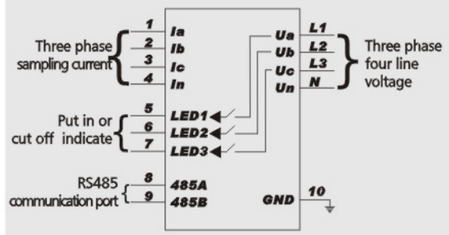
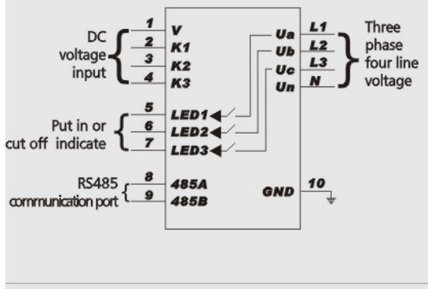
Drawing picture

ZUIC–DA



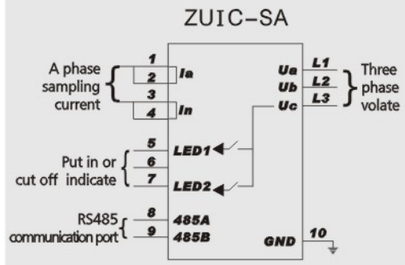
1.2.3.4 is the output teminal for three phase current, connect to the second current transfermer, 4 is common port, L1 L2 L3is three phase voltage input port, the order of three phase current should same as the three phase voltage input. One side of the three capacitor should connect to Ua Ub Uc through the inside compound switch, the other side shunt together to Un, 5 is the put in and cut off voltage signal for Ua phase capacitor, the voltage is the same phase to L1, 6 is the voltage put in and cut off signal for Ub phase, the voltage is the same phase to L2, 7 is the voltage put in and cut off signal for Uc phase, the voltage is the same phase to L3.

ZUIC–DW



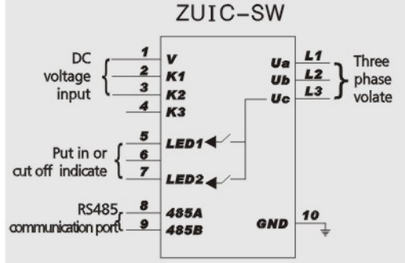
1 is the common port input of DC control signal, we suggest you to use 12V DC electric to control, K1 control NO.1 capacitor put in and cut off, K2 control NO.2 capacitor put in and cut off. If outside controller arrowed, can also use RS485 communication method at the same time. When DC control and communication control at the same time, the outside DC signal take precedence, the other the same as ZUIC-DA.

ZUIC–SA

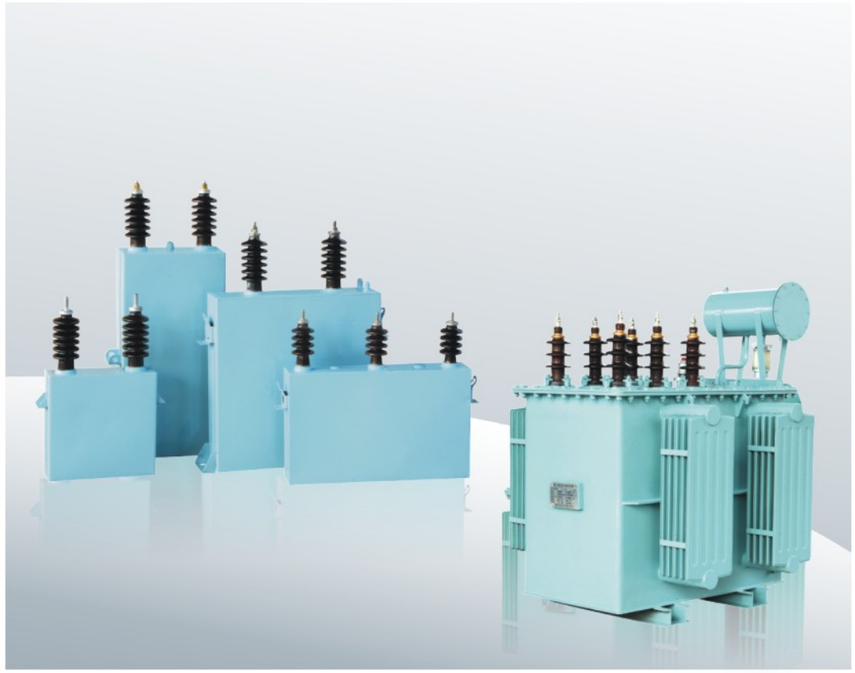


When the A phase input sampling current is big, can shunt 1and 2, shunt 3and 4 can increase the terminal's brearing capacity of current. Because the current signal usually come from the second current transformer, so connect any of two is ok, 5 is the put in and cut off voltage signal of inside NO.1capacitor, 7 is the put in and cut off voltage signal of inside NO.2 capacitor, the put in signal should be the same phase with the Uc input voltage.

ZUIC–SW



1. Is the common input port of DC control signal, we advise you use 12V DC power control.
2. Control NO.1 capacitor put in and cut off, 3 control NO.2 capacitor put in and cut off. the others the same as ZUIC-SA.



Applications

High voltage shunt capacitor is mainly used in the A. C. power system with50 Hz or 60Hz to improve power factor. The performance conforms to GB 3083.2-89《High voltage shunt capacitor》and IEC60871-1987.

Usage Conditions

1. Altitude: less than 1000m; Ambient Temperature: -40℃～+40℃.
2. No violent mechanical vibration, no harmful gas and vapor, no electric, and explosive dust in location.
3. Continuous operation voltage: 1.00 Un, long-term max. Over voltage: lessl. 1Un.
4. Stable over-current (including harmonics current) less 1.3 In.
5. With stand voltage: between terminal 2.15, time rated voltage for 10 seconds, between terminals and container 42kV for 10 seconds.

Model and its meaning

B F M R 11/√3 – 100 – 1 W

- W: Tail-note code(outdoor service)
- 1: Phase(1: single-phase, 3: three-phase)
- 100: Rated output(kvar)
- 11/√3: Rated voltage(kV)
- R: Design code r--inner fuse R--Discharge resistance
- M: Solid medium F--Film & Paper M--Film
- F: Liquid W--Dodecyl benzene F --Diphenylethane A --Benzyl benzene
- B: Series code (B--Parallel connection capacitor)

Main technical specification

1. **Rated voltage:** 6.3kV, 6.6kV, 6.6/$\sqrt{3}$ kV, 7.96kV, 10.5kV, 11kV, 11/$\sqrt{3}$ kV, 12kV, 12/$\sqrt{3}$ kV, 19kV, please indicated in the order if you want the other special capacity.
2. **Rated capacity:** 33~334kvar please indicated in the order if you want the other special capacity.
3. **Capacity tolerance:** -5~15%.
4. **Loss angel tangential value:** film & paper medium tg $\delta \leqslant 0.08\%$, film medium tg $\delta \leqslant 0.05\%$.
5. **Withstand voltage:** it can afford AC2.15 or DC4.3 times rated voltage between the capacity pales, last about 10s without break or flash, BIL: 6kV(30kV), 10kV(42kV).
6. **Free discharge:** it has the inner resistance, 10min after cutting off the power supply, the residual voltage will reduce to 75V from $\sqrt{2}$Un.
7. **Max. Voltage:** 1.1 times rated voltage, it can not exceed 8 hours each 24 hours, 1.15 times of rated voltage, it can not exceed 30mins each 24 hours, 1.2 time rated voltage, it can not exceed 5 mins each 24 hours, 1.3 time rated voltage, it can not exceed 1 min each 24 hours.
8. **Max. Current:** running smoothly under the 1.3 time rated voltage, over voltage, capacity positive tolerance and harmonic wave which can not 1.43 time rated current.
9. **Standard:** GB/T 112024.1-2001, IEC6087:1997.

Main specification

Model	Rated Value			
	Voltage(kV)	Output(kvar)	Capacitance(μF)	Current In(A)
BWF6.3-25-1W	6.3	25	2.006	3.968
BWF6.3-30-1W	6.3	30	2.406	4.762
BWF6.6/$\sqrt{3}$ -25-1W	6.6/$\sqrt{3}$	25	5.481	6.561
BWF6.3/$\sqrt{3}$ -30-1W	6.6/$\sqrt{3}$	30	6.577	7.873
BWF6.3/$\sqrt{3}$ -50-1W	6.6/$\sqrt{3}$	50	10.96	13.12
BWF10.5-25-1W	10.5	25	0.722	2.38
BWF10.5-30-1W	10.5	30	0.886	2.857
BWF10.5-50-1W	10.5	50	1.444	4.762
BWF11/$\sqrt{3}$ -30-1W	11/$\sqrt{3}$	30	2.368	4.724
BWF11/$\sqrt{3}$ -50-1W	11/$\sqrt{3}$	50	3.946	7.873
BFF6.3-30-1W	6.3	30	2.4	4.9
BFF6.3-50-1W	6.3	50	4.0	7.9
BFF6.3-100-1W	6.3	100	8.0	15.9
BFF6.3-200-1W	6.3	200	16.0	31.7
BFF6.3-300-1W	6.3	300	24.0	47.6
BFF6.3-334-1W	6.3	334	26.8	53.0
BFF10.5-50-1W	10.5	50	1.44	4.8
BFF10.5-100-1W	10.5	100	2.9	9.5
BFF10.5-150-1W	10.5	150	4.3	14.3
BFF10.5-200-1W	10.5	200	5.8	19.0
BFF10.5-300-1W	10.5	300	8.68	28.6
BFF10.5-334-1W	10.5	334	9.65	31.8

Main specification

Model	Rated Value			
	Voltage(kV)	Output(kvar)	Capacitance(μF)	Current In(A)
BFF11/$\sqrt{3}$ -50-1W	11/$\sqrt{3}$	50	3.95	7.87
BFF11/$\sqrt{3}$ -100-1W	11/$\sqrt{3}$	100	7.89	15.75
BFF11/$\sqrt{3}$ -150-1W	11/$\sqrt{3}$	150	11.84	23.60
BFF11/$\sqrt{3}$ -200-1W	11/$\sqrt{3}$	200	15.78	31.5
BFF11/$\sqrt{3}$ -300-1W	11/$\sqrt{3}$	300	23.68	47.2
BFF11/$\sqrt{3}$ -334-1W	11/$\sqrt{3}$	334	26.36	52.6
BFF6.6/$\sqrt{3}$ -50-1W	6.6/$\sqrt{3}$	50	10.96	13.12
BFF6.6/$\sqrt{3}$ -100-1W	6.6/$\sqrt{3}$	100	21.9	26.24
BFF6.6/$\sqrt{3}$ -150-1W	6.6/$\sqrt{3}$	150	32.9	39.36
BFF6.6/$\sqrt{3}$ -200-1W	6.6/$\sqrt{3}$	200	43.8	52.48
BFF6.6/$\sqrt{3}$ -300-1W	6.6/$\sqrt{3}$	300	65.8	78.7
BFF6.6/$\sqrt{3}$ -334-1W	6.6/$\sqrt{3}$	334	73.2	87.6
BFM11-100-1W	11	100	2.63	9.1
BFM11-150-1W	11	150	3.95	13.6
BFM11-200-1W	11	200	5.26	18.2
BFM11-300-1W	11	300	7.89	27.3
BFM11-334-1W	11	334	8.79	30.4
BFM12-100-1W	12	100	2.2	8.33
BFM12-150-1W	12	150	3.3	12.5
BFM12-200-1W	12	200	4.4	16.7
BFM12-300-1W	12	300	6.64	25.0
BFM12-334-1W	12	334	7.39	27.8
BFM12/$\sqrt{3}$-100-1W	12/$\sqrt{3}$	100	6.63	14.4
BFM12/$\sqrt{3}$-150-1W	12/$\sqrt{3}$	150	9.95	21.7
BFM12/$\sqrt{3}$-200-1W	12/$\sqrt{3}$	200	13.3	28.9
BFM12/$\sqrt{3}$-300-1W	12/$\sqrt{3}$	300	19.9	43.3
BFM12/$\sqrt{3}$-334-1W	12/$\sqrt{3}$	334	22.1	48.2
BFM12/$\sqrt{3}$-400-1W	12/$\sqrt{3}$	400	26.54	57.74
BFM6.3-100-1W	6.3	100	8.0	15.9
BFM6.3-150-1W	6.3	150	12.0	23.8
BFM6.3-200-1W	6.3	200	16.0	31.7
BFM6.3-300-1W	6.3	300	24.0	47.6
BFM6.3-334-1W	6.3	334	26.8	53.0
BFM6.6-100-1W	6.6	100	7.3	15.2
BFM6.6-150-1W	6.6	150	11.0	22.7
BFM6.6-200-1W	6.6	200	14.6	30.3
BFM6.6-300-1W	6.6	300	22.0	45.5
BFM6.6-334-1W	6.6	334	24.4	50.6
BFM6.6/$\sqrt{3}$-100-1W	6.6/$\sqrt{3}$	100	21.9	26.24
BFM6.6/$\sqrt{3}$-150-1W	6.6/$\sqrt{3}$	150	32.9	39.36
BFM6.6/$\sqrt{3}$-200-1W	6.6/$\sqrt{3}$	200	43.8	52.48
BFM6.6/$\sqrt{3}$-300-1W	6.6/$\sqrt{3}$	300	65.8	78.7
BFM6.6/$\sqrt{3}$-334-1W	6.6/$\sqrt{3}$	334	73.2	87.6
BFM11/$\sqrt{3}$-100-1W	11/$\sqrt{3}$	100	7.89	15.75
BFM11/$\sqrt{3}$-150-1W	11/$\sqrt{3}$	150	11.84	23.60
BFM11/$\sqrt{3}$-200-1W	11/$\sqrt{3}$	200	15.78	31.5
BFM11/$\sqrt{3}$-300-1W	11/$\sqrt{3}$	300	23.68	47.2
BFM11/$\sqrt{3}$-334-1W	11/$\sqrt{3}$	334	26.36	52.6

High Voltage Shunt Capacitor

Main sepcification

Model	Rated Value			
	Voltage(kV)	Output(kvar)	Capacitance(μ F)	Current In(A)
BFF11-100-3W	11	100	2.63	5.25
BFF11-150-3W	11	150	3.95	7.87
BFF11-200-3W	11	200	5.26	10.5
BFF11-300-3W	11	300	7.90	15.75
BFM11-100-3W	11	100	2.63	5.25
BFM11-150-3W	11	150	3.95	7.87
BFM11-200-3W	11	200	5.26	10.5
BFM11-300-3W	11	300	7.90	15.75
BFF12-100-3W	12	100	2.2	4.8
BFF12-150-3W	12	150	3.3	7.2
BFF12-200-3W	12	200	4.4	9.6
BFF12-300-3W	12	300	6.64	14.45
BFM12-100-3W	12	100	2.2	4.8
BFM12-150-3W	12	150	3.2	7.2
BFM12-200-3W	12	200	4.4	9.6
BFM12-300-3W	12	300	6.64	14.45
BAM11/$\sqrt{3}$-200-1W	11/$\sqrt{3}$	200	15.78	31.5
BAM11/$\sqrt{3}$-334-1W	11/$\sqrt{3}$	334	26.36	52.6
BAM12/$\sqrt{3}$-200-1W	12/$\sqrt{3}$	200	13.3	28.9
BAM12/$\sqrt{3}$-334-1W	12/$\sqrt{3}$	334	22.1	48.2
BAM12-200-1W	12	200	4.4	16.7
BAM12-334-1W	12	334	7.39	27.8
BAM10.5-200-1W	10.5	200	5.8	19.0
BAM10.5-334-1W	10.5	334	9.65	31.8

Order notification

1. The choose of the capacitor which should accord the voltage of the power line. The capacitor will add the voltage, so it should choose 105% rated voltage of the system for the capacitor.
2. When there is a series-wound reactor in the capacitor loop, the voltage of the terminal which will be increased accord the rising of the reacting ratio, so it should calculate the value how to match the capacitor and the reactor.
3. The capacitor is the way of low-resistance of harmonic waves, it will be over-voltage or over-current when there are a lots of harmonic waves.
4. In addition, the capacitor will extend the harmonic waves or resonance, which will affect serious to the life of the capacitor, so in the high resonance situation, it should connect a series-wound reactor to control the harmonic waves. The inrush current of the capacitor will be hundred times than the rated current when it be closed, so the switch of the capacitor which should choose the no-flash switch. To control the close inrush current, it can connect a reactor. After cutting off from the power supply, the capacitor which has discharge resistance inside, can reduce the voltage from the rated peak voltage to under 75V in 10 minutes. It should be indicated in the order to reduce the voltage from the rated peal voltage to under 75V in 5 minutes.
4. To install 150~200kvar capacitor for the line compensation. The capacitor can not be installed together with the power transformer to against the resonance of the non-all-phase running in the line, which will damage the capacitor or the power transformer.
5. The over-voltage operating protection Zno lightning arrester which should choose the lightning arrester for the capacitor special. And it is better to install the lightning arrester between the poles.
6. The instantaneous trip protection should choose the special fuse for the capacitor. And the rated current should be 1.43~1.5 times than the capacitor rated voltage.
7. When the capacitor shunt-wound connect to the high-voltage generator, to against the self-excited of the generator when it be cut off from the power supply and against the voltage extending of the capacitor`s terminal higher than the rated voltage, so the rated current of the capacitor which should less than 90% rated current of the off-load generator.
8. When the generator is Y/△ type connection, it can not shunt-wound connect the capacitor to the generator, it should use the special connection.
9. When the capacitor which is used in the altitude more than 1000m, which should be indicated in the order.