



DAZHAO 大朝

PRODUCT CATALOGUE



Artisan-Engineered
Capacitors

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浙江大朝电子科技有限公司
Zhejiang Dazhao Electronic Technology Co.,ltd.

About Us

Excellence in Every Charge, Virtue Empowering Enterprise.
We are Artisan–Engineered Capacitors

Founded in 1996, Zhejiang Dazhao Electronic Technology Co., Ltd. is a leading enterprise specializing in the research, development, manufacturing, sales, and service of metallized film capacitors.

With nearly 30 years of industry experience, our company has built a strong reputation for technological innovation and product excellence.

Strategically located in the heart of the Yangtze River Delta, we are conveniently positioned near major cities such as Shanghai, Hangzhou, and Suzhou, offering seamless transportation connections that enhance our operational efficiency and global reach.

The company has more than 160 employees, and the technical management team has more than 20 years of experience in capacitor research and development, manufacturing processes and production management.

The main products include: low-voltage shunt capacitors, low-voltage filtering capacitors, integrated intelligent capacitor compensation device (conventional type), integrated intelligent capacitor compensation device (anti-harmonic type), DC support capacitors, DC absorption capacitors, AC motor capacitors, controllers, reactors, active power filters, Static var generators and other series of more than 300 varieties and specifications.

Nearly 50 million yuan has been invested, the company has developed a constant temperature and humidity environmental control system, introduced advanced fully automatic film slitting equipment and high-precision winding equipment from both domestic and foreign sources, independently innovated double-sided gold spray sealing systems, as well as power capacitor voltage detection machine, power capacitor durability test bench, capacitor aging test bench, ROHS spectral element analyzer and other equipment and production lines.

The annual production capacity of the company can exceed 500,000 units, which is a leading level in the domestic low-voltage capacitor industry.

The company's full range of products have been certified for durability life of power capacitors and are among the first batch of certificate holders in China; At the same time, all products in the series have passed CQC, CCC, VDE, CE, CB, and UL inspection and certification, and are pioneers in implementing national standards and national standards.

We have been focusing on
capacitor production for 35 years



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CBB61-Fan type

CBB65-Aluminum case type

Self-healing low-voltage shunt capacitor

Cylindrical capacitor

Intelligent capacitor compensation device

Anti-harmonic intelligent capacitor compensation device

Series reactor, Intelligent reactive power

Compensation controller

Low voltage reactive power compensation controller

Thyristor switch

Compound switch

Active power filter

Static var generator



Strength

Let the world witness our strength!

With the goal of "building the first brand in China's thin touch capacitor industry", Dachao Electronic Technology Co., Ltd. has a strong scale and strong influence in the industry.

The acquisition of various qualifications is not only a strong endorsement of the overall strength of Dachao Electronics, but also highlights the hard strength of the enterprise and continues to lead the industry steadily.

Scientific production line

Adhering to the open attitude of science and technology, absorb advanced scientific research concepts at home and abroad: lead I into high-end automatic production equipment, research and development of high standard process.



Slitting and winding and dust-free workshop

20 million yuan invested in the independent research and development of constant temperature and humidity purification system to ensure that the measured value under the static state reaches 100,000 purification level



Advanced testing equipment

Strive for excellence, each finished product must be tested online with electrical performance parameters far higher than the national standard.



Honour

More than 30 years of production and research and development experience, always ensure product safety and stability;Is the first domestic "power capacitor durability certificate" winner
The failure rate has been lower than 1 in 1000 for many years.

Annual production capacity of more than 500,000 units Used in power plant, petrochemical, mining, rail transit, data center Military, industrial manufacturing, power grids, commercial buildings, residential power distribution and other fields.

Honorary qualification certificate



CBB capacitor full series CQC certificate



The first batch of "power capacitor durability certification" winners



PRODUCT INTRODUCTION



Product introduction -CBB capacitor

series CBB60, CBB61, CBB65

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PRODUCT INTRODUCTION



CBB60

Safety And Environmental Protection Certification

Security level: S0-S2
Operation level: B: 10000H, C: 3000H
Passed the certification: : CQC UL IS014001:2004
Environmental protection: ROHS REACH



Metallized Polypropylene Film AC Motor Capacitors (Pump/Motor Series)

Product Description

The company's products use high-quality electrical grade polypropylene film as the dielectric, thickened edge composite high-purity metal as the electrode, dry structure design, plastic shell to ensure excellent reliability and oxidation resistance of the capacitor components;

Widely used in washing machines for starting and running single-phase motors powered by AC power with a frequency of 50Hz/60Hz.

In strict accordance with the national standard:
GB/T3667.1-2005/IEC 60252-1:2001 production.



- Safe and reliable
- Professional accreditation
- Science and technology and environmental protection

Use Environment

Climate category	40/70/21; 40/85/21
Altitude	<2000M
Maximum allowable voltage	110%Un
Maximum allowable current	130%In
Insulation resistance	≥3000s (20℃, 100V,1min)

Features

- Compact in appearance, small size, light in weight, easy to install, and easy to disassemble and repair;
- Capacitors have low self loss, low heat generation, and low internal temperature rise;
- Excellent self-healing, the local breakdown of the medium caused by overvoltage can quickly self-heal, safe and reliable use;
- Has good stability, moisture resistance;
- Long service life, better energy saving effect, with high cost performance;

Technical Parameter

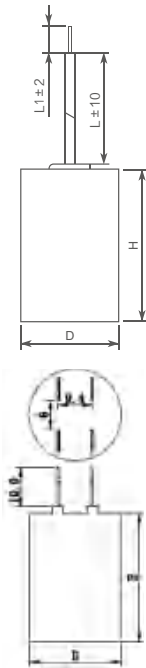
Implementation standard	GB/T3667.1-2016 / IEC 60252-1:2013
Voltage range	250VAC、300VAC、370VAC、400VAC、450VAC、500VAC
Capacitance range	1 μ F ~ 80 μ F
Capacity tolerance	-5% ~ +5%
Loss Angle tangent value	Tanδ≤0.0020 (100Hz 25℃)
Withstand voltage between the electrode	T-T:≥2Un/2S
Polar shell withstand voltage	T-C:≥2000V.AC/2S

Product Parameter

Rated capacity (μF)	Rated voltage (V)	Rated frequency (Hz)	Dimension (mm)	
			D1±0.1	H±1
5	450	50/60	30	57
10	450	50/60	30	57
15	450	50/60	38	85
20	450	50/60	41.4	68
25	450	50/60	45	71
30	450	50/60	45	71
40	450	50/60	50	100
50	450	50/60	50	100
60	450	50/60	56	100
70	450	50/60	56	100
90	450	50/60	60	110

Rated capacity (μF)	Rated voltage (V)	Rated frequency (Hz)	Dimension (mm)	
			D1±0.1	H±1
10	250	50/60	30.2	68
18	250	50/60	30.2	68
20	250	50/60	32.8	68
30	250	50/60	37.9	68
45	250	50/60	43.2	71
50	250	50/60	45	71
70	250	50/60	46	93
90	250	50/60	48.5	93
110	250	50/60	50	100
140	250	50/60	56	100
160	250	50/60	60	110

Note: Other capacity, size and extraction method can be agreed according to customer demand.



PRODUCT INTRODUCTION



Metallized Polypropylene Film AC Motor Capacitor (Double Tub Washing Machine Series)

Product Description

The company's products use high-quality electrical grade polypropylene film as the dielectric, thickened edge composite high-purity metal as the electrode, dry structure design, plastic shell to ensure excellent reliability and oxidation resistance of the capacitor components;

In strict accordance with the national standard: GB/T3667.1-2005/IEC 60252-1:2001 production.

Widely used in washing machines for starting and running single-phase motors powered by AC power with a frequency of 50Hz/60Hz.



Use Environment	
Climate category	40/70/21; 40/85/21
Altitude	≤2000M
Maximum allowable voltage	110%Un
Maximum allowable current	130%In
Insulation resistance	≥3000s (20℃, 100V, 1min)

- Features
- Compact in appearance, small size, light in weight, easy to install, and easy to disassemble and repair;
 - Capacitors have low self loss, low heat generation, and low internal temperature rise;
 - Excellent self-healing, the local breakdown of the medium caused by overvoltage can quickly self-heal, safe and reliable use;
 - Has good stability, moisture resistance;
 - Long service life, better energy saving effect, with high cost performance;

Technical Parameter	
Execution standard	GB/T3667.1-2016 / IEC 60252-1:2013
Voltage range	250VAC、300VAC、370VAC、400VAC、450VAC、500VAC
Capacity range	1+0uF ~ 80+15 μ F
Capacity tolerance	-5% ~ +5%
Tangent value of loss angle	Tanδ≤0.0020 (100Hz 25℃)
Inter electrode withstand voltage	T-T:≥2Un/2S
Extreme shell withstand voltage	T-C:≥2000V.AC/2S

Safety And Environmental Protection Certification

Security level: S₀-S₂

Operation level: B: 10000H, C: 3000H

Passed the certification: : CQC UL ISO14001:2004

Environmental protection: ROHS REACH

- Safe and reliable
- Professional accreditation
- Science and technology and environmental protection

Product Parameters

Rated capacity (μF)	Rated voltage (V)	Rated frequency (Hz)	Dimension (mm)		
			D1±0.1	D2±0.2	H±1
4+3	450	50/60	50	35.4	75
5+3	450	50/60	50	35.4	75
6+3	450	50/60	50	35.4	75
6+4	450	50/60	50	35.4	75
7+3.5	450	50/60	50	35.4	75
7+4	450	50/60	50	37.3	65
8+4	450	50/60	50	37.3	65
9+4	450	50/60	50	37.3	65
10+3	450	50/60	50	37.3	65
9+5	450	50/60	50	37.3	65
10+4	450	50/60	50	37.3	65
11+4	450	50/60	50	37.3	65
11+4.5	450	50/60	50	37.3	65
11+5	450	50/60	50	37.3	65
12+4	450	50/60	50	35.4	75
12+5	450	50/60	50	35.4	75
12+6	450	50/60	50	35.4	75
13+4	450	50/60	50	35.4	75
13+6	450	50/60	50	35.4	75
13+7	450	50/60	50	35.4	75
13+8	450	50/60	50	35.4	75
14+4	450	50/60	50	35.4	75
14+5	450	50/60	50	35.4	75
14+6	450	50/60	50	39.2	85
15+5	450	50/60	50	39.2	85
15+6	450	50/60	50	39.2	85
15+7	450	50/60	50	39.2	85

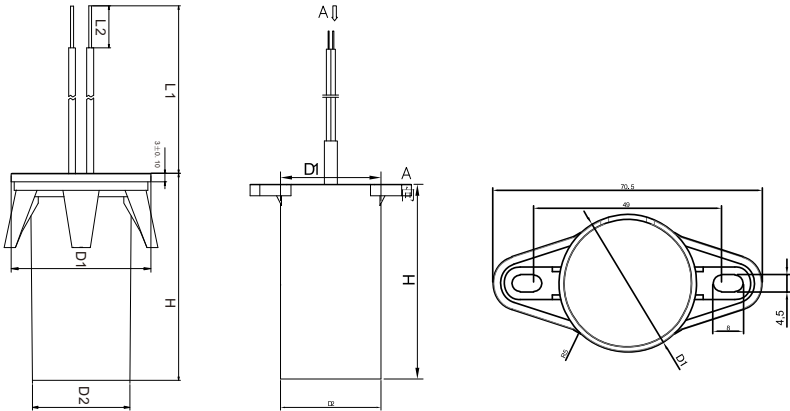
Note: Other capacity, size and extraction method can be agreed according to customer demand.

Product Parameters

Rated capacity (μF)	Rated voltage (V)	Rated frequency (Hz)	Dimension (mm)		
			D1±0.1	D2±0.2	H±1
23+9	250	50/60	50	41.4	85
30+12	250	50/60	50	41.4	85
30+14	250	50/60	50	41.4	85
30+12	250	50/60	50	41.4	85
30+15	250	50/60	50	41.4	85
30+16	250	50/60	50	41.4	85
34+14	250	50/60	50	44.5	85
35+14	250	50/60	50	44.5	85
35+16.5	250	50/60	50	44.5	85
40+14	250	50/60	50	44.5	85
40+15	250	50/60	50	44.5	85
38+18	250	50/60	50	44.5	85
39+16	250	50/60	50	44.5	85
42+15	250	50/60	50	45	100
44+16.5	250	50/60	50	45	100
48+16.5	250	50/60	50	45	100
48+18	250	50/60	50	45	100
52+17	250	50/60	50	45	100
52+26	250	50/60	50	45	100

Note: Other capacity, size and extraction method can be agreed according to customer demand.

Structure Diagram



PRODUCT INTRODUCTION



Metallized Polypropylene Film AC Motor Capacitors (Fully Automatic/Mini Washing Machine Series)

Product Description

The company's products use high-quality electrical grade polypropylene film as the dielectric, thickened edge composite high-purity metal as the electrode, dry structure design, plastic shell to ensure excellent reliability and oxidation resistance of the capacitor components;

Widely used in washing machines for starting and running single-phase motors powered by AC power with a frequency of 50Hz/60Hz.

In strict accordance with the national standard: GB/T3667.1-2005/IEC 60252-1:2001 production.



Use Environment

Climate category	40/70/21; 40/85/21
Altitude	≤2000M
Maximum allowable voltage	110%Un
Maximum allowable current	130%In
Insulation resistance	≥3000s (20℃, 100V,1min)

Features

- Compact in appearance, small size, light in weight, easy to install, and easy to disassemble and repair;
- Capacitors have low self loss, low heat generation, and low internal temperature rise;
- Excellent self-healing, the local breakdown of the medium caused by overvoltage can quickly self-heal, safe and reliable use;
- Has good stability, moisture resistance;
- Long service life, better energy saving effect, with high cost performance;

Technical Parameter

Execution standard	GB/T3667.1-2016 / IEC 60252-1:2013
Voltage range	250VAC、300VAC、370VAC、400VAC、450VAC、500VAC
Capacity range	1 μ F ~ 100 μ F
Capacity tolerance	-5% ~ +5%
Tangent value of loss angle	Tanδ≤0.0020 (100Hz 25℃)
Inter electrode withstand voltage	T-T:≥22Un/2S
Extreme shell withstand voltage	T-C:≥2200V.AC/2s

Safety And Environmental Protection Certification

Security level: So
Operation level: B: 10000H, C: 3000H
Passed the certification: : CQC / CB / CE / VDE / UL
Environmental protection: ROHS REACH



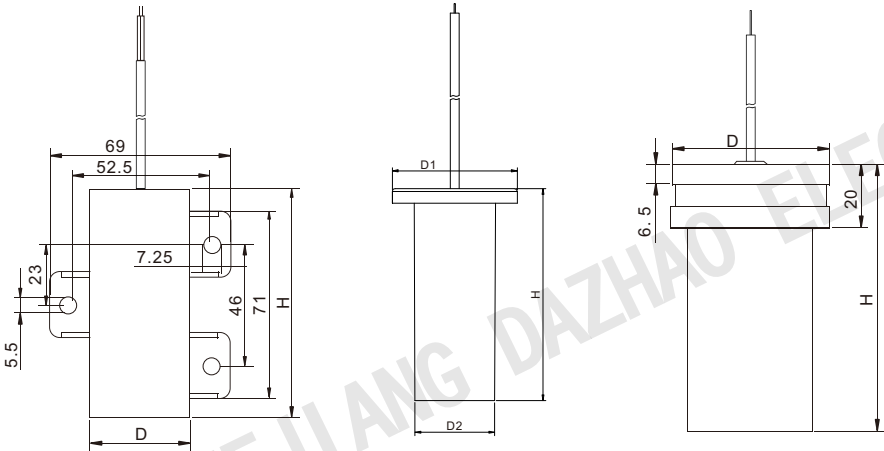
- Safe and reliable
- Professional accreditation
- Science and technology and environmental protection

Product Parameters

Rated capacity (μ F)	Rated voltage (V)	Rated frequency (Hz)	Dimension (mm)		
			D1 \pm 0.1	D2 \pm 0.2	H \pm 1
8	450	50/60	42	33.2	85
8.5	450	50/60	42	33.2	85
9	450	50/60	42	33.2	85
10	450	50/60	42	33.2	85
11	450	50/60	42	33.2	85
12	450	50/60	42	33.2	85
13	450	50/60	42	33.2	85
14	450	50/60	42	33.2	85
15	450	50/60	42	33.2	85
16	450	50/60	42	33.2	85
17	450	50/60	42	33.2	85
18	450	50/60	42	33.2	85
19	450	50/60	42	33.2	85
20	450	50/60	42	33.2	85
21	450	50/60	42	33.2	85
22	450	50/60	42	33.2	85
23	450	50/60	42	33.2	85
24	450	50/60	42	33.2	85
25	450	50/60	42	33.2	85

Note: Other capacity, size and extraction method can be agreed according to customer demand.

Structure Diagram



Product Parameters

Rated capacity (μ F)	Rated voltage (V)	Rated frequency (Hz)	Dimension (mm)	
			D1 \pm 0.1	H \pm 1
8	450	50/60	38	85
9	450	50/60	38	85
10	450	50/60	38	85
11	450	50/60	38	85
12	450	50/60	38	85
13	450	50/60	38	85
14	450	50/60	38	85
15	450	50/60	38	85
16	450	50/60	38	85
17	450	50/60	38	85
18	450	50/60	38	85
19	450	50/60	38	85
20	450	50/60	38	85
21	450	50/60	38	85
22	450	50/60	38	85
25	450	50/60	38	85
30	450	50/60	38	85
33	250	50/60	38	85
35	250	50/60	38	85
40	250	50/60	38	85
42	250	50/60	38	85
44	250	50/60	38	85
46	250	50/60	38	85
48	250	50/60	38	85
50	250	50/60	38	85
55	250	50/60	38	85
60	250	50/60	38	85

Note: Other capacity, size and extraction method can be agreed according to customer demand.

PRODUCT INTRODUCTION



Safety And Environmental Protection Certification

Security level: S0
Operation level: B: 10000H, C: 3000H
Passed the certification: : CQC / UL / ISO14001: 2004
Environmental protection: ROHS REACH



Metallized polypropylene film AC motor capacitors (Starting Series)



- Safe and reliable
- Professional accreditation
- Science and technology and environmental protection

Product Description

The company's products use high-quality electrical grade polypropylene film as the dielectric, thickened edge composite high-purity metal as the electrode, dry structure design, plastic shell to ensure excellent reliability and oxidation resistance of the capacitor components;

It is widely used in table fans, stand fans, ceiling fans, exhaust fans, range hoods, water heaters, dehumidifiers, mahjong machines, shredders, air compressors, fans and other electrical appliances, and supply for the start and operation of single-phase motors powered by 50Hz/60Hz AC power.

Use Environment

Climate category	40/70/21; 40/85/21
Altitude	≤2000M
Maximum allowable voltage	110%Un
Maximum allowable current	130%In
Insulation resistance	≥3000s (23℃, 250V, 1min)

Features

- Compact in appearance, small size, light in weight, easy to install, and easy to disassemble and repair;
- capacitor is very low, the heat generation is small, and the internal temperature rise is low;
- Excellent self-healing, the local breakdown of the medium caused by overvoltage can quickly self-heal, safe and reliable use;
- Has good stability, moisture resistance;
- Long service life, better energy saving effect, with high cost performance;

Technical Parameter

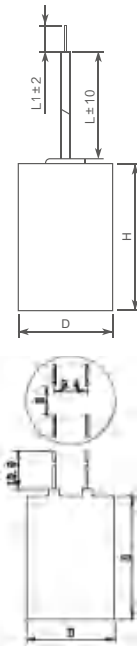
Execution standard	GB/T3667.1-2016/IEC 60252-1:2013
Voltage range	250VAC、300VAC、370VAC、400VAC、450VAC、500VAC
Capacity range	0.47 μ F ~ 60 μ F
Capacity tolerance	-5% ~ +5%
Tangent value of loss angle	Tan δ ≤0.0010 (100Hz 23° C)
Inter electrode withstand voltage	T-T:≥2Un/2S
Extreme shell withstand voltage	T-C:≥2000V.AC/2S

Product Parameter

Rated capacity (μF)	Rated voltage (V)	Rated frequency (Hz)	Dimension (mm)		
			D1±0.1	D2±0.2	H±1
1.2	450	50	37	12	22
1.5	450	50	37	13	23
1.8	450	50	38	15	25
2	450	50	38	15	25
2.5	450	50	38	17	28
3	450	50	38	18.5	29
4	450	50	47	17	31
5	450	50	47	19	33
6.5	450	50	47	23	35
7	450	50	47	23	35
8	450	50	47	25	37
12	450	50	58	28	40
15	450	50	58	32	43
18	450	50	68	30	45
20	450	50	68	30	45

Rated capacity (μF)	Rated voltage (V)	Rated frequency (Hz)	Dimension (mm)		
			D1±0.1	D2±0.2	H±1
2	250	50	32	10	20
2.5	250	50	32	11	22
3	250	50	36	10	20
3.5	250	50	37	11	22
4	250	50	37	12	22
5	250	50	37	13.5	24
6	250	50	38	15	25
7	250	50	38	16	27
8	250	50	38	17	28
10	250	50	38	18.5	29
12	250	50	47	17	28
14	250	50	48	18.5	31
15	250	50	47	19	31
16	250	50	47	19	33
20	250	50	47	23	35

Remarks: Other capacities, sizes can be negotiated according to customer needs.



Metallized Polypropylene Film AC Motor Capacitors (Explosion-proof Series)

Product Description

The company's products use high-quality electrical grade polypropylene film as the dielectric, thickened edge composite high-purity metal as the electrode, dry structure design, plastic shell to ensure excellent reliability and oxidation resistance of the capacitor components;

In strict accordance with the national standard:
GB/T3667.1-2005/IEC 60252-1:2001 production.

Mainly suitable for starting, operating, energy storage, filtering and other occasions with high safety requirements for AC motors.



- Safe and reliable
- Professional accreditation
- Science and technology and environmental protection

PRODUCT INTRODUCTION



Safety And Environmental Protection Certification

Security level: S2
Operation level: B: 10000H, C: 3000H
Passed the certification: : CQC / CB / CE / VDE / UL
Environmental protection: ROHS REACH



Use Environment

Climate category	40/70/21; 40/85/21
Altitude	≤2000M
Maximum allowable voltage	110%Un
Maximum allowable current	130%In
Insulation resistance	≥3000s (20℃, 100V,1min)

Features

- Compact in appearance, small size, light in weight, easy to install, and easy to disassemble and repair;
- Capacitors have low self loss, low heat generation, and low internal temperature rise;
- Excellent self-healing, the local breakdown of the medium caused by overvoltage can quickly self-heal, safe and reliable use;
- Has good stability, moisture resistance;
- Long service life, better energy saving effect, with high cost performance;

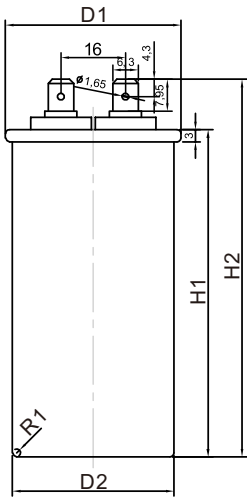
Technical Parameter

Executive standard	GB/T3667.1-2016/IEC 60252-1:2013
Voltage range	250VAC、300VAC、370VAC、400VAC、450VAC、500VAC
Capacitance range	1+0uF ~80+15 μ F、1 μ F ~80 μ F
Capacity tolerance	-5% ~ +5%
Loss Angle tangent value	Tanδ≤0.0020 (100Hz 25℃)
Withstand voltage between electrodes	T-T:≥2Un/2S
Polar shell withstand voltage	T-C:≥2000V.AC/2S

Product Parameter

Rated capacity (μF)	Rated voltage (V)	Rated frequency (Hz)	Class of protection	Dimension (mm)		
				D1±0.1	D2±0.2	H±1
10	450	50/60	S2	40	33.2	70
16	450	50/60	S2	45	33.2	75
18	450	50/60	S2	45	33.2	75
25	450	50/60	S2	45	33.2	90
30	450	50/60	S2	50	33.2	90
40	450	50/60	S2	50	33.2	100
60	450	50/60	S2	55	33.2	130
11+4.5	450	50/60	S2	40	33.2	85
13+4.5	450	50/60	S2	40	33.2	85
15+5.5	450	50/60	S2	40	33.2	85
55	250	50/60	S2	40	33.2	85

Note: Other capacity, size and extraction method can be agreed according to customer demand.



PRODUCT
INTRODUCTION



Power Capacitor
Series

DAZHAO 大朝

PRODUCT INTRODUCTION



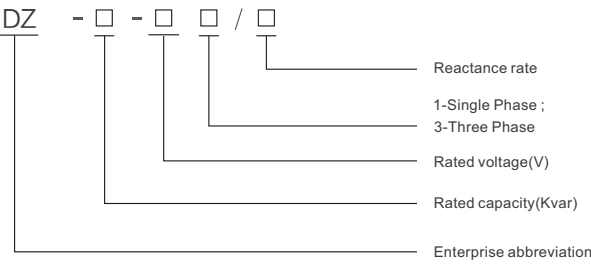
Self-Healing Type
Low-Voltage Shunt Capacitor [DZ-Square series]



• Product Description

• Model Meaning

The DZ-square series self-healing low-voltage shunt capacitors are suitable for low voltage power systems with a frequency of 50/60Hz. They are made of advanced edge thickened zinc aluminum composite metalized polypropylene film, wound into shape in a constant temperature and humidity environment; At the same time as injecting the dielectric material, inert nitrogen gas is injected in a vacuum environment for dual protection, ensuring excellent reliability and oxidation resistance of the capacitor components. Mainly used for improving power factor, reducing reactive power loss, and enhancing the quality of low-voltage power grids.



• Technical Features

- Compact and lightweight design
Dry miniaturization, convenient installation, with weight and volume only 1/4 of older products;
- Innovative infusion technology
Utilizes automatic host-type quantitative infusion technology combined with inert nitrogen for dual protection against environmental factors;
- Low power consumption and long lifespan
The components exhibit extremely low energy consumption, minimal temperature rise, a long operational lifespan, and high operational reliability;
- Dual safety design
Equipped with a self-discharge resistor and an overpressure dual safety device to prevent extreme bursting incidents;
- Exceptional self-healing capabilities
Local dielectric breakdown can rapidly self-repair, creating an insulating region that significantly enhances stability;
- Environmentally friendly dry operation without oil leakage
Employs semi-solid/dry flame-retardant impregnation techniques that ensure no oil leakage during use, thereby preventing environmental pollution.

• Use Environment

Implementation standard:	GB/T12747-2017 IEC60831-1996	Rated voltage:	230VAC ~ 1000VAC
Rated frequency:	50Hz / 60Hz	Capacity tolerance:	-5 ~ +10%
Loss Angle tangent value:	≤0.10% (Un 50Hz 20℃)	Inter-electrode withstand voltage:	T-T: ≥2.15Un/10s
Voltage between poles:	T-C: Un≤660V 3000VAC/10s; Un>660V 6000VAC/10s		
Insulation:	T-C: ≥MΩ/500V.DC	Maximum allowable voltage:	1.3In (long-term operation); 1.8In (special customization)
Maximum allowable current:	1.1Un (8h/24h) ; 1.15Un (30min/24h) ; 1.3Un (1min/24h)		
Ambien temperature:	-25℃~+50℃	Relative humidity:	≤95%
Altitude:	< 2000m	Protection grade:	indoor IP20, spacing ≥25mm
Self-discharge characteristics:	After disconnecting the power supply for 3min, the remaining voltage drops below 75V		

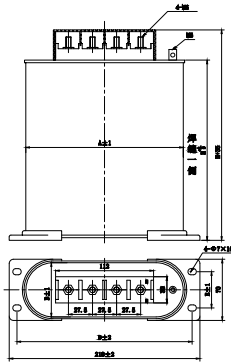
Product Parameters

Product model	Rated current (A)	Rated capacity (μF)	Overall dimensions (MM)			Installation size (MM)	Remarks
			Length	width	height		
0.25-05-3YN	6.7	254.8	180	62	115	200*42	图一
0.25-06-3YN	8.0	305.7	180	62	115	200*42	图一
0.25-08-3YN	10.7	407.6	180	62	180	200*42	图一
0.25-10-3YN	13.3	509.6	180	62	180	200*42	图一
0.25-15-3YN	20.0	764.3	180	62	200	200*42	图一
0.25-20-3YN	26.7	1019.1	180	70	220	208*50	图二
0.25-25-3YN	33.3	1273.9	180	70	270	208*50	图二
0.25-30-3YN	40.0	1528.7	180	70	320	208*50	图二

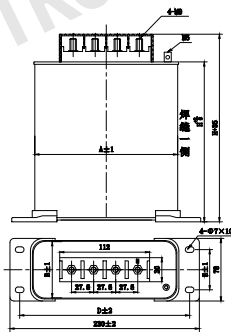
Product model	Rated current (A)	Rated capacity (μF)	Overall dimensions (MM)			Installation size (MM)	Remarks
			Length	width	height		
0.28-05-3YN	6.0	203.1	180	62	115	200*42	图一
0.28-10-3YN	11.9	406.2	180	62	130	200*42	图一
0.28-15-3YN	17.9	609.3	180	62	200	200*42	图一
0.28-20-3YN	23.8	812.4	180	70	220	208*50	图二
0.28-25-3YN	29.8	1015.5	180	70	270	208*50	图二
0.28-30-3YN	35.7	1218.6	180	70	270	208*50	图二
0.28-40-3YN	47.6	1624.9	180	95	280	200*70.5	图三

Product model	Rated current (A)	Rated capacity (μF)	Overall dimensions (MM)			Installation size (MM)	Remarks
			Length	width	height		
0.30-05-3YN	5.6	176.9	180	62	115	200*42	图一
0.30-10-3YN	11.1	353.9	180	62	180	200*42	图一
0.30-15-3YN	16.7	530.8	180	70	220	208*50	图一
0.30-20-3YN	22.2	707.7	180	70	220	208*50	图二
0.30-25-3YN	27.8	884.6	180	70	220	208*50	图二
0.30-30-3YN	33.3	1061.6	180	70	270	208*50	图二

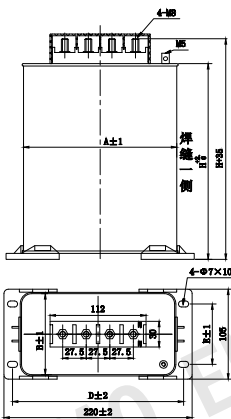
Note: The product series is updated in real-time. Please consult the sales personnel of Dazhao Electronics.



图一



图二



图三

Product Parameters

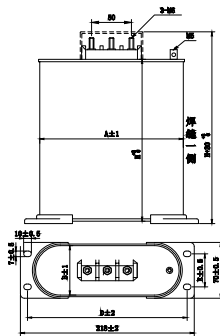
Product model	Rated current (A)	Rated capacity (μF)	Overall dimensions (MM)			Installation size (MM)	Remarks
			Length	width	height		
0.40-05-3	7.2	99.5	180	62	115	200*42	图一
0.40-08-3	11.5	159.2	180	62	115	200*42	图一
0.40-10-3	14.4	198.9	180	62	130	200*42	图一
0.40-15-3	21.7	298.4	180	62	180	200*42	图一
0.40-16-3	23.1	318.3	180	62	180	200*42	图一
0.40-20-3	28.9	397.9	180	62	250	200*42	图一
0.40-25-3	36.1	497.4	180	70	220	208*50	图二
0.40-30-3	43.3	596.8	180	70	320	208*50	图二
0.40-40-3	57.7	795.8	180	95	330	200*70.5	图三

0.45-05-3	6.4	78.6	180	62	115	200*42	图一
0.45-08-3	10.3	125.8	180	62	115	200*42	图一
0.45-10-3	12.8	157.3	180	62	115	200*42	图一
0.45-15-3	19.2	235.9	180	62	180	200*42	图一
0.45-16-3	20.5	251.6	180	62	180	200*42	图一
0.45-20-3	25.7	314.5	180	62	180	200*42	图一
0.45-25-3	32.1	393.2	180	62	250	200*42	图一
0.45-30-3	38.5	471.8	180	70	220	208*50	图二
0.45-40-3	51.3	629.1	180	70	320	208*50	图二
0.45-45-3	57.7	707.7	180	95	280	200*70.5	图三
0.45-50-3	64.2	786.3	180	95	330	200*70.5	图三

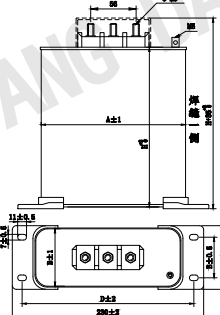
0.48-05-3	6.0	69.1	180	62	115	200*42	图一
0.48-10-3	12.0	138.2	180	62	115	200*42	图一
0.48-15-3	18.0	207.3	180	62	180	200*42	图一
0.48-20-3	24.1	276.5	180	62	220	200*42	图二
0.48-25-3	30.1	345.6	180	70	220	208*50	图二
0.48-30-3	36.1	414.7	180	70	270	208*50	图二
0.48-40-3	48.1	552.9	180	70	320	208*50	图二
0.48-50-3	60.1	691.1	180	95	330	200*70.5	图三

0.525-05-3	5.5	57.8	180	62	115	200*42	图一
0.525-10-3	11.0	115.5	180	62	115	200*42	图一
0.525-15-3	16.5	173.3	180	62	130	200*42	图一
0.525-20-3	22.0	231.1	180	70	220	208*50	图二
0.525-25-3	27.5	288.9	180	70	220	208*50	图二
0.525-30-3	33.0	346.6	180	70	270	208*50	图二
0.525-40-3	44.0	462.2	180	70	320	208*50	图二
0.525-50-3	55.0	577.7	180	95	330	200*70.5	图三

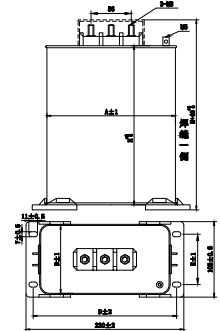
Note: The product series is updated in real-time. Please consult the sales personnel of Dazhao Electronics.



图一



图二



图三

PRODUCT INTRODUCTION



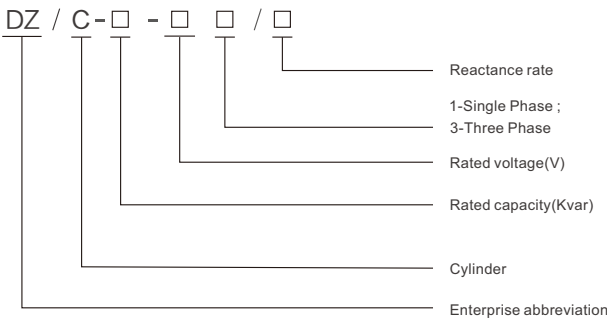
Self-Healing Type
Low-Voltage Cylindrical Shunt Capacitor
【DZ/C-Cylindrical series】



• Product Description

The DZ/C cylindrical series capacitors are packaged in cylindrical aluminum shells, which is suitable for low voltage power systems with a frequency of 50/60Hz. They are made of advanced edge thick ened zinc aluminum composite metalized polypropylene film, wound into shape in a constant temperature and humidity environment; At the same time as injecting the dielectric material, inert nitrogen gas is injected in a vacuum environment for dual protection, ensuring excellent reliability and oxidation resistance of the capacitor components; Mainly used for improving power factor, reducing reactive power loss, and enhancing the quality of low-voltage power grids.

• Model Meaning



• Technical Features

• Compact and lightweight design

Dry miniaturization, convenient installation, with weight and volume only 1/4 of older products;

• Low power consumption and long lifespan

The components exhibit extremely low energy consumption, minimal temperature rise, a long operational lifespan, and high operational reliability;

• Exceptional self-healing capabilities

Local dielectric breakdown can rapidly self-repair, creating an insulating region that significantly enhances stability;

• Innovative infusion technology

Utilizes automatic host-type quantitative infusion technology combined with inert nitrogen for dual protection against environmental factors;

• Unique structural optimization

Unique trapezoidal square resistance design, optimized adhesion of spray gold layer, increased internal wiring cross-sectional area by more than 30%;

• Integrated stamping aluminum shell

Non marking stamping forming and triple sealing edge rolling process, no leakage risk, non rusting material, maintenance free;

• Dual safety design

Equipped with a self-discharge resistor and an overpressure dual safety device to prevent extreme bursting incidents;

• Environmentally friendly dry operation without oil leakage

Employs semi-solid/dry flame-retardant impregnation techniques that ensure no oil leakage during use, thereby preventing environmental pollution.

• Use Environment

Implementation standard:	GB/T12747-2017 IEC60831-1996	Rated voltage:	230VAC ~ 1000VAC
Rated frequency:	50Hz / 60Hz	Capacity tolerance:	-5 ~ +10%
Loss Angle tangent value:	≤0.10% (Un 50Hz 20℃)	Inter-electrode withstand voltage:	T-T: ≥2.15Un/10s
Voltage between poles:	T-C: Un≤660V 3000VAC/10s; Un>660V 6000VAC/10s		
Insulation:	T-C: ≥MΩ/500V.DC	Maximum allowable voltage:	1.3In (long-term operation); 1.8In (special customization)
Maximum allowable current:	1.1Un (8h/24h) ; 1.15Un (30min/24h) ; 1.3Un (1min/24h)		
Ambien temperature:	-25℃~+50℃	Relative humidity:	≤95%
Altitude:	<2000m	Protection grade:	indoor IP20, spacing ≥25mm
Self-discharge characteristics:	After disconnecting the power supply for 3min, the remaining voltage drops below 75V		

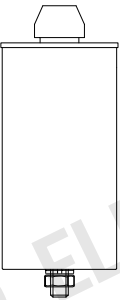
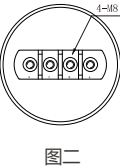
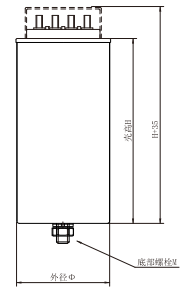
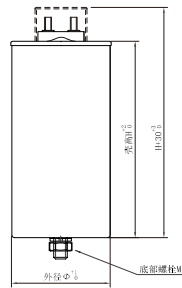
Product Parameters

Product model (μF)	Rated current (A)	Rated capacity (μF)	Overall dimensions (MM)		Installation size (MM)
			Φ	H	
0.25-05-3YN	6.7	254.8	86	245	M12*16
0.25-10-3YN	13.3	509.6	86	245	M12*16
0.25-15-3YN	20	764.3	96	245	M16*25
0.25-20-3YN	26.7	1019.1	106	245	M16*25
0.25-25-3YN	33.3	1273.9	116	290	M16*25
0.25-30-3YN	40	1528.7	126	290	M16*25

Product model (μF)	Rated current (A)	Rated capacity (μF)	Overall dimensions (MM)		Installation size (MM)
			Φ	H	
0.28-05-3YN	6.0	203.1	86	245	M12*16
0.28-10-3YN	11.9	406.2	86	245	M12*16
0.28-15-3YN	17.9	609.3	86	245	M12*16
0.28-20-3YN	23.8	812.4	96	245	M16*25
0.28-25-3YN	29.8	1015.5	106	290	M16*25
0.28-30-3YN	35.7	1218.6	116	290	M16*25

Product model (μF)	Rated current (A)	Rated capacity (μF)	Overall dimensions (MM)		Installation size (MM)
			Φ	H	
0.30-05-3YN	5.6	176.9	86	245	M12*16
0.30-10-3YN	11.1	353.9	86	245	M12*16
0.30-15-3YN	16.7	530.8	86	245	M12*16
0.30-20-3YN	22.2	707.7	96	245	M16*25
0.30-25-3YN	27.8	884.6	96	290	M16*25
0.30-30-3YN	33.3	1061.6	116	290	M16*25

Note: The product series is updated in real-time. Please consult the sales personnel of Dazhao Electronics.



图三

Product Parameters

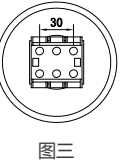
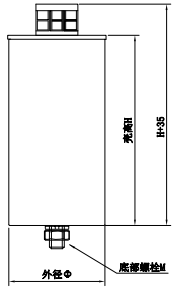
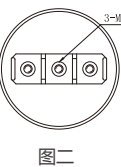
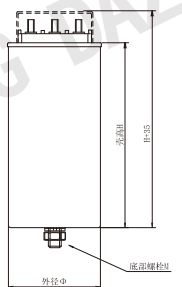
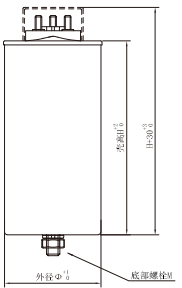
Product model (μF)	Rated current (A)	Rated capacity (μF)	Overall dimensions (MM)		Installation size (MM)
			Φ	H	
0.40-05-3	7.2	99.5	76	245	M12*16
0.40-10-3	14.4	199	76	245	M12*16
0.40-15-3	21.7	298.6	86	245	M12*16
0.40-20-3	28.9	398.1	95	245	M16*25
0.40-25-3	36.1	497.6	106	245	M16*25
0.40-30-3	43.3	597.1	116	290	M16*25

0.45-05-3	6.4	78.6	76	245	M12*16
0.45-10-3	12.8	157.3	76	245	M12*16
0.45-15-3	19.2	235.9	76	245	M12*16
0.45-20-3	25.7	314.5	96	245	M16*25
0.45-25-3	32.1	393.2	106	245	M16*25
0.45-30-3	38.5	471.8	116	245	M16*25
0.45-40-3	51.3	629.1	126	290	M16*25

0.48-05-3	6.0	69.1	76	245	M12*16
0.48-10-3	12.0	138.2	76	245	M12*16
0.48-15-3	18.0	207.3	86	245	M12*16
0.48-20-3	24.1	276.5	96	245	M16*25
0.48-25-3	30.1	345.6	96	290	M16*25
0.48-30-3	36.1	414.7	116	290	M16*25
0.48-40-3	48.1	552.9	126	290	M16*25

0.525-05-3	5.5	57.8	76	245	M12*16
0.525-10-3	11.0	115.5	76	245	M12*16
0.525-15-3	16.5	173.3	76	245	M12*16
0.525-20-3	22.0	231.1	86	245	M12*16
0.525-25-3	27.5	288.9	96	245	M16*25
0.525-30-3	33.0	346.6	116	290	M16*25
0.525-40-3	44.0	462.2	126	290	M16*25

Note: The product series is updated in real-time. Please consult the sales personnel of Dazhao Electronics.



图三

PRODUCT INTRODUCTION



Intelligent Capacitance Compensation Device (DZ -YTG/ F series)

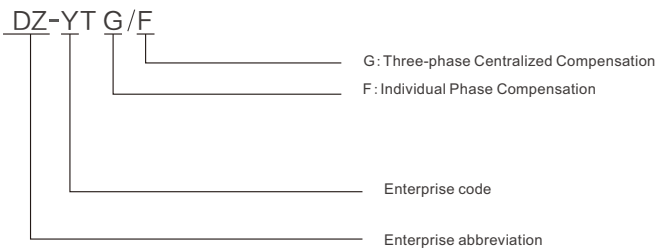


• Product Description

The DZ-YTG/F series intelligent capacitor compensation device is suitable for 0.4KV low-voltage power grids. It is a new type of intelligent reactive power compensation device , which composed of high-quality low-voltage power capacitors as the main body, using the latest technological achievements such as microelectronics, microsensor technology, and micro network technology to replace traditional dispersed electrical components. This series of compensation devices has a simple structure, reliable performance, easy use, can be flexibly used in various situations of low-voltage reactive power compensation.

• Model Meaning

The designation DZ-100CS/450-20+20 refers to a three-phase common supplement conventional dry-type low-voltage intelligent power capacitor, with a rated voltage of 450V and a rated capacity of 40KVar. The primary capacity is specified as 20KVar, while the secondary capacity is also set at 20KVar.



• Technical Features

• Long switch life

Accurately control the movement speed of the switching switch, eliminate jumping, improve lifespan, track and correct the closing phase angle, and achieve a switching lifespan of millions of times. It has advantages such as low power consumption, low failure, and long lifespan;

• On-line communication function

Network line 485 communication type online, easy to use, fast communication rate;

• Accurate zero crossing cutting

No surge current when closing, zero crossing voltage input, zero crossing current cut-off, no overvoltage breakdown, no arcing or reignition phenomenon;

• Complete protection function

With over voltage, under voltage, lack of phase, measuring body temperature, power grid harmonic content, three-phase imbalance protection functions;

• Automatic networking and online connection

Multiple building blocks are used in a modular manner to automatically generate main and auxiliary systems; The failure of the slave machine does not affect other work, and the failure of the host machine automatically exits, generating a new host and forming a new system work, with a high degree of intelligence;

• Communication control function

Can be connected to external controller, according to the communication command to carry out the operation or return;

• Hybrid compensation functio

Under three-phase unbalanced conditions, the optimal reactive power can be achieved by switching mixed compensation according to the reactive power deficiency of each phase.

• Man-machine dialogue function

Backlit LCD display, single capacitor display product conditions and electrical line status, human-machine dialogue is simple and intuitive.

• Technical Parameter

Power supply conditions			
Rated voltage: ~ 220V/380V		Voltage deviation: ±20%	
Current waveform: current harmonics not exceeding 10%		Voltage waveform: sine wave, the total distortion not exceeding 5%	
Rated frequency: 50Hz±5%		Power consumption: < 1W (when the capacitor is removed), < 1W (when the capacitor is put into)	
Error of measurement		Error of protection	
Voltage: ≤0.5%	Current: ≤0.5%	Voltage: ≤0.5%	Current: ≤0.5%
Power factor: ≤±1.5%	Temperature: ±1℃	Power factor: ≤±1.5%	Temperature: ±1℃
Reliability parameter		Environmental conditions	Environmental temperature: -40~+55℃
Control accuracy: 100%	Control allowed times: 1 million times	Altitude: ≤2000m	Relative temperature: 20 ~ 90% at 40℃
Electrical safety			
The electrical clearance, creepage distance, dielectric performance, short-time withstand strength, short-circuit protection function, and safety protection all comply with the corresponding provisions of the Chinese power industry standards DL/T842-20034 "Technical Conditions for the Use of Capacitor Devices" for low-voltage parallel connection and GB/T15576-2008 "General Technical Conditions for Low Voltage Reactive Power Static Compensation Devices".			

• Product Wiring Diagram

Compensation mode	Wiring diagram and its meaning	Physical image	
Centralized Compensation		Protective cover plate	
Individual Compensation		Data cable plug	
		External 485 communication and indicator lamp terminal	
		grounding	

• Product type and dimensions

Compensation mode	Product type	Rated voltage(V)	RCompensation capacity (Kvar)	Overall dimensions (including tripod)L×W×Hmm
Three-phase Centralized Compensation	DZ-YTG/450-05+05	450	10	400×80×270
	DZ-YTG/450-10+05	450	15	400×80×270
	DZ-YTG/450-10+10	450	20	400×80×270
	DZ-YTG/450-15+15	450	30	400×80×270
	DZ-YTG/450-20+10	450	30	400×80×340
	DZ-YTG/450-20+20	450	40	400×80×340
Compensation mode	Product type	Rated voltage(V)	RCompensation capacity (Kvar)	Overall dimensions (including tripod)L×W×Hmm
Individual Phase Compensation	DZ-YTF/250-5	250	5	400×80×270
	DZ-YTF/250-10	250	10	400×80×270
	DZ-YTF/250-15	250	15	400×80×270
	DZ-YTF/250-20	250	20	400×80×340
	DZ-YTF/250-25	250	25	400×80×340
	DZ-YTF/250-30	250	30	400×80×340

Note: The product series is updated in real-time. Please consult the sales personnel of Dazhao Electronics.

PRODUCT INTRODUCTION



Anti-Harmonic Intelligent Capacitance Compensation Device [DZ -ZNG/ F series]

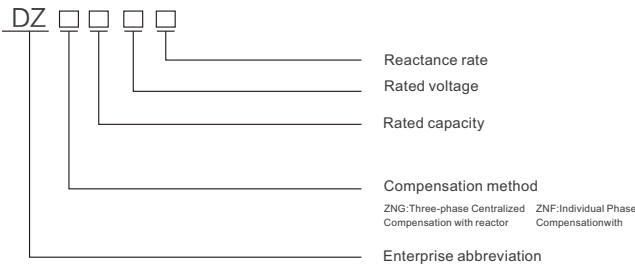


• Product Description

The DZ-ZNG/F series anti harmonic intelligent capacitor compensation device is specifically designed for applications with high harmonic content in the power grid. It is a new type of intelligent reactive power compensation device composed of intelligent measurement and control units, intelligent switching relays, intelligent protection units, high-quality low-voltage power capacitors, and dry-type series reactors, replacing traditional dispersed electrical components. This series of devices has strong reliability, does not generate resonance, does not amplify harmonics, and can effectively suppress harmonics. Series connection of 7% reactors is suitable for electrical environments with a main harmonic of 5th order, while series connection of 14% reactors is suitable for electrical environments with a main harmonic of 3rd order.

• Model Meaning

Example:
DZ-100XCS-40/480-7 represents a three-phase total complement conventional dry low-voltage intelligent power capacitor with a rated voltage of 480N and a rated capacity of 40KVar.



• Technical Features

• Accurate zero crossing cutting

No surge current when closing, zero crossing voltage input, zero crossing current cut-off, no overvoltage breakdown, no arcing or reignition phenomenon;

• Hierarchical control technique

Reactive power flow prediction and delayed multi-point sampling technology are adopted. According to power factor and reactive power, when the power factor is lower than the set value, the switching is controlled according to the load reactive power deficiency to ensure that the switching does not oscillate.

• On-line communication function

Network line 485 communication type online, easy to use, fast communication rate;

• Harmonic suppression function

It can effectively inhibit the high-order harmonic inrush current, form a low-impedance path to avoid capacitor overload, overheating, slow down aging, and reduce the failure rate;

• Complete protection function

With over voltage, under voltage, loss of voltage and short circuit protection, body over temperature protection, power grid harmonic content test and other functions, extend the service life;

• Automatic networking and online connection

Multiple building blocks are used in a modular manner to automatically generate main and auxiliary systems; The failure of the slave machine does not affect other work, and the failure of the host machine automatically exits, generating a new host and forming a new system work, with a high degree of intelligence;

• Communication control function

Can be connected to external controller, according to the communication command to carry out the operation or return;

• Hybrid compensation function

Under the condition of three-phase unbalance, the hybrid compensation method is adopted. According to the reactive power deficiency of each phase, the reactive power optimization can be achieved by switching the hybrid compensation separately.

• Product Wiring Diagram

Compensation mode	Wiring diagram and its meaning	Physical image	
Anti-harmonic Centralized Compensation			
Anti-harmonic Individual Compensation			

• Technical Parameter

Power supply conditions			
Rated voltage: ~ 220V/380V	Voltage deviation: ±20%	Rated frequency: 50Hz±5%	
Power consumption: < 0.5W (when the capacitor is removed), < 0.5W (when the capacitor is put into)			
Error of measurement			
Voltage: ≤0.5% (within the rated voltage range of 80 ~ 120% power supply)	Power factor: ≤1%	Temperature: ±1℃	
Current: ≤1% (in the range of 5 ~ 20% rated current, ≤0.5% (in the range of 20 ~ 120% rated current)			
Error of protection			
Voltage: ≤0.5%	Current: ≤1.0%	Temperature: ±1℃	Time: ±0.01S
Reliability parameter		Environmental condition	
Control accuracy: 100%	Annual failure rate: ≤0.1%	Environmental temperature: -40 ~ +55℃	
Capacity decay rate of capacitors during operation: ≤ 0.1%/year		Relative temperature: 20 ~ 90% at 40℃	
Capacitor capacity switching attenuation rate: ≤ 0.1%/10000 times		Altitude: ≤2000m	
Electrical safety			
The electrical clearance, creepage distance, dielectric performance, short-time withstand strength, short-circuit protection function, and safety protection all comply with the corresponding provisions of the Chinese power industry standards DL/T842-20034 "Technical Conditions for the Use of Capacitor Devices" for low-voltage parallel connection and GB/T15576-2008 "General Technical Conditions for Low Voltage Reactive Power Static Compensation Devices". "			

• Capacitor cabinet configuration reference table

The height, depth, and width of a general low-voltage complete cabinet are 2200mm, 600mm, and 800mm. The maximum configuration of anti harmonic intelligent capacitors is as follows:										
Cabinet depth(mm)			600			800			1000	
Cabinet width(mm)			600	800	1000	600	800	1000	600	800 1000
Maximum container loading quantity (units)	Simple reactance	Individual Compensation	4	6	8	4	6	8	6	8 10
		Centralized Compensation	4	6	8	4	6	8	6	8 10
Maximum loading capacity (Kvar)	Simple reactance	Individual Compensation	160	240	320	160	240	320	240	320 400
		Centralized Compensation	120	180	240	120	180	240	180	240 300

• Product type and dimensions

Compensation mode	Product type	Overall dimensions (including tripod) L×W×H (mm)	Mounting dimension (mm)
Anti-harmonic Centralized Compensation	DZ-ZNG/480-5-P7	420 × 166 × 450	340 × 152
	DZ-ZNG/480-10-P7	420 × 166 × 450	340 × 152
	DZ-ZNG/480-15-P7	420 × 166 × 450	340 × 152
	DZ-ZNG/480-20-P7	420 × 166 × 450	340 × 152
	DZ-ZNG/480-25-P7	420 × 166 × 450	340 × 152
	DZ-ZNG/480-30-P7	420 × 165 × 450	340 × 152
	DZ-ZNG/480-40-P7	445 × 166 × 450	340 × 152
Anti-harmonic Individual Compensation	DZ-ZNF/280-5-P7	420 × 166 × 450	340 × 152
	DZ-ZNF/280-10-P7	420 × 166 × 450	340 × 152
	DZ-ZNF/280-15-P7	420 × 166 × 450	340 × 152
	DZ-ZNF/280-20-P7	420 × 166 × 450	340 × 152
	DZ-ZNF/280-25-P7	420 × 166 × 450	340 × 152
	DZ-ZNF/280-30-P7	420 × 166 × 450	340 × 152
Compensation mode	Product type	Overall dimensions (including tripod) L×W×H (mm)	Mounting dimension (mm)
Anti-harmonic Centralized Compensation	DZ-ZNG/525-5-P14	420 × 166 × 450	340 × 152
	DZ-ZNG/525-10-P14	420 × 166 × 450	340 × 152
	DZ-ZNG/525-15-P14	420 × 166 × 450	340 × 152
	DZ-ZNG/525-20-P14	420 × 166 × 450	340 × 152
	DZ-ZNG/525-25-P14	420 × 166 × 450	340 × 152
	DZ-ZNG/525-30-P14	420 × 165 × 450	340 × 152
	DZ-ZNG/525-40-P14	445 × 166 × 450	340 × 152
Anti-harmonic Individual Compensation	DZ-ZNF/300-5-P14	420 × 166 × 450	340 × 152
	DZ-ZNF/300-10-P14	420 × 166 × 450	340 × 152
	DZ-ZNF/300-15-P14	420 × 166 × 450	340 × 152
	DZ-ZNF/300-20-P14	420 × 166 × 450	340 × 152
	DZ-ZNF/300-25-P14	420 × 166 × 450	340 × 152
	DZ-ZNF/300-30-P14	420 × 166 × 450	340 × 152

Note: The product series is updated in real-time. Please consult the sales personnel of Dazhao Electronics.

PRODUCT INTRODUCTION



Series Tuning Reactor



• Technical Features

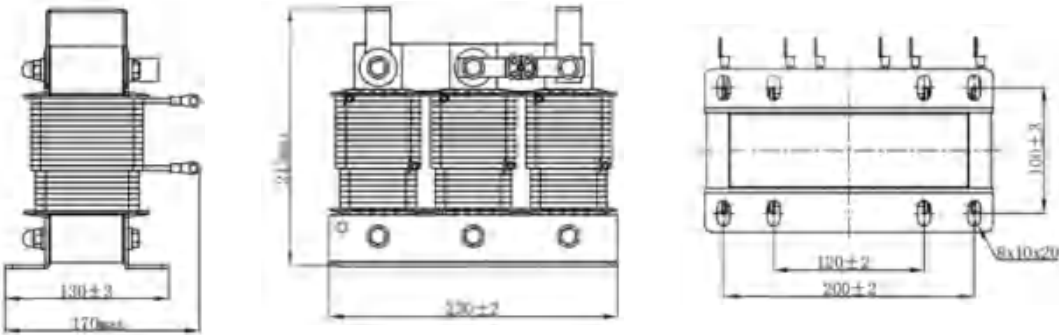
- Low temperature rise, low loss, low noise**
The iron core is made of high-quality cold-rolled silicon steel sheet, which is cut by high-speed punching machine, with small burrs, uniform rules and neatly stacked;
- High quality factor, good tuning effect**
Overall anti-corrosion process, the key clips are made of non-magnetic materials, vacuum paint and high temperature curing, coil and iron core firmly into one, to ensure reliability;
- Good insulation performance, high overcurrent multiple**
Coil adopts high quality insulated wire, wound by professional winding equipment, good flatness, beautiful appearance;
- Safe to use, energy saving and environmental protection**
Size reference standard cabinet size design, small size, convenient connection, greatly saving user cost investment.

• Specifications And Model Dimensions

Reactor Type	Matching capacitor capacity(Kvar)	Reference pressure drop(V)	Overall dimensions max (MM) Length*width*height	Mounting dimension	material	Reactor Type	Matching capacitor capacity(Kvar)	Reference pressure drop(V)	Overall dimensions max (MM) Length*width*height	Mounting dimension	material
CKDG-0.35/0.28-7%	5	7%	205*120*225	90*84	aluminum copper	CKDG-0.7/0.30-14%	5	14%	225*110*225	110*84	aluminum copper
CKDG-0.7/0.28-7%	10		190*110*200	110*74	aluminum copper	CKDG-1.4/0.30-14%	10		225*120*225	110*94	aluminum copper
CKDG-1.05/0.28-7%	15		205*120*225	90*84	aluminum copper	CKDG-2.1/0.30-14%	15		205*120*200	110*96	aluminum copper
CKDG-1.4/0.28-7%	20		205*110*200	110*89	aluminum copper	CKDG-2.8/0.30-14%	20		230*140*240	110*99	aluminum copper
CKDG-1.75/0.28-7%	25		225*110*225	110*84	aluminum copper	CKDG-3.5/0.30-14%	25		245*145*245	120*108	aluminum copper
CKDG-2.1/0.28-7%	30		205*125*200	110*96	aluminum copper	CKDG-4.2/0.30-14%	30		245*165*265	120*118	aluminum copper
CKDG-2.8/0.28-7%	40		230*140*240	110*99	aluminum copper	CKDG-5.6/0.30-14%	40		245*155*245	120*118	aluminum copper
CKDG-3.5/0.28-7%	50		245*145*245	120*108	aluminum copper	CKDG-7.0/0.30-14%	50		250*155*270	133*113	aluminum copper
			245*165*245	120*108	aluminum copper				245*165*245	120*128	aluminum copper
			230*140*240	110*99	aluminum copper				290*175*275	133*129	aluminum copper

Reactor Type	Matching capacitor capacity(Kvar)	Reference pressure drop(V)	Overall dimensions max (MM) Length*width*height	Mounting dimension	material	Reactor Type	Matching capacitor capacity(Kvar)	Reference pressure drop(V)	Overall dimensions max (MM) Length*width*height	Mounting dimension	material
CKSG-0.35/0.48-7%	5	7%	205*120*225	90*84	aluminum copper	CKSG-0.7/0.525-14%	5	14%	225*110*225	110*84	aluminum copper
CKSG-0.7/0.48-7%	10		190*110*200	110*74	aluminum copper	CKSG-1.4/0.525-14%	10		190*110*200	90*84	aluminum copper
CKSG-1.05/0.48-7%	15		205*120*225	90*84	aluminum copper	CKSG-2.1/0.525-14%	15		225*120*225	110*94	aluminum copper
CKSG-1.4/0.48-7%	20		190*110*200	110*74	aluminum copper	CKSG-2.8/0.525-14%	20		205*120*200	110*96	aluminum copper
CKSG-1.75/0.48-7%	25		225*110*225	110*84	aluminum copper	CKSG-3.5/0.525-14%	25		230*140*240	110*99	aluminum copper
CKSG-2.1/0.48-7%	30		205*125*200	110*96	aluminum copper	CKSG-4.2/0.525-14%	30		245*145*245	120*108	aluminum copper
CKSG-2.8/0.48-7%	40		230*140*240	110*99	aluminum copper	CKSG-5.6/0.525-14%	40		245*165*265	120*118	aluminum copper
CKSG-3.5/0.48-7%	50		245*145*245	120*108	aluminum copper	CKSG-7.0/0.525-14%	50		245*155*245	120*118	aluminum copper
			245*165*245	120*118	aluminum copper				250*155*270	133*113	aluminum copper
			250*155*270	133*113	aluminum copper				245*165*245	120*128	aluminum copper

Note: The product series is updated in real-time. Please consult the sales personnel of Dazhao Electronics.



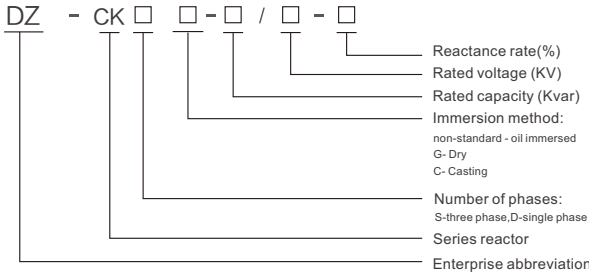
• Product Description

The nonlinear current generated by the large-scale use of modern power electronic equipment will increase the grid pollution in a harmonic way. The DAZHAO series tuned reactor can effectively suppress high order harmonics and avoid the influence of harmonic voltage, harmonic current, impulse voltage and current. It is suitable for reactive power compensation and filtering of 3, 5, 7, 11, 13 harmonic loads, which can improve power quality, improve power factor, extend capacitor life and protect the safety of power system.

• Model Meaning

Example:

DZ-CKSG-2.1/0.48-7% three-phase synchronous iron core represents a series reactor with a voltage level of 0.48KV and a rated capacity of 2.1Kvar. The reactance rate is 7%, and the matched capacitor capacity is 30Kvar



• Technical Parameter

Reliability parameter

Rated voltage: 230VAC ~ 1000VAC
Rated frequency: 50/60Hz

Environmental condition

Environmental temperature: -25°C ~ +45°C
Relative humidity: ≤90%
Altitude: ≤3000m (customizable for high altitudes)

Other requirements

Environmental temperature: -25°C ~ +45°C
The surrounding environment should have good ventilation conditions, no violent mechanical vibration;
No flammable and explosive media, conductive dust, or corrosive gases exist;

Performance parameter

Executive standards: GB/T 10946-2011 Reactors, IEC60076-6 Reactors
Insulation class: F class, H class
Noise: ≤65dB
Reactance rate: 1%, 4.5%, 6%, 7%, 12%, 13%, 14%
Electrical strength: Iron Core-winding 3000VAC/50Hz/60s, no arcing breakdown
Temperature protection: 125°C overheat breaking (normally closed type)

PRODUCT INTRODUCTION



Intelligent Reactive Power Compensation Controller [DZ-100CK-SF/B series]



• Product Description

The DZ-100CK-SF/B series reactive power compensation controller is suitable for supporting intelligent capacitor compensation devices. It adopts a new reactive power trend judgment algorithm and realizes human-machine dialogue through large-sized LCD and buttons. It has the functions of collecting and displaying measurement data, monitoring and displaying the operating conditions and switching status of intelligent capacitors, and automatically controlling the switching of capacitors based on reactive power and power factor. This product adopts universal instrument dimensions, has a beautiful and elegant appearance, and is easy to install and use.

• Technical Features

- Complete protection function**
With over voltage, under voltage, over current, over temperature, harmonic protection and other functions, when the grid parameters exceed the set limit, the capacitor can be quickly removed to extend the service life of the capacitor;
- Specialized metering chip**
The special power metering chip is used to measure the grid parameters with high precision, and the LCD screen dynamically displays the three-phase voltage, current, reactive power, active power and power factor of A, B and C.
- Communication control function**
The use of network line 485 communication control protocol, easy to install and use, fast communication rate;
- Multipoint sampling technique**
Using MCU microelectronic control circuit technology to determine reactive power trend and flow, automatically controlling the switching process based on preset parameters and reactive power levels to prevent switching oscillations;
- Encoding cycle switching**
Adopt the code cycle mode, the same capacity of the cycle switching in order, the capacity of different by code dynamic adaptation compensation, improve the compensation accuracy, with less action times to obtain the best compensation effect;
- Man-machine dialogue function**
Backlight LCD display and anti-interference single chip microcomputer are used to ensure the reliable operation of the product.

• Technical Parameter

Power supply conditions		
Rated voltage: 220V	Voltage deviation: ±20%	Rated frequency: 50Hz±5%
Environmental condition		Error of measurement
Environmental temperature: -25 ~ +55°C		Voltage: ≤±1%
Relative humidity: 20 ~ 90% at 40°C		Current: ≤±1%
Altitude: ≤2000m		Power factor: ≤±1%
Other requirements: No flammable or explosive media, conductive dust or corrosive gases exist		Reactive power: ≤±2%
Output mode: RS485 communication control output		Number of control circuits: Total number of intelligent capacitors ≤32
Mechanical parameter		
Overall dimension: 120×120×100mm		Installation dimension: 113×113mm

• Product Description

DAZHAO series low-voltage reactive power compensation controller is a new generation of intelligent controller designed and developed by professional power parameter acquisition chip and MCU microelectronic control circuit technology. Through the digital tube display and key to achieve man-machine dialogue, with the acquisition and display of measurement data, especially suitable for power factor changes large occasions, less movement, high control accuracy. The product adopts general instrument size, beautiful appearance, easy to install and use.

• Technical Features

- **Dynamic detection function**

Automatically detect the quantity and capacity of compensation devices, and control the switching according to reactive power parameters; Dynamically display the parameter values of power distribution, with simple and fast parameter settings, and the set parameters will not be lost when the power is turned off;
- **Complete protection function**

With over voltage, under voltage, over current, under current, over temperature protection and other functions, when the grid parameter exceeds the set limit, the capacitor can be quickly removed to protect the safe operation of the circuit and extend the service life;
- **Multipoint sampling technique**

Using MCU microelectronic control circuit technology, multi-point sampling of voltage, current, power, power factor and other data is used to determine the trend of reactive power flow, avoiding the misjudgment of single point sampling and accurately determining the required reactive power and compensation direction (switching on or off);
- **Encoding cycle switching**

Adopt the coding cycle mode, the same capacity in order to cycle switching, capacity of different coding according to the requirements, and then dynamic adaptation compensation, effectively improve the compensation accuracy, with less action times to obtain the best compensation effect;
- **Manual/automatic switching function**

When the automatic function is set, the input or removal of capacitors can be controlled according to the comprehensive factors of voltage, load, power factor and reactive power deficiency. It can also manually operate the input or removal of the capacitor, which is convenient for factory debugging and quick switching of the capacitor.
- **Communication control function**

The use of network line 485 communication control protocol, easy to install and use, fast communication rate.

• Technical Parameter

Power supply conditions		Environmental condition	
Rated voltage: AC380V		Environmental temperature: -25℃ ~ +55℃	
Voltage deviation: ±20%		Relative humidity: 20 ~ 90% at 40℃	
Rated frequency: 50Hz±5%		Altitude: ≤2000m	
Power consumption: < 5W		Other requirements: No flammable or explosive media, conductive dust or corrosive gases exist	
Error of measurement			
Voltage: ≤±0.5%		Current: ≤±1.0%	
Power factor: ≤±1.5%		Reactive power: ≤±2%	
Number of control circuits			
Total time: Total number of units ≤30 units		Mixing time: total complement ≤20 sets, fractional complement ≤10 sets	

PRODUCT INTRODUCTION



Low-Voltage Reactive Power Compensation Controller



PRODUCT INTRODUCTION



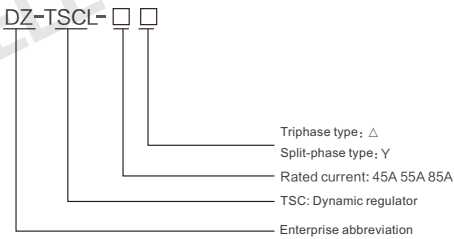
SCR Switch



• Product Description

DAZHAO series SCR switch (pure thyristor) is a kind of electronic power equipment that can quickly switch capacitors, which is mainly composed of microcomputer software control, photoelectric isolation and logic control chip. It can close the capacitor when the voltage is over zero, and cut the capacitor when the current is over zero, which can avoid the influence caused by instantaneous overvoltage, and has the functions of zero switching and over-temperature heat dissipation. Because of its fast response, it is often used in complex situations where the load fluctuates frequently or changes rapidly.

• Model Meaning



• Technical Parameter

Power supply conditions

Rated voltage: AC380V 250V
Voltage deviation: ±20%
Operating frequency: 50Hz±5%

Environmental condition

Environmental temperature: -25°C ~ +55°C
Relative humidity: 20 ~ 90% at 40°C
Altitude: ≤2000m

Control parameter

Control voltage: DC12V, triggered at low level
Control current: 20mA
Switching time: ≤20ms

Mechanical parameter

Installation hole size: 184.5±8×35mm
Opening size: 162×116mm

Other requirements

The surrounding environment should have good ventilation conditions, no violent mechanical vibration; No flammable or explosive media, conductive dust or corrosive gases exist; The installation and operation of the compensation system shall be strictly installed and operated by professional personnel in accordance with the selected model of the compensation system;

• Technical characteristics

- Zero crossing, no flow, no noise, no sparks
- Intelligent chip, stable performance
- The response time is extremely short, less than 20ms
- Strong anti-interference ability
- Easy to install and use
- The running/fault status can be displayed

• Product Number

Specification Mode	Compensation Mode	Rated current	Configured capacitor capacity (Kvar)
DZ-TSCL-45/Δ	Three-phase Centralized Compensation	45A	20And below
DZ-TSCL-55/Δ		55A	30And below
DZ-TSCL-85/Δ		85A	50And below
DZ-TSCL-45/Y		45A	20And below
DZ-TSCL-55/Y	Individual Phase Compensation	55A	30And below
DZ-TSCL-85/Y		85A	50And below

PRODUCT INTRODUCTION



Composite Switch



• Product Description

The DAZHAO series composite switch is an intelligent and environmentally friendly product used for on/off control of low-voltage power capacitors. It combines the advantages of thyristors and AC contactors, and achieves voltage zero crossing conduction and current zero crossing capacitor cut-off by detecting external control signals. It also innovatively adds data communication function, greatly reducing the degree of replication of complete wiring sets. It has complete self diagnosis and protection functions, and has obvious advantages in switching inrush current and safety reliability.

• Technical Parameter

- Zero crossing switching:** automatically find voltage zero crossing input, find current zero crossing cutting, no harmonic injection, to achieve no inrush current switching;
- Energy saving and consumption reduction:** the magnetic holding relay only consumes power at the moment of switching action, and the contact resistance is small, no heat, reducing its own loss;
- Safety protection function:** intelligent monitoring of operating conditions, with voltage phase loss, automatic fault judgment, power failure/no-load protection functions;
- Data communication function:** network line 485 communication type control, simple wiring, easy installation;
- Strong anti-interference:** anti-interference single chip microcomputer control, safe and reliable operation;

• Product Number

Specification Mode	Compensation Mode	Rated current	Configured capacitor capacity (Kvar)
DZ-FK-Δ-45	Three-phase Centralized Compensation	45A	20And below
DZ-FK-Δ-60		60A	30And below
DZ-FK-Δ-100		100A	50And below
DZ-FK-Y-45		45A	20And below
DZ-FK-Y-60	Individual Phase Compensation	60A	30And below
DZ-FK-Y-100		100A	50And below

• Technical characteristics

Power supply conditions

Rated voltage: AC380V 250V
Voltage deviation: ±20%
Operating frequency: 50Hz±5%
Rated current: 100A/60A/45A

Control parameter

Service life: 2 million times
Power consumption: ≤1.5W
Contact voltage reduction: ≤100mV
Switch withstand voltage: ≥2500V
Response time: ≤100ms
Interval between each connection and disconnection: ≥1s
Control capacitance: three-phase ≤50KVar, type connection;
Single-phase ≤15KVar, Y-type connection

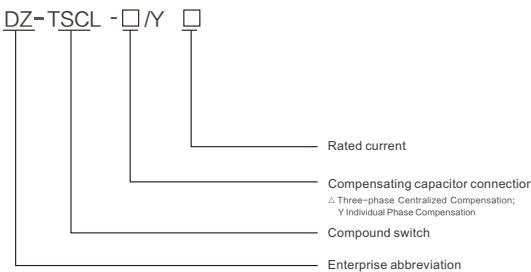
Mechanical parameter

Installation hole size: 150mm*99mm
Opening size: φ 7mm

Other requirements

The surrounding environment should have good ventilation conditions, no violent mechanical vibration; No flammable or explosive media, conductive dust or corrosive gases exist;

• Model Meaning



PRODUCT INTRODUCTION



Active Power Filter



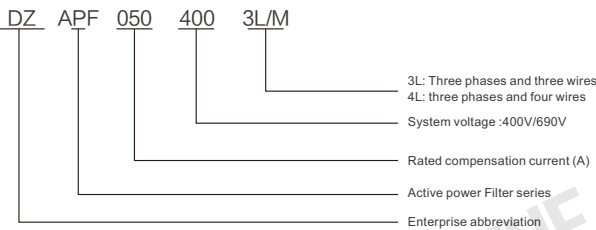
• Product Description

DZ-APF active power filter is a new type of device which adopts modern power electronic technology (DSP+FPGA control system) based on instantaneous reactive power theory to dynamically suppress harmonics and compensate reactive power. Compared with passive filtering, one is to automatically track harmonic changes in the power grid, actively generate compensation current (reverse harmonic) with equal amplitude and opposite polarity to the load harmonic current, which can actively compensate or cancel the harmonic; One is filtering by passive absorption.

The device adopts military-grade control chip, has strong computing power and anti-interference ability, which can realize the centralized control of multiple active filters by one controller. It adopts adaptive current average value control algorithm combined with LCL topology. It overcomes the shortcomings of traditional hysteresis current control, such as wide range of output spectrum, difficulty of filtering and interference of high frequency harmonics.

Compared with the traditional passive compensation, the device has the advantages of high controllability, arbitrary compensation for unfixed harmonics, smaller volume, faster response, better filtering effect, easy installation, simple debugging and easy maintenance, and is suitable for the place where the size and frequency of harmonics are fast transients.

• Model Meaning



• Technical Parameter

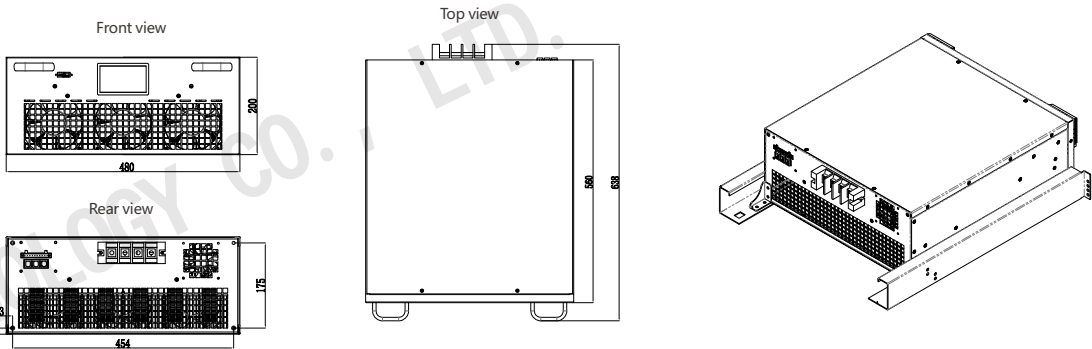
input	Rated compensation current of a single cabinet	50A~900A
	Operating voltage	-20%~+15%
	Operating frequency	50±2.5Hz
Display and communication	Display interface	7 inch touch screen
	Display status	Device and system current, voltage, state parameter, waveform
	Communication	RS485, RS232, Modbus protocols
Use environment	Ambient temperature	-10℃~+45℃
	Storage temperature	-40℃~+60℃
	Relative humidity	< 95%, no condensation
	altitude	< 1000米 (high altitude need to be customized)

Performance indication	Filter range	2~50 times, single harmonic can be limited
	Harmonic filtering rate	> 97%
	Instantaneous response time	< 100us
	Full response time	< 10ms
	Active power loss	< 3% (rated)
	Heat dissipation mode	Intelligent air cooling
	Number of parallel machines	12sets
	Noise index	< 65dB
	Overload capacity	120%
	Switching frequency	21.6KHz

• Product Model And Size

Rated voltage	<input checked="" type="checkbox"/> 380V (-20%~+20%)												
Rated current of a single cabinet	50A	75A	100A	150A	200A	250A	300A	350A	400A	450A	500A	550A	600A
Number of parallel machines	Higher capacity can be used in parallel; Up to 12 units can be connected in parallel, with an output capacity of 4200A, and only one controller is used.												
Connection mode	<input checked="" type="checkbox"/> 3 phase 3 wire <input checked="" type="checkbox"/> 3 phase 4 wire												
Size mm(W*D*H)	550*268*570 800*600*2200 600*800*2200 800*800*2200 800*1000*2200 1000*800*2200 1000*1000*2200				600*800*2200 800*800*2200 800*1000*2200 1000*800*2200 1000*1000*2200				1200*800*2200 1600*800*2200 1600*1000*2200 2000*800*2200 2000*1000*2200				
Installation mode	<input checked="" type="checkbox"/> Wall hanging <input checked="" type="checkbox"/> rack				rack								
Class of protection	IP20(Other protection levels can be customized)												

Rated voltage	<input checked="" type="checkbox"/> 690V (-20%~+20%)			
Rated current of a single cabinet	100A	200A	300A	400A
Number of parallel machines	Higher capacity can be used in parallel; Up to 12 units can be connected in parallel, with an output capacity of 1500A, and only one controller is used.			
Connection mode	<input checked="" type="checkbox"/> 3 phase 3 wire <input checked="" type="checkbox"/> 3 phase 4 wire			
Size mm(W*D*H)	800*800*2200	800*1000*2200	1000*800*2200	1000*1000*2200
Installation mode	Rack			
Class of protection	IP20(Other protection levels can be customized)			



• Typical application field

Industry type	Harmonic source	THD experience value	Governance mode
nosocomium	Medical equipment, UPS, variable frequency air conditioning, computers, energy-saving lamps	25%	Centralized treatment or local compensation
Subways, tunnels, high-speed trains, airports	Energy-saving lamp, inverter fan, elevator, thyristor dimming equipment	15%	Centralized management
Communication room, data center, bank	UPS, switching power supply, variable frequency air conditioning, energy-saving lamp	20%	Centralized management
Smart building, business center	Energy-saving lamps, elevators, computers, variable frequency air conditioning	20%	Centralized management
Automobile manufacturing	Spot welding machine, electric welding machine	30%	Centralized management
Petroleum and chemical industry	Inverter, rectifier equipment	35%	Centralized treatment or local compensation
metallurgy	Medium frequency furnace, electric arc furnace, rolling mill	40%	
Gymnasium, Theater	Dimming equipment, energy-saving lamps	50%	Centralized management

PRODUCT INTRODUCTION



Static Var Generator

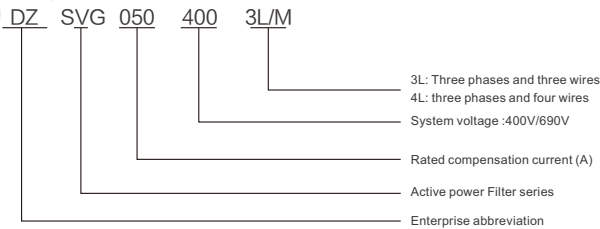


• Product Description

DZ-SVG static reactive power generator is a new type of power electronic device used for dynamic reactive power compensation, balancing three-phase load and suppressing harmonics in power grid. The product uses power conversion technology to generate reactive current and current opposite to harmonic current to achieve dynamic reactive power compensation. Compared with passive compensation, it can quickly (dynamically) and continuously compensate the reactive power of the size change. It has the advantages of fast response speed, accurate compensation effect, large compensation capacity, high reliability, simple installation and operation. Widely used in medical, modern office, machining, automobile manufacturing, rail transit, port and other industrial and mining places.

The reactive power generator can detect the power grid current or load current in real time through the external transformer CT, and the controller can extract the base branch current and each harmonic current of the load through the fast Fourier transform, and obtain data such as active power, reactive power and negative sequence through the dq rotation coordinates. Then, through IGBT power converter, the compensation current that is equal in magnitude and opposite in phase to the compensation target (harmonic, reactive power, unbalance) is injected into the grid to realize the power quality improvement function on the grid side.

• Model Meaning



• Features

Compensation schematic diagram

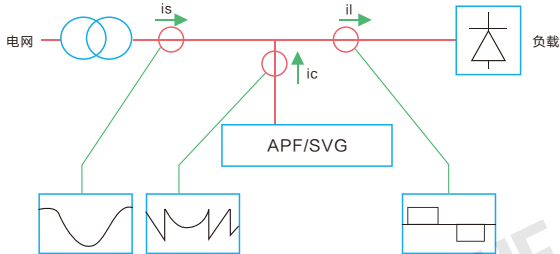


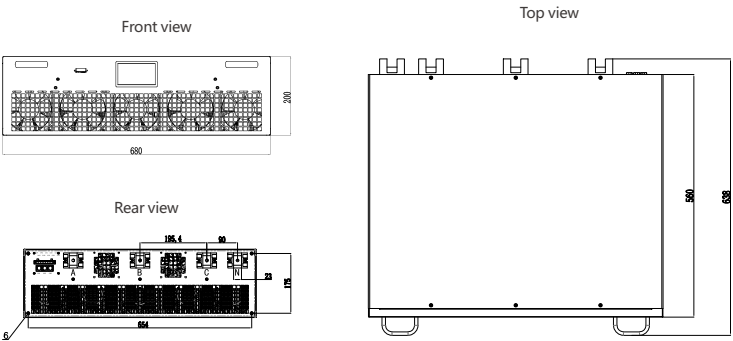
Table 1 Technical index comparison

	DZ-SVG	Mainstream SVG
Maximum power of single cabinet	600kvar	600A/400kvar
wastage	< 2.5%	< 3%-4%
noise	< 60dB	< 70dB
Equivalent swiching frequency/ current loop broadband	80kHz/4kHz	20kHz/1kHz

• Technical Parameters And Dimensions

		SVG (kvar)		
Specification	Module specification	35	50	75
	Module size	480*200*530	\	
	(W*H*D)(Note 1)	\	680*200*530	
	Shunt quantity	15		
Input	Operating voltage	380V/690V (-20%~+15%)		
	Operating frequency	50Hz (-10%~+10%)		
	Current transformer	100: 5~10000: 5		
Output(W*D)(Note2)	600*600 cabinet	P _{liver} ≤100kvar		
	800*600 cabinet	P _{liver} ≤200kvar		
	600*800 cabinet	P _{liver} ≤300kvar		
	800*800 cabinet	P _{liver} ≤600kvar		
Feature	Compensated harmonic	2~13 times (50% of rated current)		
	Harmonic filtering rate	> 97%		
	Compensated reactive power	The value ranges from -1 to +1		
	Three-Phase Unbalance Compensation	100% unbalance fully compensated		
Communication protocol	Communication mode	Rs232, 485, Modbus, and TCP/IP are optional		
	Communication interface	Rs485, network port, CAN		
	Upper computer software	Yes, all parameters can be set by the host computer		
	Fault alarm	Yes, it can record up to 500 alarm messages		
	Supervisory control	Supports independent monitoring of each module or centralized monitoring of the entire system		
Technical index	Full response time	< 10ms		
	Active power loss	< 2.5%		
	Heat dissipation mode	Intelligent air cooling		
	Noise	< 60dB		
	Sampling/control frequency	160kHz		
	Equivalent switching frequency	80kHz		
	Current ambient stop frequency	4Khz		
	Protection function	Over voltage, under voltage, overheating, overcurrent, short circuit and other more than 20 kinds of protection		
	CT installation position	Negative cutting side/Power grid side Optional		
Mechanical characteristic	Wall mounting dimension	The wall hanging is the same size as the horizontal block		
	Module weight	25kg(=75A/50kvar)50kg(=100A/100kvar)		
	Colour	Matte black		
Environmental requirement	Operating temperature	-10℃~+45℃		
	Altitude	<5000 meters (over 1000 meters, the power is reduced by 1% for every 100 meters)		
	Relative humidity	<95% no condensation		
	Class of protection	IP20(Higher protection level can be customized)		

Note: The product series is updated in real-time. Please consult the sales personnel of Dazhao Electronics.



Installation diagram

Note:
1. Install M6 screws
2. Minimum air vent opening area 47700mm², minimum opening rate 0.7

