.4	33.5	320	M8	B2
0.69-50-3	0.69	50	334.3	41.9	210	M10	C
0.69-60-3	0.69	60	401.1	50.2	260	M10	C

Low Voltage Shunt Power Capacitors of the Self-healing Type (Three-phase)

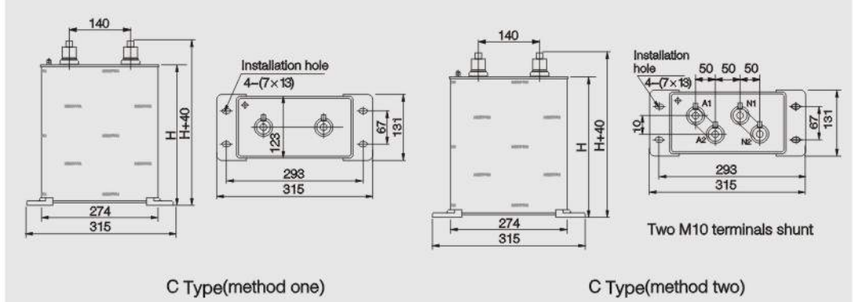
Main specification

Model BSMJ、BCMJ、BZMJ	Rated Voltage (kV)	Rated Output (kvar)	Rated capacity (μ F)	Rated Current (A)	H (mm)	Output Terminal	Shell type
1.2-5-3	1.2	5	11.0	2.4	180	M6	A2
1.2-10-3	1.2	10	22.0	4.8	210	M6	A2
1.2-15-3	1.2	15	33.2	7.2	245	M6	A2
1.2-20-3	1.2	20	44.2	9.6	210	M6	B2
1.2-25-3	1.2	25	55.3	12	210	M6	B2
1.2-30-3	1.2	30	66.3	14.4	210	M10	C
1.2-40-3	1.2	40	88.4	19.2	210	M10	C
1.2-50-3	1.2	50	110.5	24.1	210	M10	C

Overall Dimension



Overall Dimension



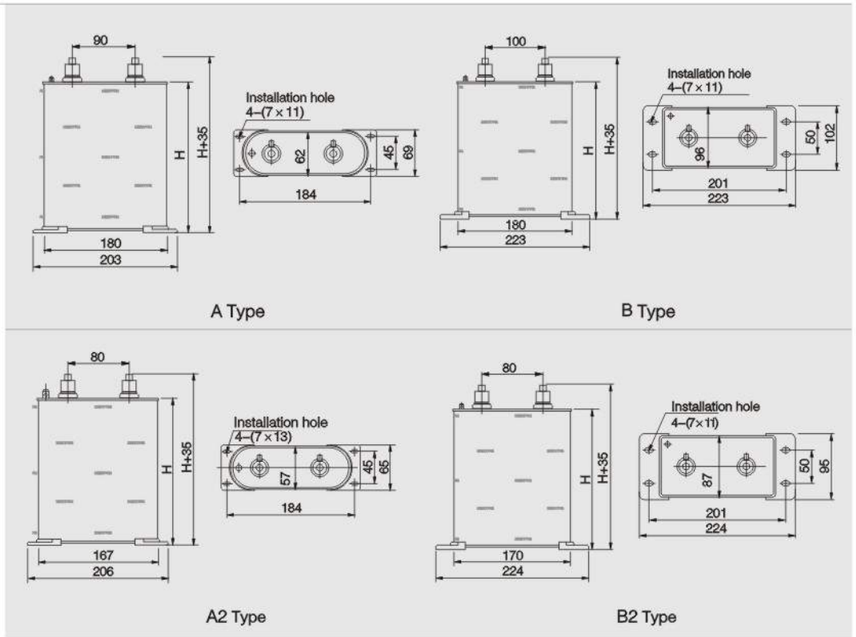
Main specification

Model BSMJ、BCMJ、BZMJ	Rated Voltage (kV)	Rated Output (kvar)	Rated capacity (μ F)	Rated Current (A)	H (mm)	Output Terminal	Shell type
0.23–1–1	0.23	1	60.2	4.3	130	M6	A
0.23–3–1	0.23	3	180.5	13.0	130	M6	A
0.23–5–1	0.23	5	301.0	21.7	130	M6	A
0.23–7.5–1	0.23	7.5	451.5	32.6	220	M8	A
0.23–10–1	0.23	10	602.0	43.5	220	M8	A
0.23–15–1	0.23	15	903.0	65.2	220	M8	B
0.23–20–1	0.23	20	1203.4	87.0	270	M8	B
0.23–25–1	0.23	25	1504.3	108.7	330	M10	B
0.23–30–1	0.23	30	1805.2	130.4	210	2×M10	C
0.4–4–1	0.4	4	79.6	10.0	125	M6	A2
0.4–5–1	0.4	5	99.5	12.5	125	M6	A2
0.4–6–1	0.4	6	119.4	15.0	125	M6	A2
0.4–7.5–1	0.4	7.5	149.2	18.8	125	M6	A2
0.4–8–1	0.4	8	159.2	20	125	M6	A2
0.4–10–1	0.4	10	198.9	25	180	M6	A2
0.4–12–1	0.4	12	238.7	30	180	M6	A2
0.4–14–1	0.4	14	278.5	35	210	M8	A2
0.4–15–1	0.4	15	298.4	37.5	210	M8	A2
0.4–16–1	0.4	16	318.3	40	210	M8	A2
0.4–18–1 A2 (B2)	0.4	18	358.1	45.0	245(210)	M8	A2 (B2)
0.4–20–1 A2 (B2)	0.4	20	397.9	50	245(210)	M8	A2 (B2)
0.4–22–1	0.4	22	437.7	55	210	M8	B2
0.4–25–1	0.4	25	497.4	62.5	210	M8	B2
0.4–30–1	0.4	30	596.8	75	260	M8	B2

Main specification

Model BSMJ、BCMJ、BZMJ	Rated Voltage (kV)	Rated Output (kvar)	Rated capacity (μ F)	Rated Current (A)	H (mm)	Output Terminal	Shell type
0.4–35–1	0.4	35	696.3	87.5	260	M8	B2
0.4–40–1	0.4	40	796.2	100	320	M10	B2
0.4–45–1	0.4	45	895.2	112.5	210	2×M10	C
0.4–50–1	0.4	50	995.2	125	210	2×M10	C
0.4–60–1	0.4	60	1194.3	150	260	2×M10	C
0.45–4–1	0.45	4	62.9	8.9	125	M6	A2
0.45–5–1	0.45	5	78.6	11.1	125	M6	A2
0.45–6–1	0.45	6	94.3	13.3	125	M6	A2
0.45–7.5–1	0.45	7.5	117.9	16.7	125	M6	A2
0.45–8–1	0.45	8	125.8	17.8	125	M6	A2
0.45–10–1	0.45	10	157.2	22.2	180	M6	A2
0.45–12–1	0.45	12	188.6	26.7	180	M6	A2
0.45–14–1	0.45	14	220.1	31.1	210	M8	A2
0.45–15–1	0.45	15	235.8	33.3	210	M8	A2
0.45–16–1	0.45	16	251.5	35.6	210	M8	A2
0.45–18–1 A2(B2)	0.45	18	282.9	40	245(210)	M8	A2 (B2)
0.45–20–1 A2(B2)	0.45	20	314.4	44.4	245(210)	M8	A2 (B2)
0.45–22–1	0.45	22	345.8	48.9	210	M8	B2
0.45–25–1	0.45	25	393.2	55.6	210	M8	B2
0.45–30–1	0.45	30	471.8	66.7	210	M8	B2
0.45–35–1	0.45	35	550.2	77.8	260	M8	B2
0.45–40–1	0.45	40	629.1	88.9	260	M8	B2
0.45–45–1	0.45	45	707.4	100.0	210	M10	C
0.45–50–1	0.45	50	786.3	111.1	210	2×M10	C
0.45–60–1	0.45	60	943.6	133.3	210	2×M10	C

Overall Dimension



General Description

CMKP series low voltage shunt capacitor of the self-healing type round capacitor is use for correcting the power factor of 50Hz and 60Hz low voltage power system device. It is suit for compensation on the spot and concentrate auto compensation, can reduce reactive loss, improve voltage quality, is a energy conservation product .
The product is according to IEC831-1/2.

Working Condition

1. Alitude: lower than 2000m
2. Ambient temperature -25℃-50℃
3. Humidity : smaller than 90%
4. After the power cut off, reputing when make sure the remain voltage is smaller than 10% of the rated voltage, usually this time is 200s, so the controller you use should has the function of time delay for reputing after cut off.

Model and its meaning

C MKP 0.4 - 15 - 3

- 3 — Phase number(3 means three phase, 1means single phase)
- 15 — Rated output (if three phase, it mean total three phase output, (kvar))
- 0.4 — line voltage(kV)
- MKP — Metallized film capacitor
- C — Factory code

Low voltage shunt capacitor
of self-healing type(cylinder type)

Structure Characteristics

1. Use cylinder aluminium tin sealed.
2. Use microcrystalline wax and healthy dielectric oil as the impregnant.
3. It has built-in pressure separation device and discharge resistor.
4. Use dielectric metallized plypropylene film as medium.
5. In the top of the capacitor is electric shock resistant protection connecting terminal.
6. In the bottom is M12 or M16 earth ground screw.
7. All the three phase capacitor is triangle connection inside.

Main technical characteristics

1. Rated voltage: 0.23kv,04kv, 0.415kv, 0.45kv, 0.525kv , and so on.
2. Rated output: 1-30kvar.
3. Capacitance tolerance: -5%-10%.
4. Tangent of the loss angle: smaller than 0.1%.
5. Between terminals withstand voltage: 2.15times rated voltage for 5 seconds.
6. Dielectric level: add voltage between terminal and case: 2times of rated voltage add 2KV or 3KV, choose the higher one, it takes 10s, no spark over or flash.
7. Max permissible over-voltage:when 1.1 times rated voltage, it can not exceed 8 hours per day; when 1.15 times rated voltage, it can not exceed 30minutes per day, when 1.2 times voltage, can not exceed 5 minutes per day, 1.3tims rated voltage, can not exceed 1 minutes per day.
8. Max permissible over-current: 1.3 times of rated current, but consider to the voltage, capacitance tolerance and harmonic, the transient current can not exceed 1.43 times of rated current.
9. Discharge feature: it has built-in discharge resistor, discharge 3 minutes, the voltage will down to below 50V after the capacitor cut off the power.
10. According to the IEC60831-2002 standard.

Main specification

Three phase capacitor

Model CMKP	Frequency: 50Hz				Connection Method: △	
	Rated Voltage (kV)	Rated Output (kvar)	Rated capacity (μF)	Rated Current (A)	Dimesion D×H (mm)	Installation Size M×L(mm)
0.23-2.5-3	230	2.5	150	6.3	Φ76×180	M12×16
0.23-3-3	230	3	181	7.5	Φ76×180	M12×16
0.23-4-3	230	4	241	10	Φ76×180	M12×16
0.23-5-3	230	5	301	12.6	Φ76×210	M12×16
0.23-6-3	230	6	361	15.1	Φ76×210	M12×16
0.23-7.5-3	230	7.5	451	18.8	Φ76×240	M12×16
0.23-8-3	230	8	481	20.1	Φ86×240	M12×16
0.23-10-3	230	10	602	25.1	Φ96×240	M16×25
0.23-12-3	230	12	722	30.1	Φ96×240	M16×25
0.23-12.5-3	230	12.5	752	31.4	Φ106×240	M16×25
0.23-15-3	230	15	903	37.7	Φ106×240	M16×25
0.4-2.5-3	400	2.5	49.7	3.6	Φ76×135	M12×16
0.4-3-3	400	3	59.7	4.3	Φ76×135	M12×16
0.4-4-3	400	4	79.6	5.8	Φ86×135	M12×16
0.4-5-3	400	5	99.5	7.2	Φ76×180	M12×16
0.4-6-3	400	6	119	8.7	Φ76×180	M12×16
0.4-7.5	400	7.5	149	10.8	Φ76×180	M12×16
0.4-8-3	400	8	159	11.6	Φ76×210	M12×16
0.4-10-3	400	10	199	14.4	Φ76×240	M12×16
0.4-12-3	400	12	239	17.3	Φ86×240	M12×16
0.4-12.5-3	400	12.5	249	18	Φ86×240	M12×16
0.4-14-3	400	14	279	20.2	Φ86×240	M12×16
0.4-15-3	400	15	298	21.7	Φ96×240	M16×25
0.4-16-3	400	16	318	23.1	Φ96×240	M16×25

Main specification
Three phase capacitor

Model CMKP	Frequency: 50Hz				Connection Method: △	
	Rated Voltage (kV)	Rated Output (kvar)	Rated capacity (μ F)	Rated Current (A)	Dimesion D×H (mm)	Installation Size M×L(mm)
0.4-18-3	400	18	358	26.0	Φ96×240	M16×25
0.4-20-3	400	20	398	28.9	Φ106×240	M16×25
0.4-25-3	400	25	497	36.1	Φ106×290	M16×25
0.4-30-3	400	30	597	43.3	Φ116×290	M16×25
0.415-5-3	415	5	92.4	7.0	Φ76×180	M12×16
0.415-10-3	415	10	185	13.9	Φ76×240	M12×16
0.415-15-3	415	15	277	20.9	Φ96×240	M16×25
0.415-20-3	415	20	370	27.8	Φ106×240	M16×25
0.415-25-3	415	25	462	34.8	Φ106×290	M16×25
0.415-30-3	415	30	555	41.7	Φ116×290	M16×25
0.45-5-3	450	5	78.6	6.4	Φ76×180	M12×16
0.45-10-3	450	10	157	12.8	Φ76×240	M12×16
0.45-15-3	450	15	236	19.3	Φ86×240	M12×16
0.45-20-3	450	20	314	25.7	Φ106×240	M16×25
0.45-25-3	450	25	393	32.1	Φ106×290	M16×25
0.45-30-3	450	30	472	38.5	Φ106×290	M16×25
0.525-5-3	525	5	57.7	5.5	Φ76×180	M12×16
0.525-10-3	525	10	116	11.0	Φ86×240	M12×16
0.525-15-3	525	15	173	16.5	Φ96×240	M16×25
0.525-20-3	525	20	231	22.0	Φ106×240	M16×25
0.525-25-3	525	25	289	27.5	Φ106×290	M16×25
0.525-30-3	525	30	347	33.0	Φ116×290	M16×25

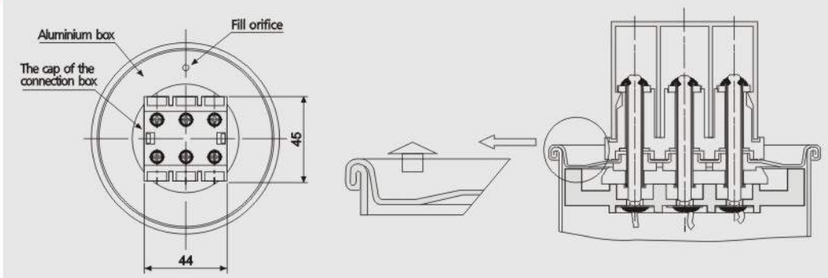
Note: Can offer other specification according to the customer's requirement overall dimesion

Main specification
Single phase capacitor

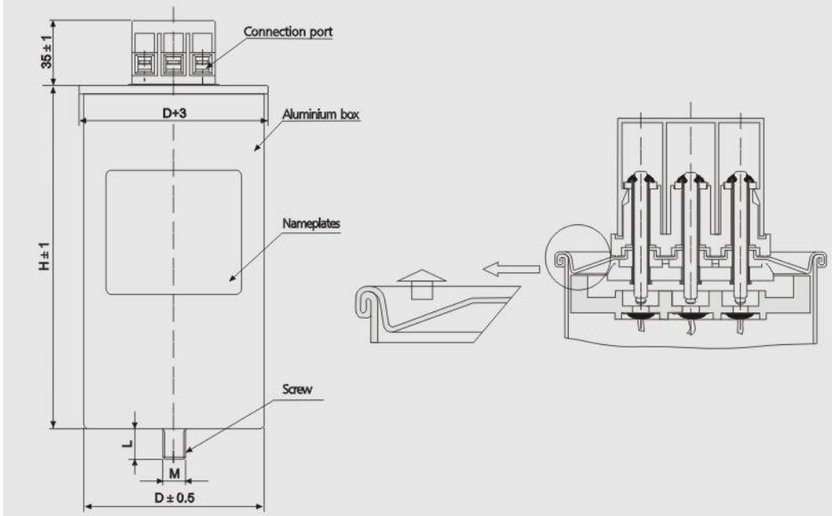
Model CMKP	Frequency: 50Hz				Connection Method	
	Rated Voltage (kV)	Rated Output (kvar)	Rated capacity (μ F)	Rated Current (A)	Dimesion D×H (mm)	Installation Size M×L(mm)
0.23-2.5-1	230	2.5	150	10.9	Φ76×135	M12×16
0.23-5-1	230	5	301	21.7	Φ76×180	M12×16
0.23-7.5-1	230	7.5	451	32.6	Φ86×240	M12×16
0.23-10-1	230	10	602	43.5	Φ96×240	M16×25
0.4-2.5-1	400	2.5	49.7	6.3	Φ76×135	M12×16
0.4-5-1	400	5	99.5	12.5	Φ76×180	M12×16
0.4-7.5-1	400	7.5	149	18.8	Φ76×180	M12×16
0.4-10-1	400	10	199	25	Φ76×240	M12×16
0.4-12.5-1	400	12.5	249	31.3	Φ86×240	M12×16
0.4-15-1	400	15	298	37.5	Φ96×240	M16×25
0.45-2.5-1	450	2.5	39.3	5.6	Φ76×135	M12×16
0.45-5-1	450	5	78.6	11.1	Φ76×180	M12×16
0.45-7.5-1	450	7.5	118	16.7	Φ76×180	M12×16
0.45-10-1	450	10	157	22.2	Φ76×240	M12×16
0.45-15-1	450	15	236	33.3	Φ86×240	M12×16
0.525-2.5-1	525	2.5	28.9	4.8	Φ76×135	M12×16
0.525-5-1	525	5	57.7	9.5	Φ76×180	M12×16
0.525-7.5-1	525	7.5	86.6	14.3	Φ76×210	M12×16
0.525-10-1	525	10	116	19	Φ76×240	M12×16
0.525-15-1	525	15	173	28.6	Φ96×240	M16×25

Note: Can offer other specification according to the customer's requirement overall dimesion

Pressure tension fracture protection device drawing



Before tension fracture



After tension fracture