

电力级别高压交流陶瓷电容器/Power level high voltage ceramic capacitors

Power paper 电力篇

美志12KV Ac系列具有以下特点:

Amazing 12 kv AC series has the following features:

高低温特性好: $-50^{\circ}\text{C}\sim+125^{\circ}\text{C}$ 工作

高压特性好: 可承受50KV保压测试

雷电冲击电压高: 可承受90KV雷击

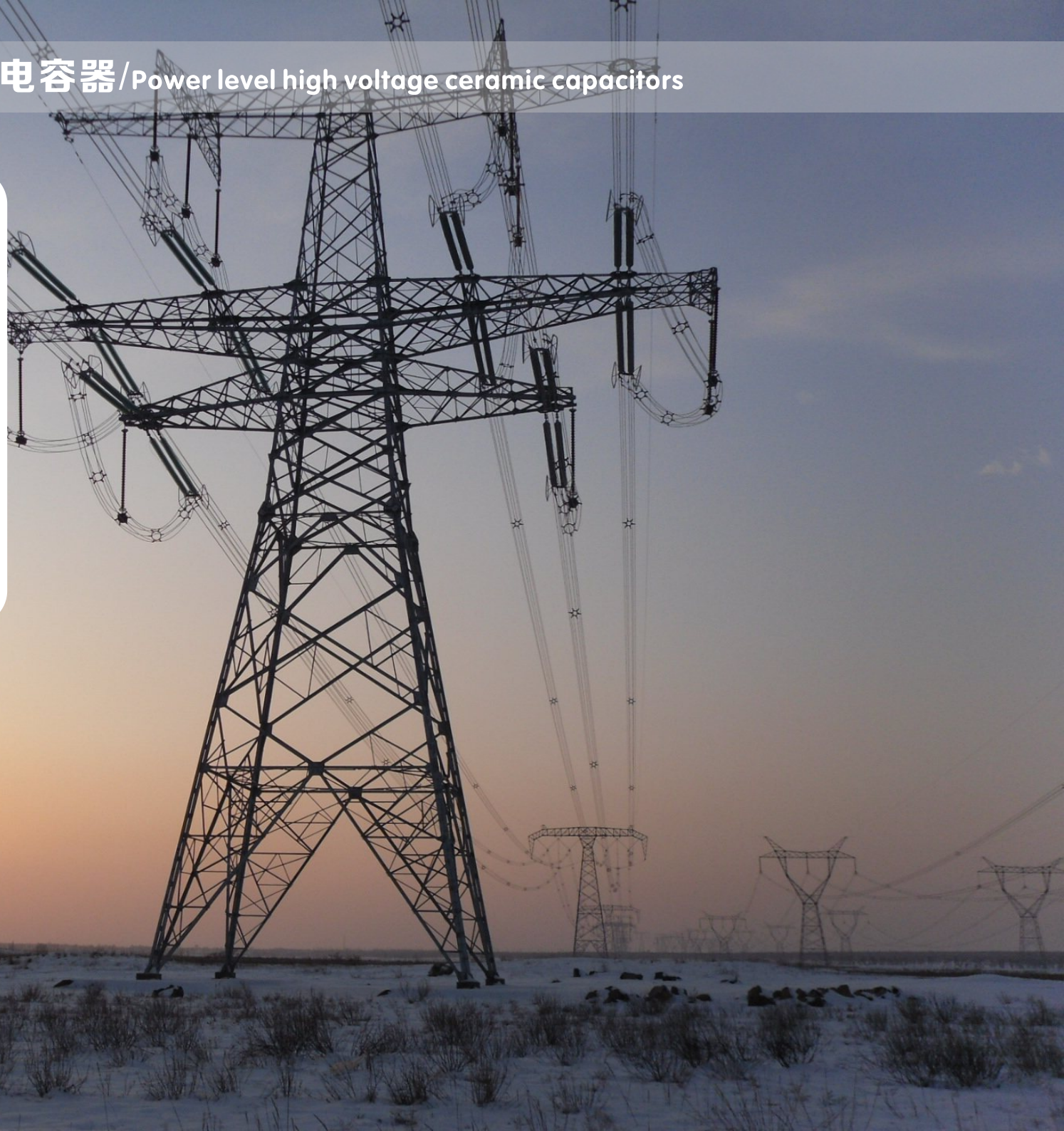
局部放电小: 在15KV AC局部放电小于3PC

Good high and low temperature performance: work $-50^{\circ}\text{C}\sim+125^{\circ}\text{C}$

Can bear high pressure good features: 50 kv pressure test

Lightning impulse voltage, high can withstand 90 kv struck by lightning

Partial discharge small: in 15 kv AC partial discharge is less than 3 PCS



专注高频高压 服务电力军工

Focus on High Frequency High Voltage Serve for Electricity and Military



圆柱形特种零局放交流陶瓷电容器
CYLINDER SPECIAL LOW PARTIAL DISCHARGE GRID CAPACITOR

Characteristics
特点 GC系列

高电压强度、零局部放电、温度稳定
High voltage Non-partial discharge Temperature stability

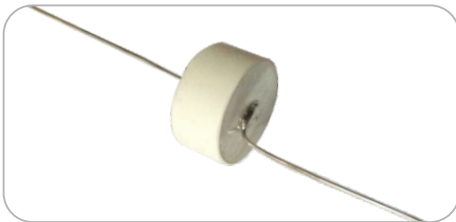
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高精度型传感器陶瓷电容器
PRECISE SENSOR CAPACITOR SERIES

Characteristics
特点 PSC系列

精密度高、耐电压高、高温性能好
High precision High voltage high temperature resistant performance is good



圆形单功能电容式电压互感器-A型
Circular monofunctional capacitor type voltage transformer-A

圆形多功能电容式电压互感器-B型
Circular multi-function capacitor type voltage transformer-B

Characteristics
特点 CVT系列

零序保护和电压信号采集
Zero sequence protection and voltage signal acquisition

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CVD系列 圆形互感器分压器陶瓷电容器
CCAPACITIVE VOLTAGE DIVIDER



Characteristics
特点

功耗小、尺寸小、安全等级高、电压有保障
Power consumption small size small safe level high voltage protection

产品优势

- 外形体积小
- 相对其它材质更显轻便可靠
- 几乎接近于零的局部放电
- 容量温度变化率极小
- 能在较高或较低温度下应用
- 绝缘阻耐高压能力

电性参数

- 介电常数: 320
- 耐测试电压: 用5倍额定工作电压作耐压、测试2分钟无异常
- 雷电冲击测试: 75KV正反极雷电冲击各15次无异常
- 局部放电: 在额定标称电压内测试, 局部放电为零
- 温度变化: 在-50°C~+125°C温度区间, 容量变化率小于3%

Advantage

- Small size
- More portable and reliable relative to other material
- Almost zero partial discharge
- Capacity with low temperature gradient
- Very high or low temperature available
- Withstand high ability of resistance to high pressure

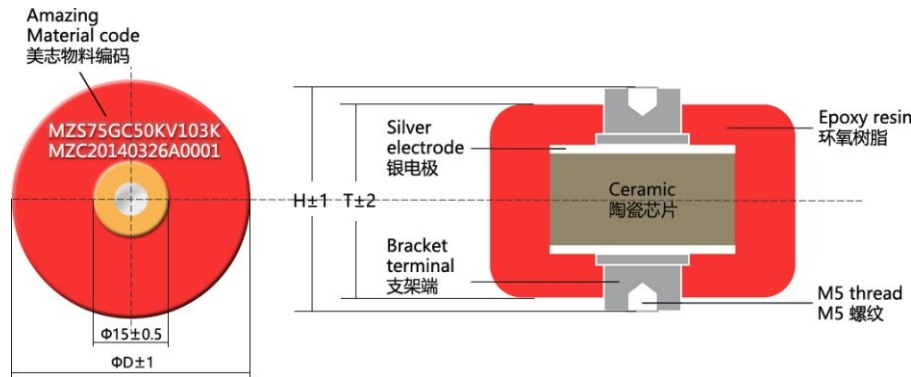


Electrical parameters

- Dielectric constant: 320
- Voltage-withstand test: Using 5 times the rated working voltage testing of pressure, two minutes without exception
- Lightning impulse: 75 kv lightning impact 15 times without exception
- Partial discharge: Zero partial discharge under the rated voltage test
- Temperature changes: In -40°C~+125°C range, capacity tolerance range is less than 3%

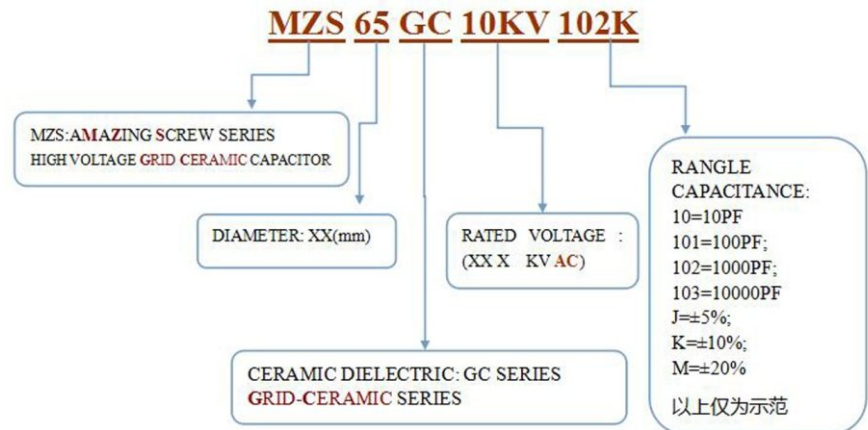
产品结构示意图

Product structure diagram



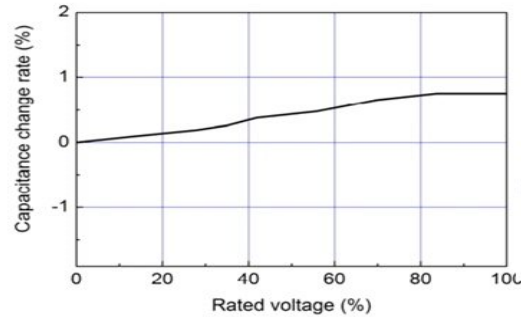
物料编码释义

Material code interpretation



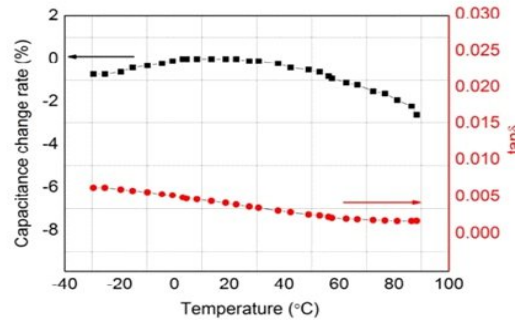
偏压特性示意图

Bias characteristic diagram



温度特性示意图

Temperature characteristic diagram



主要型号对应表/Model parameter table

物料编码 Material code	额定电压 Rated voltage	标称容量 Capacity	雷电冲击 Lightning impulse	容量误差 Tolerance	直径 D (mm)	厚度 T (mm)	高度 H (mm)	螺丝 M (mm)
MZS30GC12KV30P	50KV	30PF	75KV	±10%	30	30	36	M5
MZS30GC12KV50P	50KV	50PF	75KV	±10%	30	30	36	M5
MZS30GC12KV101K	50KV	100PF	75KV	±10%	30	30	36	M5
MZS40GC12KV151K	50KV	150PF	75KV	±10%	40	30	36	M5
MZS40GC12KV201K	50KV	200PF	75KV	±10%	40	30	36	M5
MZS40GC12KV301K	50KV	300PF	75KV	±10%	40	30	36	M5
MZS50GC12KV401K	50KV	400PF	75KV	±10%	50	30	36	M5
MZS55GC24KV401K	100KV	400PF	140KV	±10%	55	36	40	M5
MZS50GC12KV501K	50KV	500PF	75KV	±10%	50	30	36	M5
MZS50GC24KV501K	100KV	500PF	140KV	±10%	50	36	40	M5
MZS65GC12KV701K	50KV	700PF	75KV	±10%	65	30	36	M5
MZS75GC12KV102K	50KV	1000PF	75KV	±10%	75	40	46	M5

如有选表上未列产品需求，可以联系我们定做，此表仅供参考，尺寸以实物为准！

If you have selected tables not listed on the product demand, can contact us, this table is for reference only, the actual size shall prevail!

功能应用

智能电网及相关设备中作取信号，滤波、耦合、取能等用途。常用来作互感器分压器电容、断路器电容、耦合器、传感器、滤波器、电能计量、电源储能、分压倍压、保护电路、局部放电监测设备及交流换流站等。

Function application

The smart grid and related equipment for the signal, filter, coupling, can take to use. Commonly used for transformer voltage divider capacitor, the circuit breaker capacitor, coupler, sensor, filter and electric energy metering and power energy storage, pressure times, protection circuit, partial discharge monitoring equipment, ac converter station, and so on.

应用领域/Application field



产品优势

尺寸更小巧
精密度高
耐电压高
高温性能好
多级倍压组合
多种装配方式

电性参数

介电常数: 320
温度范围: $-50^{\circ}\text{C} \sim +125^{\circ}\text{C}$
容量误差: $\pm 5\%$
温度变化率: $\leq 5\%$

Advantage

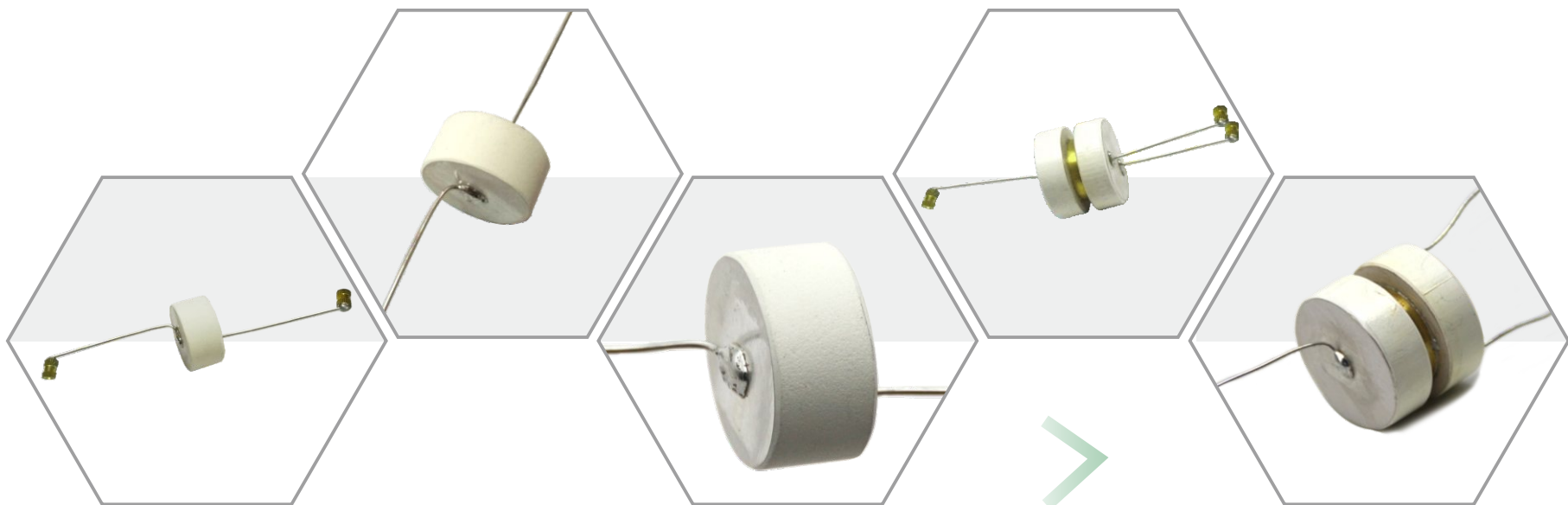
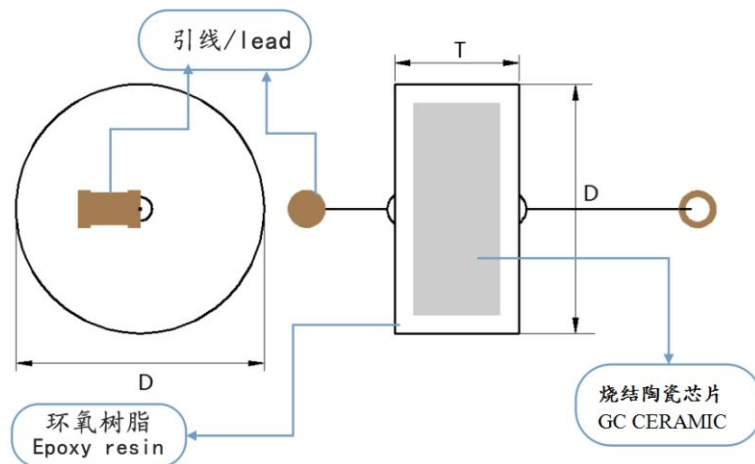
Smaller size
High precision
High withstand voltage
Good high temperature performance
Multistage pressure combination
A variety of assembly ways

Electrical parameters

Dielectric constant: 320
Temperature range: $-50^{\circ}\text{C} \sim +125^{\circ}\text{C}$
Capacity tolerance: $\pm 5\%$
temperature gradient: $\leq 5\%$

产品结构示意图

Product structure diagram



精密度高 耐电压高 高温性能好

High precision High voltage high temperature resistant performance is good

功能应用

广泛应用于环网开关柜、断路器等设备中用作传感器、电压互感器、绝缘子等。主要用作取信号用。PSC系列的高精密电容器适合在低温或较高温度工作,且性能稳定。

Function application

Widely used in the ring net switch cabinets, circuit breakers and other equipment used for sensor, voltage transformer, insulator, etc. Mainly used as signal with. PSC series high precision capacitor is suitable for working in the low or high temperature, and stable performance.

主要型号对应表 / Model parameter table

物料编码 Material code	标称容量 Capacity	交流电压 Ac voltage	耐压测试 KVAC	冲击电压 Dielectric loss	芯片数量 Chip number	直径 D (mm)	厚度 T (mm)	介质材料 Dielectric materials
B35PSC10P	10PF	35KV	130	210KV	2	20	40	GC
A24PSC20P	20PF	24KV	65	110KV	1	20	20	GC
A24PSC25P	25PF	24KV	65	110KV	1	20	20	GC
A24PSC30P	30PF	24KV	65	110KV	1	20	20	GC
A24PSC35P	35PF	24KV	65	110KV	1	20	20	GC
A24PSC40P	40PF	35KV	130	210KV	1	20	20	GC
A24PSC15P	15PF	35KV	130	210KV	1	20	20	GC
A24PSC60P	60PF	35KV	130	210KV	1	20	20	GC
C35PSC10P	10PF	66KV	180	270KV	3	20	60	GC
B35PSC15P	15PF	35KV	130	210KV	2	20	40	GC
B35PSC20P	20PF	35KV	130	210KV	2	20	40	GC
B35PSC25P	25PF	35KV	130	210KV	2	20	40	GC
B35PSC30P	30PF	35KV	130	210KV	2	20	40	GC

以上尺寸仅作参考!实际订单或协议为准!欢迎来函定制!(编码首位ABC分别表示一二三个瓷片)

The above dimensions are for reference only! The actual order or agreement shall prevail. Welcome for your custom! (code first ABC respectively two three ceramics)

应用领域 / Application field



PSC系列



CVD系列

圆形互感器分压器陶瓷电容器 CCAPACITIVE VOLTAGE DIVIDER

电性参数

介质介电常数: 320
工作温度区间: $-50^{\circ}\text{C}\sim+125^{\circ}\text{C}$
单片额定电压: 12KV AC
单片额定容量: 15~500PF
频率: 50~120HZ

Electrical parameters

Dielectric constant: 320
Working temperature range: $-50^{\circ}\text{C}\sim+125^{\circ}\text{C}$
Single rated voltage: 12 KV AC
Single rated capacity: 15~500 PF
Frequency: 50 ~ 120 HZ



产品优势

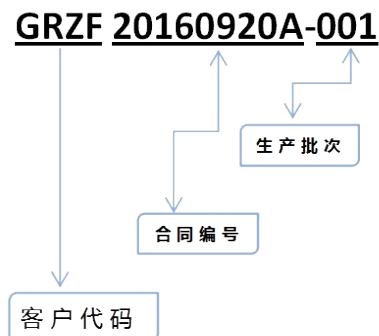
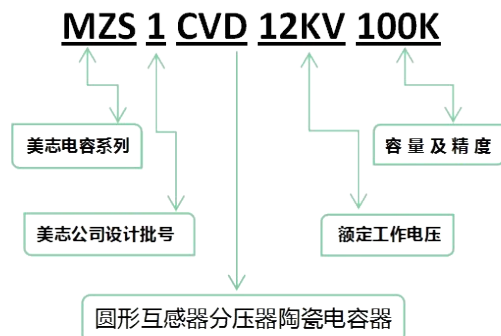
交流耐压42KV两分钟没问题，电压有保障
雷电冲击85KV设计，安全等级高
局部放电小，20KV时局部放电小于3PC
温度变化率小，在 $-40^{\circ}\text{C}\sim+70^{\circ}\text{C}$ 温度变化率小于3%

Advantage

No problem hold voltage 50 kV 2 minutes, voltage is being guaranteed
Designing for lightning impulse 90 kV , high security levels
Partial discharge is small, 20 kV when partial discharge is less than 3 PCS
Temperature range is small, in $-40^{\circ}\text{C}\sim+70^{\circ}\text{C}$ change rate is less than 3%

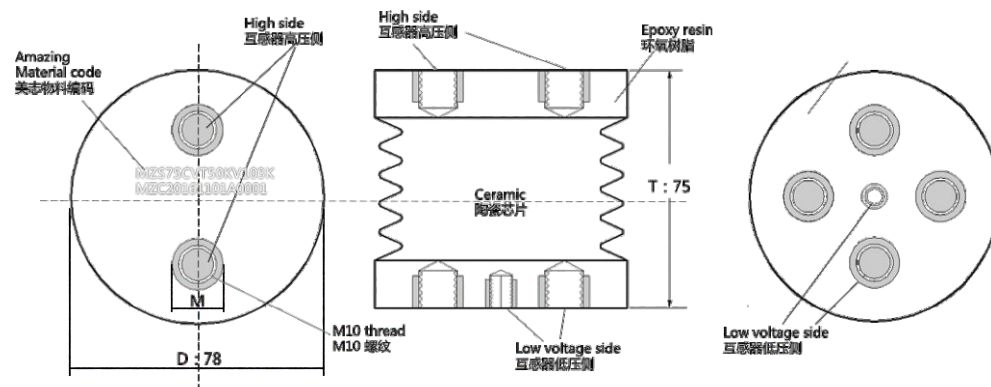
物料编码释义

Material code interpretation



产品结构示意图

Product structure diagram



设计理念

根据MZS2GC12KV211K即12KV210PF双芯片串联电容器方案设计. 此系列电容器经专业机构检测, 在50KV保压两分钟, 在90KV雷电冲击测试, 在15KV局部放电测试, 在-40到+70温度变化率测试都获得了极佳的成绩. 本系列产品设计, 即照此标准. 此类产品的设计以体积小而见长, 可以同时满足用户取信号和零序的功能。本系列的陶瓷电容器我们以提供芯片为主, 也可以代加工成分压器。

Design concept

According to MZSGC12KV211K(12KV210PF) dual chip series capacitor design. The series capacitor detection via professional organization, 50 kv withstand voltage in two minutes, in the 90 kv lightning impulse test, partial discharge test in 15 kv, in 40 to + 70 temperature gradient testing have been excellent results. This series of product according to this standard design. Such products design small size and can meet user at the same time take the function of the signal and the zero sequence. This series of ceramic capacitor mainly focuses on the chip, we can also be processed into voltage divider.

主要型号对应表 (单片电容器芯片尺寸)

Model parameter table (monolithic capacitors chip size)

物料编码 Material code	标称容量 Capacity	额定电压 Rated voltage	直径 D (mm)	厚度 T (mm)	片/串 PCS/STACK
MZS1CVD12KV100P	100PF	12KV	26	14	1
MZS1CVD12KV108P	108PF	12KV	26	14	1
MZS1CVD12KV122P	122PF	12KV	27	14	1
MZS1CVD12KV180P	180PF	12KV	30	14	1
MZS2CVD24KV122P	122PF	24KV	35	28	2
MZS2CVD24KV210P	210PF	24KV	45	28	2

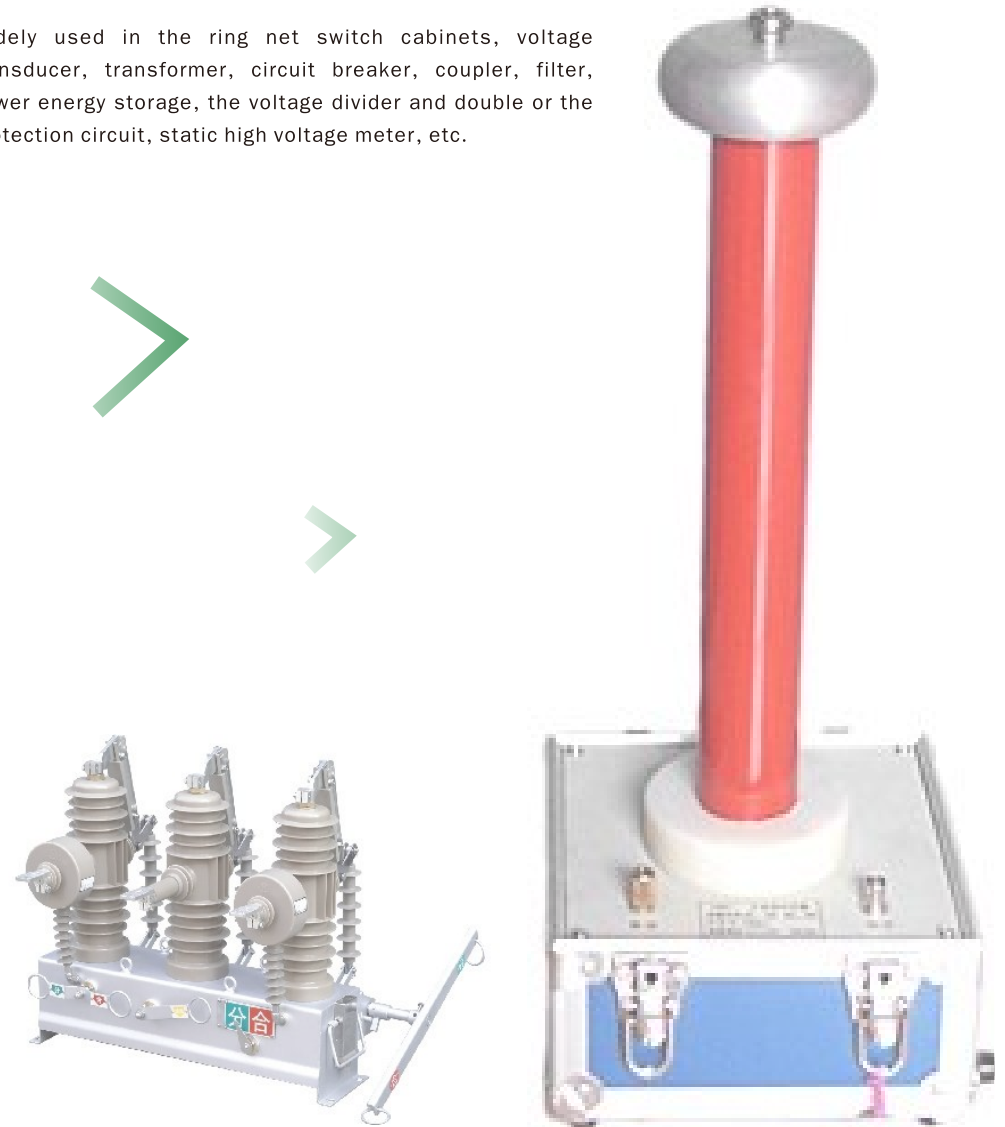
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The above dimensions are for reference only! The actual order or agreement shall prevail. Welcome for your custom!

功能应用/Function application

广泛应用于环网开关柜、电压传感器、互感器、断路器、耦合器、滤波器、电源储能、分压倍压及保护电路、静电电压表等。

Widely used in the ring net switch cabinets, voltage transducer, transformer, circuit breaker, coupler, filter, power energy storage, the voltage divider and double or the protection circuit, static high voltage meter, etc.



CVD系列

产品优势

介电常数：320

容量偏差：±1PF

电压等级高：保压测试42KV

雷击电压高：承受雷击电压130KV

局部放电小：在14.5KVAC几乎测不到局放

温度变化率小：在-40℃~+125℃温度区间，容量变化率在1.0级

产品描述

- 1、此型号产品是一种支柱式绝缘子，同时赋予其电压采集或零序保护等功能。
- 2、互感器的整体精度为1.0级，也可以按客户要求作0.5级甚至0.2级的调整。
- 3、产品采用一次与二次电压分体式结构，方便调整二次侧取样电压，用户可以通过改变二次侧取样电压来赋予不同的互感器功能。

产品结构示意图

Product structure diagram



Advantage

Dielectric constant: 320

Capacity deviation: ±1PF

High voltage grade: voltage maintaining test 42 KV

High lightning voltage: lightning voltage under 130 KV

Small partial discharge: in 14.5 KVAC almost no partial discharge measurement

Small temperature gradient: in -40℃~+125℃, the capacity rate of change in the magnitude of 1.0

Describe

- 1, this model is a kind of pillar insulator, and at the same time giving it a voltage acquisition or zero sequence voltage protection function.
- 2, the overall precision of transformer with a magnitude of 1.0, can also according to customer requirements for magnitude 0.5 and even 0.2 on the adjustment.
- 3, the product structure of primary and secondary voltage separation, convenient to adjust the secondary side voltage sampling, users can change to give different voltage transformer secondary side sampling function.

产品参数/Product parameters

名称	Name	参数/parameter
额定一次电压 (KV)	Rated primary voltage (KV)	12KVAC
标称容量 (PF)	Nominal capacity (PF)	122PF
耐压测试 (保压2分钟)	Withstand voltage test	42KVAC
产品尺寸小	Small product size	直径/D: 78MM, 高度/T: 75MM
二次侧输出电压	Secondary side output voltage	3.25V~6.5V
互感器高压侧	High voltage side	有两个螺孔为M10
互感器低压侧	Low voltage side	有四个M10的螺孔, 中央小孔为M6的螺丝

参数依客户指定，尺寸可以依客户要求做到更小！欢迎咨询定制！

Parameters specified by customer, the size can be done in accordance with customer demand smaller! Welcome consulting custom!

产品优势

介电常数：320
容量偏差：±2PF
电压等级高：保压测试42KV
雷击电压高：承受雷击电压110KV
局部放电小：在14.5KVAC几乎测不到局放
温度变化率小：在-40℃~+125℃温度区间，容量变化率在1.0级

产品描述

此产品符合国家电网提出的一个互感器同时担当多种功能的要求。产品选用高精度的电容器为材料，绝缘子里面实际包含两个互感器，可以同时担当零序保护和电压信号采集的功能。产品尺寸小，重量轻，具有较高的精度，是环网柜柱上支柱绝缘子的最佳方案

产品参数/Product parameters

名称	Name	参数/parameter
额定一次电压 (KV)	Rated primary voltage (KV)	10KVAC
标称容量 (PF)	Nominal capacity (PF)	122PF
耐压测试 (保压2分钟)	Withstand voltage test	42KVAC
产品尺寸小	Small product size	直径/D:78MM, 高度/T:75MM
零序互感器	Zero sequence transformer	10/√3/6.5/3
信号采集互感器	Signal acquisition transformer	10/√3/3.25/√3
零序保护互感器精度	The precision of zero sequence transformer	1.0
信号采集互感器粘度	Signal acquisition viscosity	0.5~1.0

参数依客户指定，尺寸可以依客户要求做到更小！欢迎咨询定制！

Parameters specified by customer, the size can be done in accordance with customer demand smaller! Welcome consulting custom!

Advantage

Dielectric constant: 320
Capacity deviation: ±2PF
High voltage grade: voltage maintaining test 42 KV
High lightning voltage: lightning voltage under 110 KV
Small partial discharge: in 14.5 KVAC almost no partial discharge measurement
Small temperature gradient: in the temperature range -40℃~+125℃, Capacity rate of change in the magnitude of 1.0

Describe

This product conforms to the national grid, puts forward a transformer at the same time as the requirements of a variety of functions. Products with high precision capacitor for material, insulator, it actually contains two transformer can also act as the function of zero sequence protection and voltage signal acquisition. Products small size, light weight, high precision, was a pillar of ring network cabinet post insulator on the best solution

产品结构示意图

Product structure diagram

