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Important Notice

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2024 A1

72.5kV-550kV
High Voltage Power Cable Accessories

STOCK CODE:002130

Global Solution Provider

PEOPLE. PRODUCT. POWER.

Woer Group (Stock Code: 002130) is a high-tech enterprise with headquarter in Shenzhen, China. Founded in 1998, Woer has undergone dynamic growth and become one of the largest manufacturers of heat & cold shrinkable insulation material.

The Woer brand has always been a guarantee for the steady supply of products and services. From product design and raw materials sourcing to final inspection and testing, Woer has a perfect quality assurance program covering the entire production process. So far, we have been successfully certified by ISO 9001, ISO 14001, ISO/TS 16949, UL, CSA, 3C,etc. Also, we've acquired the Type Test certification from KEMA in 2007, and were authenticated by CNAS in 2011.

Shenzhen Woer Electric Technology Co., Ltd(Woer Electric), a major part of Woer Group, is well-known for its outstanding products and professional services. For more than 20 years, Woer Electric has been developing, manufacturing and marketing a broad range of cable accessories for reliable power transmission. And it has made tremendous contribution to the innovation of product design and manufacture. All our experiences, together with a strong commitment to R&D, have prepared us to be a global leader in cable accessories industry.

At Woer, we know this can be done.

Our Technology

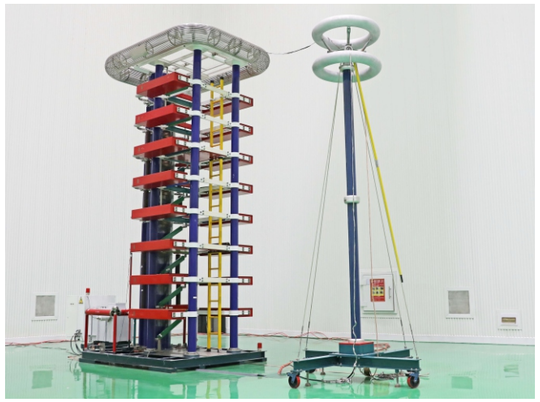
We offer a full range of products for a wide variety of applications using heat shrink, cold shrink and cold applied technologies. Woer technology is based on specially formulated thermoplastic polymer materials or high quality silicone rubber. The compounds for these materials are designed, selected and mixed in our own factory. Sophisticated process controls during extrusion, injection moulding, cross-linking and expansion ensure high quality and reliability of our products.

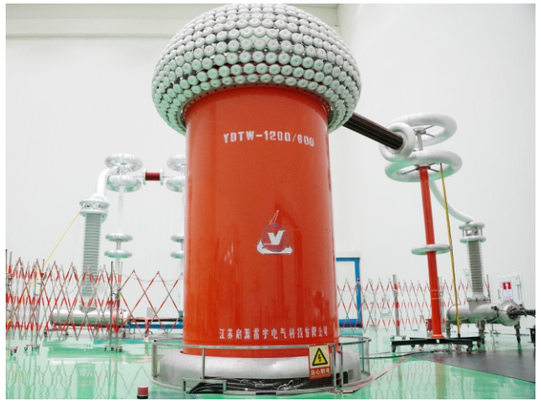
Innovation is the soul of a high-tech enterprise. To achieve this, we established several material labs and two fully equipped high voltage test labs with AC voltage withstand up to 1200kV. All the labs were authenticated by CNAS in 2011. Also, electrical, material and mechanical engineers are working in cross functional teams focused on new technologies and product developments.

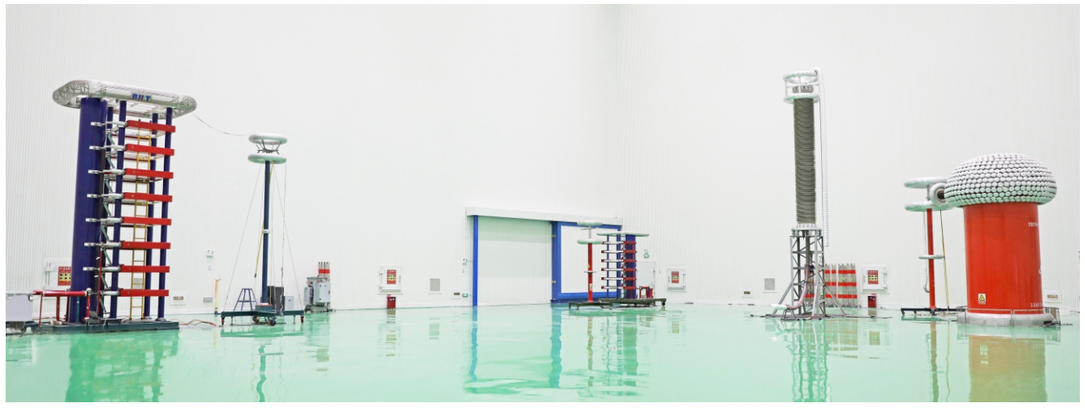
Materials Laboratory

Laboratory Accreditation Certificate

HIGH VOLTAGE LAB







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Test Parameters

Type Test Sequence of 550kV Cable Accessories

Test Item	Requirements	Outdoor Termination	GIS Termination	Straight Through Joint	Shield-break Joint
Partial discharge test at ambient temperature	No detectable discharge exceeding declared sensitivity from the test object at 435kV.	√	√	√	√
Heating cycle voltage test	The test assembly shall be carried out 20 times under power frequency voltage of 580kV.	√	√	√	√
Partial discharge at high temperature	No detectable discharge exceeding declared sensitivity from the test object at 435kV.	√	√	√	√
Partial discharge test at ambient temperature	No detectable discharge exceeding declared sensitivity from the test object at 435kV.	√	√	√	√
Switching impulse voltage test	No breakdown or flashover shall occur at 10 positive and 10 negative impulse of 1175kV.	√	√	√	√
Lightning impulse voltage test	No breakdown or flashover shall occur at 10 positive and 10 negative impulse of 1550kV.	√	√	√	√
Power frequency voltage test after lighting impulse voltage test	No breakdown or flashover shall occur at 580kV for 15min.	√	√	√	√
Radio influence voltage test	The radio influence voltage shall not exceed 500μV at 1MHz and 319kV.	√			
Power frequency voltage wet withstand test	No breakdown or flashover shall occur at 680 kV for 1min.	√			
Pressure leak test	(0.2±0.01) MPa for 1h, no leakage shall occur.	√	√		
DC voltage test	No breakdown shall occur when applied with DC voltage test.				√
Impulse voltage test	No breakdown shall occur when applied with impulse voltage test.				√

Type Test Sequence of 362kV Cable Accessories

Test Item	Requirements	Outdoor Termination	GIS Termination	Straight Through Joint	Shield-break Joint
Partial discharge test at ambient temperature	No detectable discharge exceeding declared sensitivity from the test object at 285kV.	√	√	√	√
Heating cycle voltage test	The test assembly shall be carried out 20 times under power frequency voltage of 380kV.	√	√	√	√
Partial discharge at high temperature	No detectable discharge exceeding declared sensitivity from the test object at 285kV.	√	√	√	√
Partial discharge test at ambient temperature	No detectable discharge exceeding declared sensitivity from the test object at 285kV.	√	√	√	√
Switching impulse voltage test	No breakdown or flashover shall occur at 10 positive and 10 negative impulse of 950kV.	√	√	√	√
Lightning impulse voltage test	No breakdown or flashover shall occur at 10 positive and 10 negative impulse of 1175kV.	√	√	√	√
Power frequency voltage test after lighting impulse voltage test	No breakdown or flashover shall occur at 380kV for 15min.	√	√	√	√
Radio influence voltage test	The radio influence voltage shall not exceed 500μV at 1MHz and 209kV.	√			
Power frequency voltage wet withstand test	No breakdown or flashover shall occur at 510 kV for 1min.	√			

Type Test Sequence of 362kV Cable Accessories

Test Item	Requirements	Outdoor Termination	GIS Termination	Straight Through Joint	Shield-break Joint
Pressure leak test	(0.2±0.01) MPa for 1h, no leakage shall occur.	√	√		
DC voltage test	No breakdown shall occur when applied with DC voltage test.				√
Impulse voltage test	No breakdown shall occur when applied with impulse voltage test.				√

Type Test Sequence of 252kV Cable Accessories

Test Item	Requirements	Outdoor Termination	GIS Termination	Straight Through Joint	Shield-break Joint
Partial discharge test at ambient temperature	No detectable discharge exceeding declared sensitivity from the test object at 190kV	√	√	√	√
Heating cycle voltage test	The test assembly shall be carried out 20 times under power frequency voltage of 254kV.	√	√	√	√
Partial discharge test at high temperature	No detectable discharge exceeding declared sensitivity from the test object at 190kV	√	√	√	√
Partial discharge test at ambient temperature	No detectable discharge exceeding declared sensitivity from the test object at 190kV	√	√	√	√
Lightning impulse voltage test	No breakdown or flashover shall occur at 10 positive and 10 negative impulse of 1050kV	√	√	√	√
Power frequency voltage test after lighting impulse voltage test	No breakdown or flashover shall occur at 254kV for 15min	√	√	√	√
DC voltage test	No breakdown shall occur when applied with DC voltage test.				√
Power frequency voltage wet withstand test	No breakdown or flashover shall occur at 460kV for 1min	√			
Impulse voltage test	No breakdown shall occur when applied with impulse voltage test.				√
Radio influence voltage test	Radio influence voltage shall not exceed 450μV at 1MHz and 140kV	√			
Pressure leak test	(0.2±0.01) MPa for 1h,no leakage shall occur	√	√		

Type Test Sequence of 145kV Cable Accessories

Test Item	Requirements	Outdoor Termination	GIS Termination	Straight Through Joint	Shield-break Joint
Partial discharge test at ambient temperature	No detectable discharge exceeding declared sensitivity from the test object at 114kV	√	√	√	√
Heating cycle voltage test	The test assembly shall be carried out 20 times under power frequency voltage of 152kV.	√	√	√	√
Partial discharge test at high temperature	No detectable discharge exceeding declared sensitivity from the test object at 114kV	√	√	√	√
Partial discharge test at ambient temperature	No detectable discharge exceeding declared sensitivity from the test object at 114kV	√	√	√	√
Lightning impulse voltage test	No breakdown or flashover shall occur at 10 positive and 10 negative impulse of 650kV	√	√	√	√
Power frequency voltage test after lighting impulse voltage test	No breakdown or flashover shall occur at 190kV for 15min	√	√	√	√

Test Parameters

Type Test Sequence of 145kV Cable Accessories

Test Item	Requirements	Outdoor Termination	GIS Termination	Straight Through Joint	Shield-break Joint
DC voltage test	No breakdown shall occur when applied with DC voltage test.				√
Impulse voltage test	No breakdown shall occur when applied with impulse voltage test.				√

Type Test Sequence of 126kV Cable Accessories

Test Item	Requirements	Outdoor Termination	GIS Termination	Straight Through Joint	Shield-break Joint
Partial discharge test at ambient temperature	No detectable discharge exceeding declared sensitivity from the test object at 96kV	√	√	√	√
Heating cycle voltage test	The test assembly shall be carried out 20 times under power frequency voltage of 128kV.	√	√	√	√
Partial discharge test at high temperature	No detectable discharge from the test object at 96kV	√	√	√	√
Partial discharge test at ambient temperature	No detectable discharge from the test object at 96kV	√	√	√	√
Lightning impulse voltage test	No breakdown or flashover shall occur at 10 positive and 10 negative impulse of 550kV	√	√	√	√
Power frequency voltage test after lighting impulse voltage test	No breakdown or flashover shall occur at 160kV for 15min	√	√	√	√
Power frequency voltage wet withstand test	No breakdown or flashover shall occur at 185 kV for 1min	√			
DC voltage test	No breakdown shall occur when applied with DC voltage test.				√
Impulse voltage test	No breakdown shall occur when applied with impulse voltage test.				√
Radio influence voltage test	Radio influence voltage shall not exceed 450μV at 1MHz and 81kV	√			
Pressure leak test	(0.2±0.01) MPa for 1h,no leakage shall occur	√	√		
Vacuum leak test	Vacuum leak test after the sample was installed, the sample at environment temperature vacuum to the residual pressure is 10 kPa and maintained for 1h.At the end of the test,the increased value of vacuum pressure shall not exceed 10 kPa.	√	√		
Voltage test of pedestal insulator	The insulator shall be subjected to DC voltage of 25kV for 1min and 10 positive and 10 negative impulse voltage of 37.5kV, no breakdown or flashover shall occur	√			

Type Test Sequence of 72.5kV Cable Accessories

Test Item	Requirements	Outdoor Termination	GIS Termination	Straight Through Joint	Shield-break Joint
Partial discharge test at ambient temperature	No detectable discharge exceeding declared sensitivity from the test object at 72kV	√	√	√	

Type Test Sequence of 72.5kV Cable Accessories

Test Item	Requirements	Outdoor Termination	GIS Termination	Straight Through Joint	Shield-break Joint
Heating cycle voltage test	The test assembly shall be carried out 20 times under power frequency voltage of 96kV.	√	√	√	√
Partial discharge test at high temperature	No detectable discharge exceeding declared sensitivity from the test object at 72kV	√	√	√	√
Partial discharge test at ambient temperature	No detectable discharge exceeding declared sensitivity from the test object at 72kV	√	√	√	√
Lightning impulse voltage test	No breakdown or flashover shall occur at 10 positive and 10 negative impulse of 450kV	√	√	√	√
Power frequency voltage test after lighting impulse voltage test	No breakdown or flashover shall occur at 120kV for 15min	√	√	√	√
Power frequency voltage wet withstand test	No breakdown or flashover shall occur at 140kV for 1min	√			
DC voltage test	No breakdown shall occur when applied with DC voltage test.				√
Impulse voltage test	No breakdown shall occur when applied with impulse voltage test.				√
Radio influence voltage test	Radio influence voltage shall not exceed 450μV at 1MHz and 61kV	√			
Pressure leak test	(0.2±0.01) MPa for 1h,no leakage shall occur	√	√		
Vacuum leak test	Vacuum leak test after the sample was installed, the sample at environment temperature vacuum to the residual pressure is 10 kPa and maintained for 1h. At the end of the test, the increased value of vacuum pressure shall not exceed 10 kPa.	√	√		
Voltage test of pedestal insulator	The insulator shallbe subjected to DC voltage of 25kV for 1min and 10positive and 10 negative impulse voltage of 37.5kV, no breakdown or flashover shall occur	√			

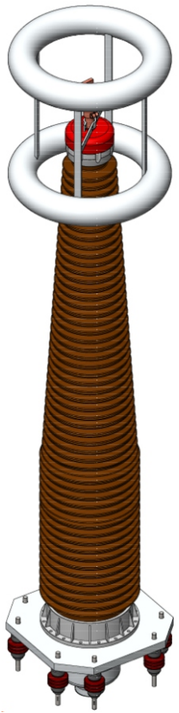
Technical Parameter

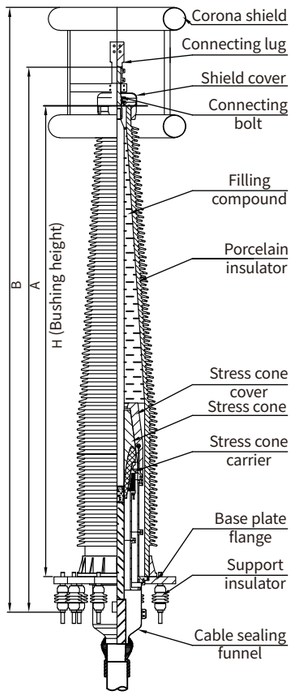
Item	550kV	362kV	252kV	145kV	126kV	72.5kV
U_0(kV)	290kV	190kV	127kV	76kV	64kV	36*kV
Rated voltage (U)	500kV	330~345kV	220~230kV	132~138kV	110~115kV	60~69kV
Max.system voltage(Um)	550kV	362kV	245 (252) kV	145kV	123 (126) kV	72.5kV
Leakage distance(mm)	⩾17600	⩾11584	⩾8064	⩾4500	⩾4032	⩾2320
Leakage ratio(mm/kV)	⩾32	⩾32	⩾32	⩾32	⩾32	⩾32

Remark:Considering the local voltage variance, above voltage rating table is for reference only, please feel free to contact our technical people for other voltage conformance unspecified above.

*:With the local voltage variance, the cable accessories of 36kV(U_0)specified above is applied and tested at the local voltage rating of 48kV.

362kV-550kV Outdoor Porcelain Termination





Type/Applications:

WYJZWY4: Meet with requirements of pollution class IV
Max. system voltage: 362kV, applicable to 800 ~2500mm^2
Max. system voltage: 550kV, applicable to 800 ~2500mm^2

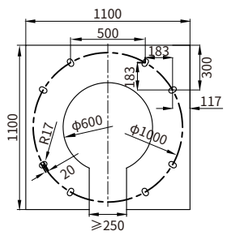
Features:

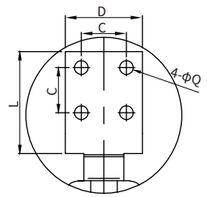
1. Stress cone is injection-molded by excellent EPDM rubber. Secured by the spring cone carrier, our stress cone is designed with a stress cone cover so as to be isolated from insulated agent (avoiding poor contact between stress cone and cable outer semi-conductive layer or elastic relaxation due to stress cone ageing) ensures excellent electrical property.
2. Multi-layer sealing construction avoids water or oil leakage during operation and prolongs service life of termination.
3. Rain sheds of various sizes on terminations well prevent pollution flashover.
4. Porcelain insulator, made of high strength inorganic material, demonstrates good performance in weather resistance, anti-tracking nature, arc-erosion resistance as well as hydrophobicity.
5. Type tested according to IEC 62067, GB/T 22078.

Cable Lug Palm Specification of Composite Termination

Voltage rating	Cable nominal cross-section	Lug hole distance C(mm)	Connecting hole of lug Q(mm)	Palm width of cable lug D(mm)	Palm length of cable lug L (mm)
362kV	800mm^2	45	14	80	113
	1000-1600 mm^2	50	17	100	133
	2000-2500 mm^2	50	18	125	162.5
550kV	800 mm^2	45	14	80	113
	1000-1600 mm^2	50	17	100	133
	2000-2500 mm^2	50	18	125	162.5

Base Plate Mounting Dimension





Outline Dimension

Max. system voltage	H(mm)	A(mm)	B(mm)
362 kV	4100±10	4715±20	5116±50
550 kV	5400±10	6045±20	6416±50

Notice When Ordering:

1. Cable configuration and the cross-sectional area of earth wire shall be submitted when ordering.
2. Feel free to contact our sales manager before ordering if you have any special requirements.

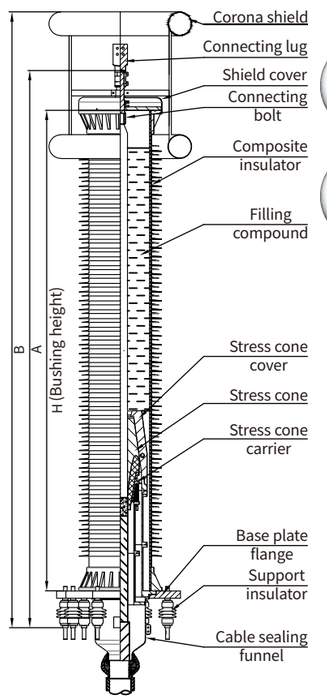
362kV-550kV Outdoor Composite Termination

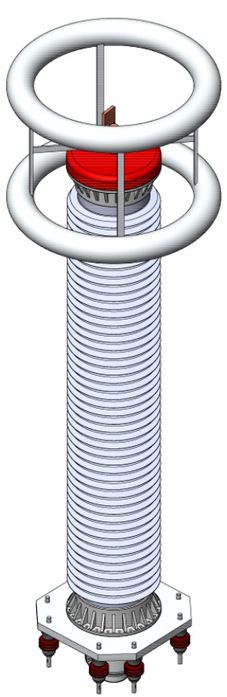
Type/Applications:

WYJZWFY4: Meet with requirements of pollution class IV
Max. system voltage: 362kV, applicable to 800 ~2500mm^2
Max. system voltage: 550kV, applicable to 800 ~2500mm^2

Features:

1. Stress cone is injection-molded by excellent EPDM rubber. Secured by the spring cone carrier, our stress cone is designed with a stress cone cover so as to be isolated from insulated agent (avoiding poor contact between stress cone and cable outer semi-conductive layer or elastic relaxation due to stress cone ageing) ensures excellent electrical property.
2. Multi-layer sealing construction avoids water or oil leakage during operation and prolongs service life of termination.
3. Rain sheds of various sizes on terminations well prevent pollution flashover.
4. Outer insulation made of silicone rubber, outstanding in properties of anti-pollution flashover, anti-UV, anti-aging and anti-explosion while it weighs only 1/2 of porcelain termination at equivalent voltage level provides a more convenient installation.
5. Type tested according to IEC 62067, GB/T 22078.

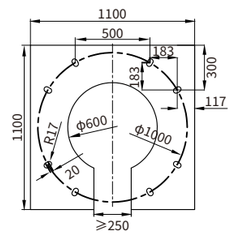


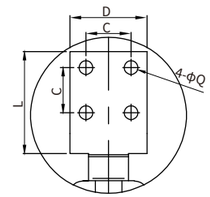


Cable Lug Palm Specification of Composite Termination

Voltage Rating	Cable nominal cross-section	Lug hole distance C(mm)	Connecting hole of lug Q(mm)	Palm width of cable lug D(mm)	Palm length of cable lug L (mm)
362kV	800mm^2	45	14	80	113
	1000-1600 mm^2	50	17	100	133
	2000-2500 mm^2	50	18	125	162.5
550kV	800 mm^2	45	14	80	113
	1000-1600 mm^2	50	17	100	133
	2000-2500 mm^2	50	18	125	162.5

Base Plate Mounting Dimension





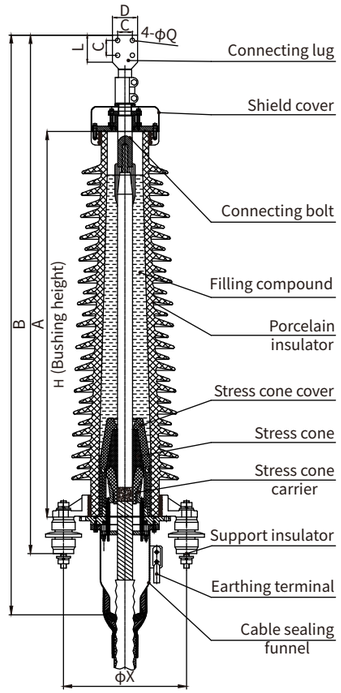
Outline Dimension

Max. system voltage	H(mm)	A(mm)	B(mm)
362 kV	4038±10	4583±20	4944±50
550 kV	5380±10	5295±20	6286±50

Notice When Ordering:

1. Cable configuration and the cross-sectional area of earth wire shall be submitted when ordering.
2. Feel free to contact our sales manager before ordering if you have any special requirements.

72.5kV-252kV Outdoor Porcelain Termination



Type/Applications:

Oil-filled type: WYJZWY4: Meet with requirements of pollution class IV
Max.system voltage: 72.5kV, applicable to 150 ~1600mm^2
Max.system voltage: 126kV, applicable to 240 ~1600mm^2
Max.system voltage: 145kV, applicable to 240 ~1600mm^2
Max.system voltage: 252kV, applicable to 400 ~2500mm^2

Features:

1. Stress cone is injection-molded by excellent EPDM rubber. Secured by the spring cone carrier, our stress cone is designed with a stress cone cover so as to be isolated from insulated agent (avoiding poor contact between stress cone and cable outer semi-conductive layer or elastic relaxation due to stress cone ageing) ensures excellent electrical property.
2. Multi-layer sealing construction avoids water or oil leakage during operation and prolongs service life of termination.
3. Rain sheds of various sizes on terminations well prevent pollution flashover.
4. Porcelain insulator, made of high strength inorganic material, demonstrates good performance in weather resistance, anti-tracking, arc-erosion resistance as well as hydrophobicity.
5.Type tested according to IEC 60840, GB/T11017, IEC 62067, GB/T18890.

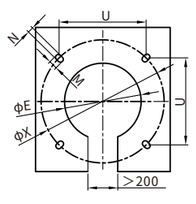
Cable Lug Palm Specification of Porcelain Termination

Max. system voltage	Cable Nominal Cross-section	Lug hole distance C(mm)	Connecting hole of lug Q(mm)	Palm width of cable lug D(mm)	Palm length of cable lug L(mm)
72.5kV	150mm^2-400mm^2	35	14	63	80
	500mm^2-800mm^2	45	14	80	100
	1000mm^2-1600mm^2	50	17	100	110
126-145kV	240mm^2-400mm^2	35	14	63	80
	500mm^2-800mm^2	45	14	80	100
	1000mm^2-1600mm^2	50	17	100	110
252 kV	400mm^2-800mm^2	45	14	80	100
	1000mm^2-1600mm^2	50	17	100	110
	2000mm^2-2500mm^2	50	18	125	140

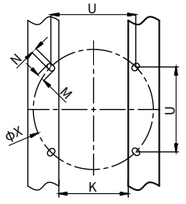
Base Plate Mounting Dimension

Max. system voltage	N(mm)	M(mm)	E(mm)	K(mm)	U(mm)	X(mm)
72.5kV-145kV	21	30	280	270	318	450
252 kV	32	40	540	450	566	800

Base Plate Mounting Dimension



Flat Plate



Steel Channel

Outline Dimension

Max. system voltage	H(mm)	A(mm)	B(mm)
72.5 kV	1050	1550	1770
126 kV	1410	1910	2130
145 kV	1570	2070	2290
252 kV	2700	3395	3598

Notice When Ordering:

1.Cable configuration and the cross-sectional area of earth wire shall be submitted when ordering.
2.Feel free to contact our sales manager before ordering if you have any special requirements.
3. Silicone rubber products are available upon request.

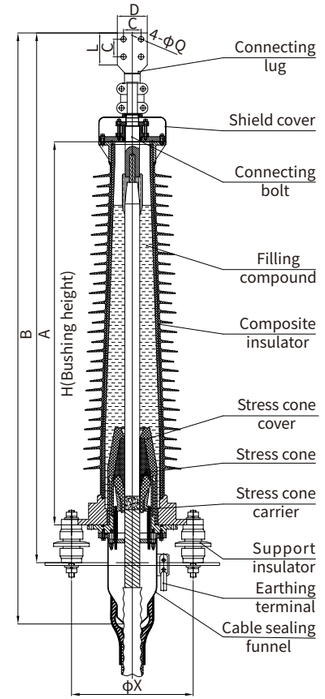
72.5kV-252kV Outdoor Composite Termination

Type/Applications:

Oil-filled type: WYJZWFY4:Meet with requirements of pollution class IV
Max.system voltage: 72.5kV, applicable to 150 ~1600mm^2
Max.system voltage: 126kV, applicable to 240 ~1600mm^2
Max.system voltage: 145kV, applicable to 240 ~1600mm^2
Max.system voltage: 252kV, applicable to 400 ~2500mm^2

Features:

1. Stress cone is injection-molded by excellent EPDM rubber. Secured by the spring cone carrier, our stress cone is designed with a stress cone cover so as to be isolated from insulated agent (avoiding poor contact between stress cone and cable outer semi-conductive layer or elastic relaxation due to stress cone ageing) ensures excellent electrical property.
2. Multi-layer sealing construction avoids water or oil leakage during operation and prolongs service life of termination.
3. Rain sheds of various sizes on terminations well prevent pollution flashover.
4. Outer insulation made of silicone rubber, outstanding in properties of anti-pollution flashover, anti-UV, anti-aging and anti-explosion while it weighs only 1/2 of porcelain termination at equivalent voltage level provides a more convenient installation.
5. Type tested according to IEC 60840, GB/T11017, IEC 62067, GB/T18890.



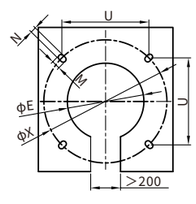
Cable Lug Palm Specification of Composite Termination

Max.system Voltage	Cable nominal cross-section	Lug hole distance C (mm)	Connecting hole of lug Q (mm)	Palm width of cable lug D (mm)	Palm length of cable lug L (mm)
72.5 kV	150mm^2-400mm^2	35	14	63	80
	500mm^2-800mm^2	45	14	80	100
	1000mm^2-1600mm^2	50	17	100	110
126 kV-145kV	240mm^2-400mm^2	35	14	63	80
	500mm^2-800mm^2	45	14	80	100
	1000mm^2-1600mm^2	50	17	100	110
252 kV	400mm^2-800mm^2	45	14	80	100
	1000mm^2-1600mm^2	50	17	100	110
	2000mm^2-2500mm^2	50	18	125	140

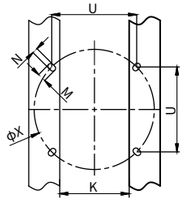
Base Plate Mounting Dimension

Max.system Voltage	N(mm)	M(mm)	E(mm)	K(mm)	U(mm)	X(mm)
72.5 kV-145 kV	21	30	280	270	318	450
252 kV	32	40	540	450	566	800

Base Plate Mounting Dimension



Flat Plate



Steel Channel

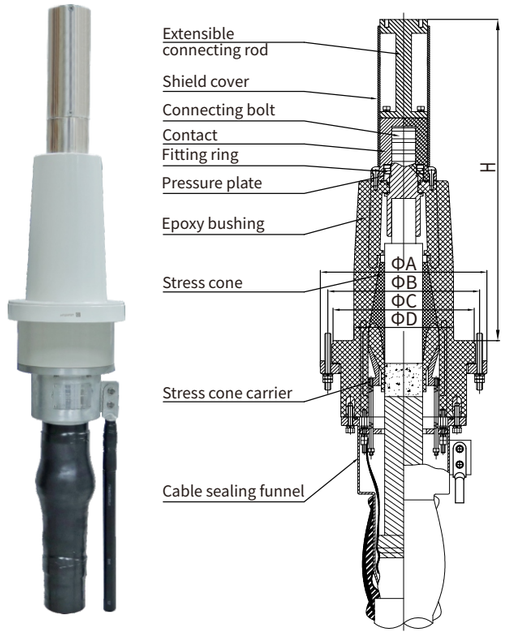
Outline Dimension

Max.system Voltage	H(mm)	A(mm)	B(mm)
72.5 kV	1100	1600	1820
126 kV	1400	1900	2120
145 kV	1580	2080	2300
252 kV	2700	3395	3598

Notice When Ordering:

1.Cable configuration and the cross-sectional area of earth wire shall be submitted when ordering.
2.Feel free to contact our sales manager before ordering if you have any special requirements.
3. Silicone rubber products are available upon request.

72.5kV-550kV Assembled Dry GIS Termination



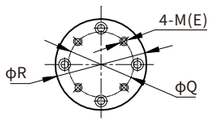
Type/Applications:

WYJZGG: Indoor only
Max.system voltage：72.5kV，applicable to 120 ~1600mm²
Max.system voltage：126kV，applicable to 240 ~1600mm²
Max.system voltage：145kV，applicable to 240 ~1600mm²
Max.system voltage：252kV，applicable to 400 ~2500mm²
Max.system voltage：362kV， applicable to 800~2500mm²
Max.system voltage：550kV， applicable to 800~2500mm²

Features：

1. Stress cone is injection-molded by excellent EPDM rubber. Secured by the spring cone carrier, our stress cone is designed with a stress cone cover so as to be isolated from insulated agent (avoiding poor contact between stress cone and cable outer semi-conductive layer or elastic relaxation due to stress cone ageing) ensures excellent electrical property.
2. Dry design eliminates risks of oil or gas leakage
3. Compact design with lightweight and small volume significantly saves mounting space.
4. Type tested according to IEC 60840, GB/T11017, IEC 62067, GB/T18890 GB/T 22078.

Top Mounting Dimension



Outline Dimension

Max.system Voltage	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	H (mm)	Q (mm)	R (mm)
72.5kV	300	270	245	185	10	310/583	80	110
126kV	350	320	298	210	10	470/757	80	110
145kV	350	320	298	210	10	470/757	80	110
252kV	500	475	454	340	12	620/960	110	150
252kV	620	582	559	340	12	960	110	200
362kV	690	640	618	570	12	960/1400	110	236
550kV	690	640	618	570	12	960/1400	110	236

Notice When Ordering:

1.Cable configuration and the cross-sectional area of earth wire shall be informed when ordering.
2.All GIS termination and GIS composite apparatus produced in our company are strictly in accordance with IEC 62271-209 and GB/T 22381.When ordering, please submit relevant information including executive standards and interface height or assembly drawing of GIS composite apparatus to ensure correspondent dimension matches up.
3. Silicone rubber products are available upon request.

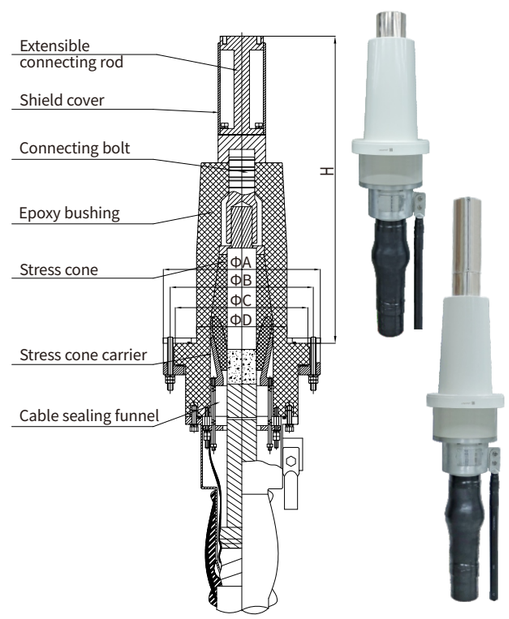
72.5kV-252kV Dry Plug-in GIS Termination

Type/Applications:

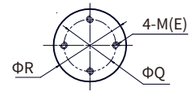
WYJZGGC: Indoor only
Max.system voltage：72.5kV，applicable to 150 ~1600mm²
Max.system voltage：126kV，applicable to 240 ~1600mm²
Max.system voltage：145kV，applicable to 240 ~1600mm²
WYJZGGD: Indoor only
Max.system voltage：252kV，applicable to 400 ~2500mm²

Features：

1. Stress cone is injection-molded by excellent EPDM rubber. Secured by the spring cone carrier, our stress cone is designed with a stress cone cover so as to be isolated from insulated agent (avoiding poor contact between stress cone and cable outer semi-conductive layer or elastic relaxation due to stress cone ageing) ensures excellent electrical property.
2. Dry design eliminates risks of oil or gas leakage
3. Compact design with lightweight and small volume significantly saves mounting space.
4. Plug-in connection between termination and cables provides more convenient installation and maintenance.
5. Plug-in GIS termination is suitable for connection between power cable and transformer.
6. Short plug-in GIS termination can be refitted to equipments applicable to a long type GIS termination kit after assembled with an extending rod.
7. Type tested according to IEC60840, GB/T11017, IEC 62067, GB/T18890.



Top Mounting Dimension



Outline Dimension

Max.system Voltage	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	H (mm)	Q (mm)	R (mm)
72.5 kV	300	270	245	185	10	310/583	80	110
126 kV	350	320	298	210	10	470/757	80	110
145kV	350	320	298	210	10	470/757	80	110
252 kV	500	475	454	340	12	620/960	110	160
252 kV	620	582	559	340	12	620/960	110	200

Notice When Ordering:

1.Cable configuration and the cross-sectional area of earth wire shall be informed when ordering.
2.All GIS termination and GIS composite apparatus produced in our company are strictly in accordance with IEC 62271-209 and GB/T 22381.When ordering, please submit relevant information including executive standards and interface height or assembly drawing of GIS composite apparatus to ensure correspondent dimension matches up.
3. Silicone rubber products are available upon request.

72.5kV-550kV Straight through Joint/Shield-break Joint

Type/Applications:

Straight through joint: WYJJTI
Shield-break joint: WYJJJI
Max. system voltage: 72.5kV, applicable to 120 ~1600mm^2
Max. system voltage: 126kV, applicable to 240 ~1600mm^2
Max. system voltage: 145kV, applicable to 240 ~1600mm^2
Max. system voltage: 252kV, applicable to 400 ~2500mm^2
Max. system voltage: 362kV, applicable to 800~2500mm^2
Max. system voltage: 550kV, applicable to 800~2500mm^2

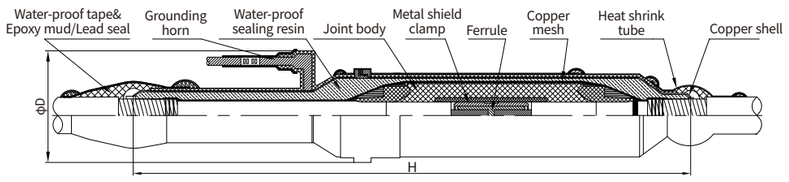
Outline Dimension

Max.system Voltage	H (mm)	D (mm)
72.5-145 kV	1600	270
252kV	2100	370
362kV	2020	500
550kV	2020	500

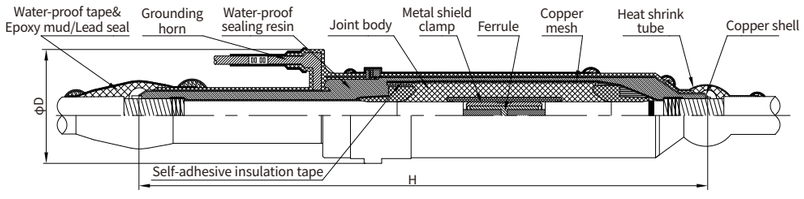
Features:

1. Compact joint construction and easy installation. Long creepage distance inside rubber insulated components and large design allowance. Long term and stable operation in highly humid regions.
2. High strength protective shelter and waterproof sealing construction enable better mechanical , sealing and anti-corrosion performance, ensuring safe operation in long term under severe condition.
3. Good anti-explosion property prevents casualty resulted from explosion.
4. Optional outer fiberglass reinforced enclosure and inner HV cable sealing resin reinforce the water-proof property.
5. Type tested according to IEC 60840, GB/T11017, IEC 62067, GB/T18890, GB/T 22078.

Structure Diagram



Straight through Joint



Shield-break Joint

Notice When Ordering:

1.Cable configuration and the cross-sectional area of earth wire shall be submitted when ordering.
2.Feel free to contact our sales manager before ordering if you have any special requirements.
3. Silicone rubber products are available upon request.

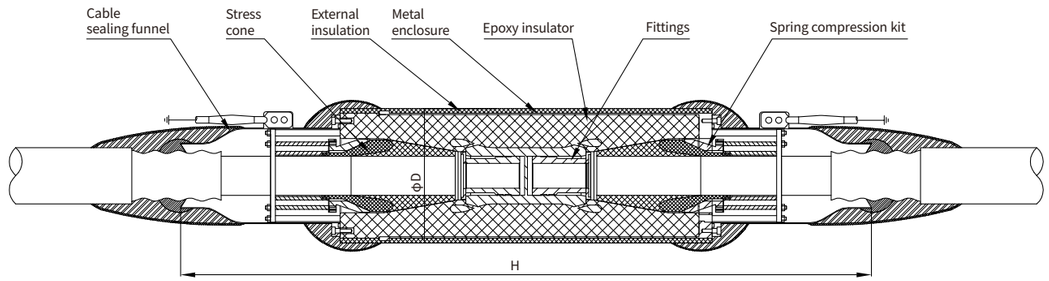
72.5kV-252kV Composite type cable joint

Type/Applications:

Type/Applications: WYJJJ(T)Z
Max.system voltage：72.5kV，applicable to 120 ~1600mm^2
Max.system voltage：126kV，applicable to 240 ~1600mm^2
Max.system voltage：145kV，applicable to 240 ~1600mm^2
Max.system voltage：252kV，applicable to 400 ~2500mm^2

Features：

1. Composite type cable joint body is vacuum injection molded by thermosetting resin or insulated rubber, of which wholly dry construction prevents potential oil-leakage.
2. One-piece design and outer metal enclosure provides such properties as water-proofing, damp resistance and mechanical stress resistance to maintain operation under various conditions.
3. Compact structure and small volume save its installation space. Installation available in cable well, cable duct or direct bury.
4. Wholly prefabricated in factory. No filler and insulated gas is required. Simply insert two prepared cables of any cross-sections into the joint body.
5. Type tested according to IEC 60840, GB/T11017，IEC 62067,GB/T 18890.



Max. system voltage	H（mm）	D（mm）
72.5kV	1600	280
126kV	1600	280
145kV	1600	280
252kV	1890	370

72.5kV-145kV Y-type Branch Joint

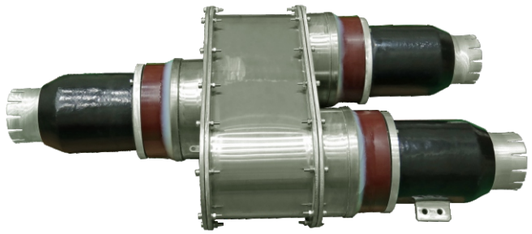
Type/Applications:

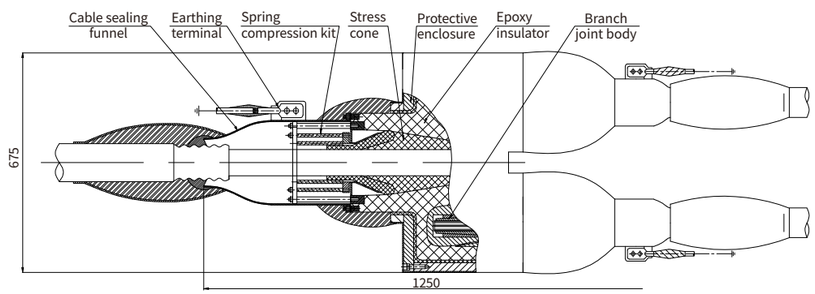
Branch joint：WYJJFG
Max.system voltage：72.5kV, applicable to 150~1600mm²
Max.system voltage：126kV, applicable to 240 ~1600mm²
Max.system voltage：145kV，applicable to 240 ~1600mm²

Features：

1. Branch joint body is vacuum injection molded by thermosetting resin or insulated rubber, of which wholly dry construction prevents potential oil-leakage.
2. One-piece design and outer metal enclosure provides such properties as water-proofing, damp resistance and mechanical stress resistance to maintain branch joints' operation under various conditions.
3. Compact structure and small volume save its installation space. Installation available in cable well, cable duct or direct bury.
4. Wholly prefabricated in factory. No filler and insulated gas is required. Simply insert the prepared cable into the joint body while no maintenance is required during operation.
5. Type tested according to IEC 60840, GB/T11017.

Structure Diagram





Notice When Ordering:

1.Cable configuration and the cross-sectional area of earth wire shall be submitted when ordering.
2.Feel free to contact our sales manager before ordering if you have any special requirements.

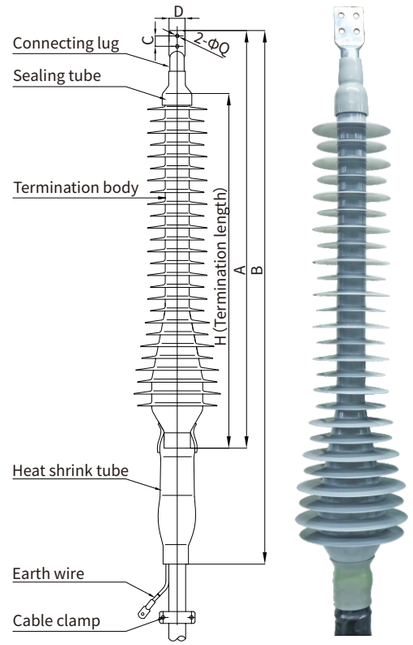
72.5kV-145kV One-piece Outdoor Termination

Type/Applications：

WYJZWG4: Meet with requirements of pollution class IV
Max. system voltage: 72.5kV, applicable to 120 ~ 1600mm²
Max. system voltage: 126kV, applicable to 240 ~ 1600mm²
Max. system voltage: 145kV, applicable to 240 ~ 1600mm²

Features：

1. Seamless manufacturing process greatly improves mechanical and electrical properties of termination surface.
2. Good weather resistant, anti-tracking, arc-erosion resistant, hydrophobic and pollution flashover prevention properties, which ensures safe and long-term operation even under severe and highly polluted environments.
3. One-piece outdoor termination, only 1/8~1/10 of the weight of porcelain type termination at equivalent voltage level, catering for more convenient installation.
4. Good anti-explosion property prevents casualty resulted from explosion.
5. Dry design, free of oil or gas leakage.
6. Flexible installation renders either inclined or inverted mounting.
7. Type tested according to IEC 60840, GB/T11017.



Cable Lug Palm Specification of One-piece Outdoor Termination

Cable nominal cross-section	D(mm)	C(mm)	ΦQ(mm)	Hole Nos.
120 mm²	50	35	13	2
150 mm²	50	35	13	2
185 mm²	50	35	13	2
240 mm²	50	35	13	2
300 mm²	60	35	13	2
400 mm²	60	35	13	2
500 mm²	80	45	13	4
630 mm²	80	45	13	4
800 mm²	90	45	17	4
1000 mm²	100	50	17	4
1200 mm²	100	50	17	4
1400 mm²	100	50	17	4
1600 mm²	100	50	17	4

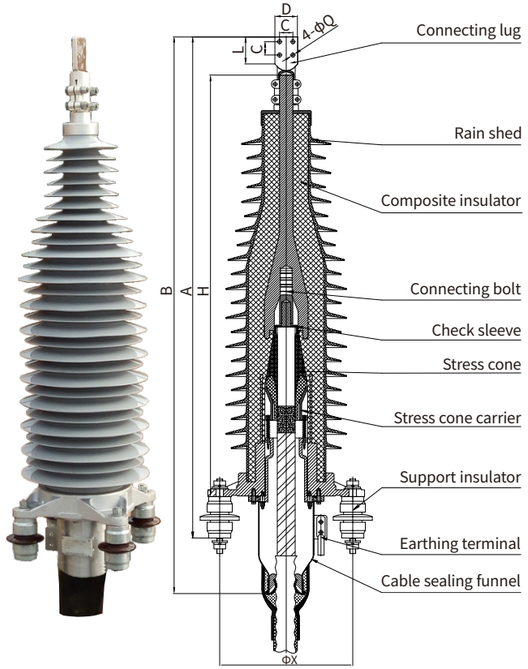
Termination Outline Dimension

Max.system Voltage	Type	H(mm)	A(mm)	B(mm)	Creepage distance (mm)
72.5 kV	WYJZWG4	1050	1400	1800~2100	⩾3000
126 kV	WYJZWG4	1510	1800	2200~2500	⩾4500
145 kV	WYJZWG4	1510	1800	2200~2500	⩾4500

Notice When Ordering:

1.Cable configuration and the cross-sectional area of earth wire shall be submitted when ordering.
2.Feel free to contact our sales manager before ordering if you have any special requirements.

72.5kV-126kV Dry Plug-in Composite Termination



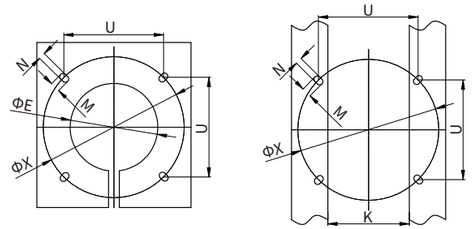
Type/Applications:

WYJZWFGC4:
In accordance with outdoor pollution class IV requirements
Max.system voltage：72.5kV，applicable to 150 ~1200mm^2
Max.system voltage：126kV，applicable to 240 ~1200mm^2

Features：

1. Rain sheds made of silicone rubber, outstanding in properties of anti-pollution flashover, anti-UV, anti-ageing and anti-explosion;
2. 1/3 of cable connecting length compared with that of regular outdoor termination, significantly saving installation time.
3. Plug-in connection between termination and cables provides more convenient installation and maintenance.
4. Dry design eliminates risks of oil or gas leakage
5. Type tested according to IEC 60840, GB/T11017.

Base Plate Mounting Dimension



Flat Plate

Steel Channel

Cable Lug Palm Specification of Dry Plug-in Termination

Max.system Voltage	Cable nominal cross-section	Lug hole distance C (mm)	Connecting hole of lug Q (mm)	Palm width of cable lug D (mm)	Palm length of cable lug L (mm)
72.5kV	150 mm^2-400mm^2	35	14	63	80
	500 mm^2-800mm^2	45	14	80	100
	1000mm^2-1600mm^2	50	17	100	110
126kV	240mm^2-400mm^2	35	14	63	80
	500mm^2-800mm^2	45	14	80	100
	1000mm^2-1600mm^2	50	17	100	110

Base Plate Mounting Dimension

Max.system Voltage	N(mm)	M(mm)	E(mm)	K(mm)	U(mm)	X(mm)
72.5 kV-126 kV	21	30	280	270	318	450

Outline Dimension

Max.system Voltage	H(mm)	A(mm)	B(mm)
72.5 kV	1420	1715	1930
126 kV	1420	1715	1930

Notice When Ordering:

1.Cable configuration and the cross-sectional area of earth wire shall be submitted when ordering.
2.Feel free to contact our sales manager before ordering if you have any special requirements.

Cross Bonding Link Box

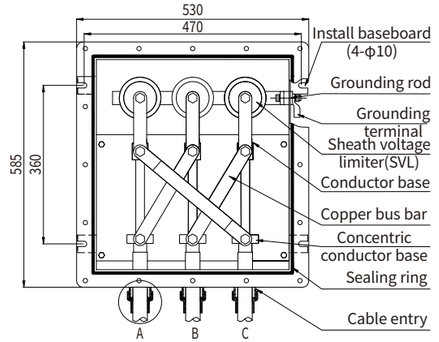
Product Introduction

Cross bonding link box is used for cross interconnection of high-voltage single-core cable metal sheath, limiting over voltage applied to cable sheath and both insulated part ends of shield-break joint, controlling induced voltage on metal sheath, reducing or eliminating ring current on cable sheath, increasing transmission capacity of power cable, avoiding oversheath breakdown, to ensure a safe operating for per cable. With stainless steel enclosure, link box could be filled by resin inside, at the mean time, link box is volume-small, weight-light, installation-easy and SVL removable.

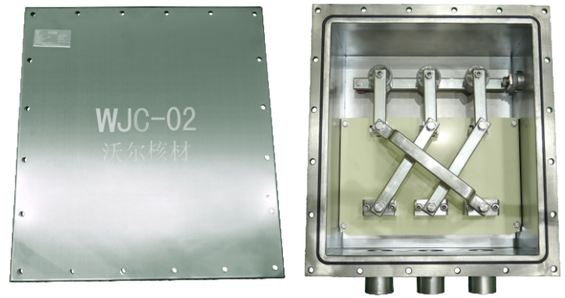
Type/Applications:

Cross Bonding Link Box: WJC

Structure Diagram



Box height:230mm



Cross Bonding Link Box

Main Electrical Properties of Link Boxes

Test Item	Technical Requirements
DC voltage withstand test	Neither breakdown nor flashover shall occur at 20kV for 1 min
Impulse voltage test	Neither breakdown nor flashover shall occur at 10 positive and 10 negative impulse of 40kV (peak value)
Insulation resistance test between copper bar and housing	Not less than 20MΩ
Contact resistance test of copper bar	No more than 20μΩ

Main Electrical Properties of SVL

Test Item	BHQ-7/600	BHQ-10/600
DC 1mA reference voltage	4kV	5.8kV
Rectangular wave capacity	600A	600A
Residual voltage ratio	K≤2	K≤2
Current capacity	100kA	100kA
Rated voltage	2.8kV	4kV
Residual voltage of nominal discharge	≤7kV	≤10kV

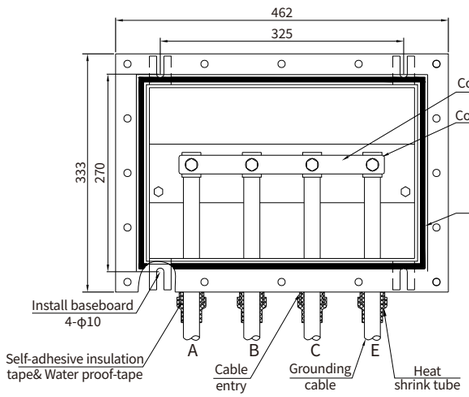
Link Box/Link Box with SVL

Type/Applications:

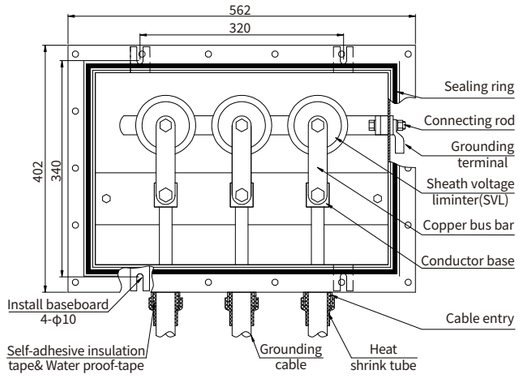
Type/Applications:
Link Box: WJD
Link Box with SVL: WHJD

Link Box/Link Box with SVL is used for directly grounding or grounding protecting of high-voltage cable metal sheath. With stainless steel enclosure. Link Box/Link Box with SVL could be filled by resin inside, making it non-removable, fully sealed and theft-proof. At the mean time, Link Box/Link Box with SVL is volume-small, weight-light, installation-easy.

Structure Diagram

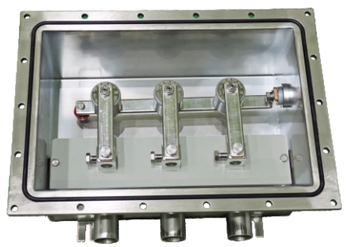


Box height: 130mm



Box height: 200mm

Link Box



Link Box with SVL

Projects Overseas