

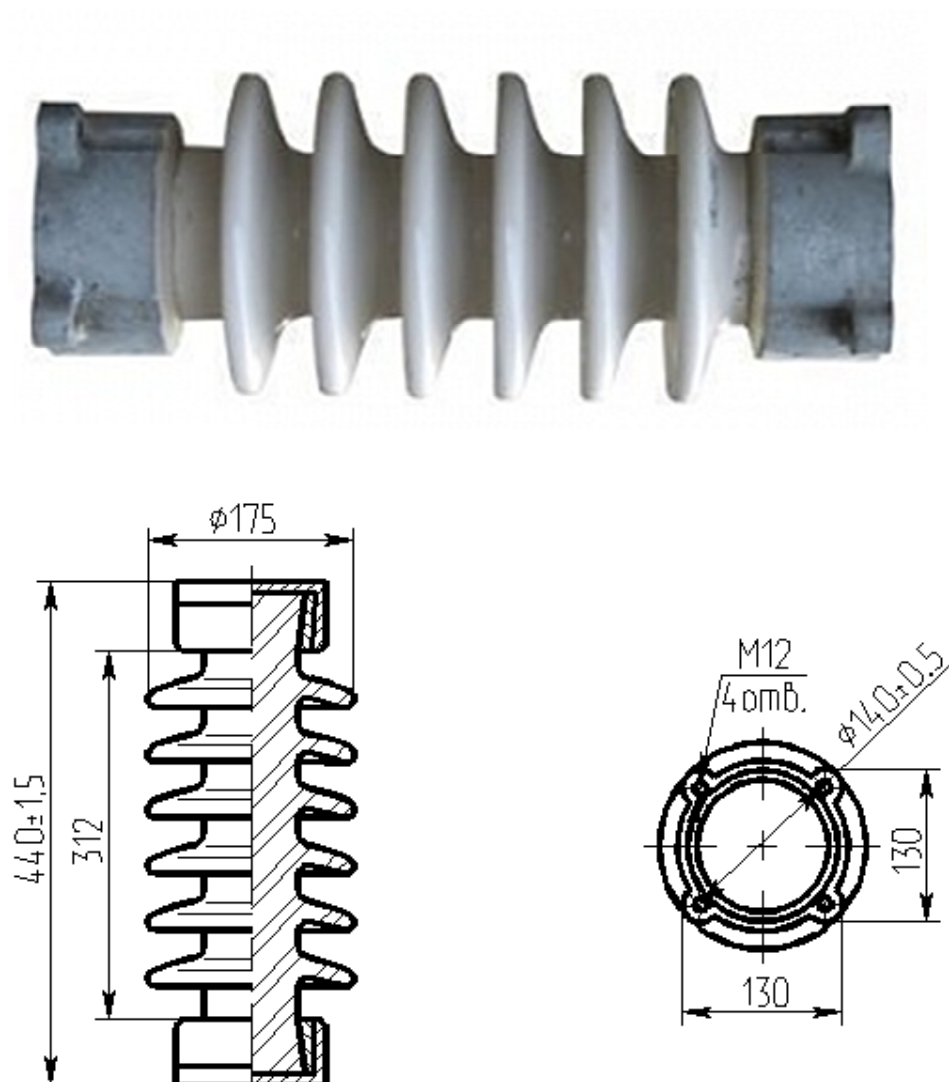
FIȘA TEHNICĂ IZOLATOR DE SUPORT 35 kV TIP 1 (pentru înlocuirea izolatoarelor de tip HOC-35-500-01 Y1)				
Nr crt.	Caracteristica	U.M	Date tehnice solicitate	Date tehnice garantate (oferta furnizor)
PRODUCĂTOR Dalian Hivolt Power System Co.,Ltd				
TIP Porcelain post insulator IOS-35-500-01				
ȚARA DE ORIGINE China				
1	CONDIȚII IMPUSE DE SISTEMUL ENERGETIC			
1.1	Tensiunea nominală a sistemului	kV	35	35
1.2	Tensiunea cea mai ridicată a rețelei	kV	40.5 (52)	40.5 (52)
1.3	Frecvența nominală	Hz	50	50
1.4	Modul de conectare a neutrului rețelei		izolat	izolat
1.5	Durata defectelor cu pământul	ore	minimum 2	minimum 2
1.6	Curentul de scurtcircuit a rețelei la locul de montaj	kA	20	20
2	CONDIȚII CLIMATERICE ȘI DE MEDIU			
2.1	Temperatura mediului ambiant	°C	-40 / +40	-40 / +40
2.2	Radiația solară maximă	kW/m²	1,1	1,1
2.3	Locul de montaj		exterior	exterior
2.4	Altitudine	m	≤1000	≤1000
2.5	Umiditatea relativă a aerului	%	100	100
2.6	Grosimea stratului de gheață	mm	20	20
2.7	Clasa seismică conform MSK 64		8	8
3	CARACTERISTICI ELECTRICE			
3.1	Tensiunea nominală	kV	35	35
3.2	Nivelul de izolație			
3.2.1	la impuls de trăsnet (1,2/50)	kVmax	190	170 <i>izolator din portelan IOS 35-500, conform standardului IEC 60273, 170kV fulgerul corespunde înălțimii de 445 mm, iar fulgerul de 195 kV poate fi atins doar cu 475 mm.</i> Vedeti: <u>Clarification letter HOC</u>
3.2.2	la frecvența industrială (50Hz 1min)	kVef	95	70 Vedeti: <u>Clarification letter HOC</u>
4	CARACTERISTICI CONSTRUCTIVE			
4.1	Tipul constructiv		de suport	de suport
4.2	Protecția anticorozivă părților metalice		Da	Da
4.3	Materialul izolatorului		Porțelan electrotehnic	Porțelan electrotehnic
4.4	Linia de fugă specifică	cm/kV	≥2,25	2,25
4.5	Rezistența mecanică la încovoiere	kN	≥5	5
4.6	Dimensiunile (conform desenului nr. 3)			
4.6.1	Flanșa de fixare		Rotundă	Rotundă
4.6.2	Dimensiunile flanșei	mm	170	170
4.6.3	Numărul găurilor în flanșa de fixare	buc	4	4
4.6.4	Diametrul găurii în flanșa de fixare	mm	M12	M12
4.6.5	Distanța între centrele găurilor în flanșa de fixare	mm	140±0,5	140±0,5
4.6.6	Înălțimea izolator	mm	440±1,5	440±1,5

Data: 19 august 2025

SRL „ELECTROCON”
Director General
Nguyen Huu Thuy



**Desenul nr. 3 Caracteristici constructive a izolatorului de suport 35 kV tip 1
(pentru înlocuirea izolatoarelor de tip HOC-35-500-01 Y1) flanșa rotundă**



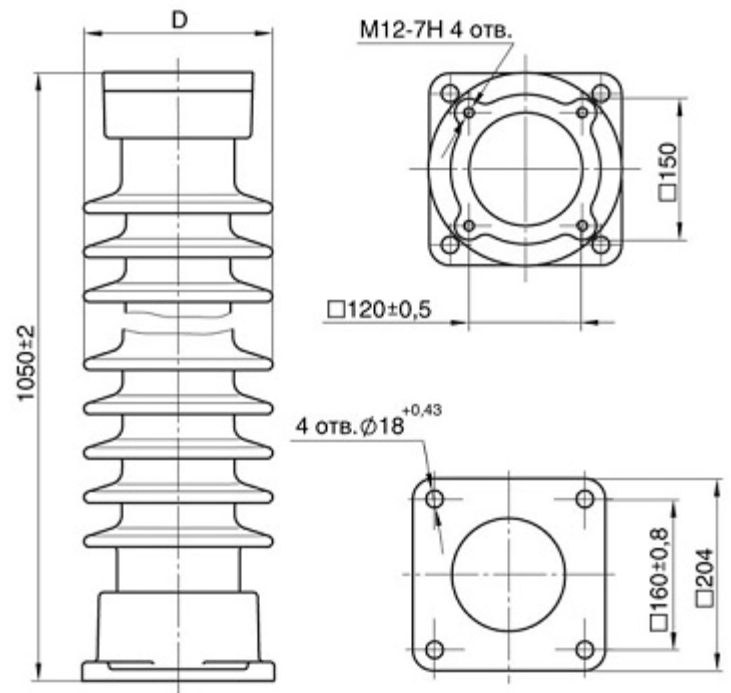
FIȘA TEHNICĂ IZOLATOR DE SUPORT 110 kV TIP 1 (pentru înlocuirea izolatoarelor de tip IOC-110-400 YXJ1)				
Nr crt.	Caracteristica	U.M	Date tehnice solicitate	Date tehnice garantate (oferta furnizor)
PRODUCĂTOR Dalian Hivolt Power System Co.,Ltd				
TIP Porcelain post insulator IOS-110-400				
ȚARA DE ORIGINE China				
1	CONDIȚII IMPUSE DE SISTEMUL ENERGETIC			
1.1	Tensiunea nominală a sistemului	kV	110	110
1.2	Tensiunea cea mai ridicată a rețelei	kV	123	123
1.3	Frecvența nominală	Hz	50	50
1.4	Modul de conectare a neutrlui rețelei		izolat	izolat
1.5	Durata defectelor	s	3	3
1.6	Curentul de scurtcircuit a rețelei la locul de montaj	kA	63	63
2	CONDIȚII CLIMATERICE ȘI DE MEDIU			
2.1	Temperatura mediului ambiant	°C	-40 / +40	-40 / +40
2.2	Radiația solară maximă	kW/m ²	1,1	1,1
2.3	Locul de montaj		exterior	exterior
2.4	Altitudine	m	≤1000	≤1000
2.5	Umiditatea relativă a aerului	%	100	100
2.6	Grosimea stratului de gheață	mm	20	20
2.7	Clasa seismică conform MSK 64		8	8
3	CARACTERISTICI ELECTRICE			
3.1	Tensiunea nominală	kV	110	110
3.2	Nivelul de izolație			
3.2.1	la impuls de trăsnet (1,2/50)	kVmax	550	550
3.2.2	la frecvența industrială (50Hz 1min)	kVef	230	230
4	CARACTERISTICI CONSTRUCTIVE			
4.1	Tipul constructiv		de suport	de suport
4.2	Protecția anticorozivă părților metalice		Da	Da
4.3	Materialul izolatorului		Porțelan electrotehnic	Porțelan electrotehnic
4.4	Linia de fugă specifică	cm/kV	≥2,25	2,25
4.5	Rezistența mecanică la încovoiere	kN	≥8,0	8,0
4.6	Dimensiunile (conform desenului nr. 4)			
4.6.1	Flanșa de fixare partea de jos		pătrată	pătrată
4.6.1.1	Dimensiunile flanșei	mm	204x204	200x200
4.6.1.2	Numărul găurilor în flanșa de fixare	buc	4	4
4.6.1.3	Diametru găurii în flanșa de fixare	mm	18	18
4.6.1.4	Distanța între centrele găurilor în flanșa de fixare	mm	160±0,8	160±1
4.6.2	Flanșa de fixare partea de sus		rotundă	rotundă
4.6.2.1	Dimensiunile flanșei	mm	150	150
4.6.2.2	Numărul găurilor în flanșa de fixare	buc	4	4
4.6.2.3	Diametru găurii în flanșa de fixare	mm	M12	M12
4.6.2.4	Distanța între centrele găurilor în flanșa de fixare	mm	120±0,5	120±0,5
4.7	Înălțimea izolator	mm	1050±2,0	1050±2,0

Data: 19 august 2025

SRL „ELECTROCON”
 Director General
 Nguyen Huu Thuy



**Desenul nr. 4 Caracteristici constructive a izolatorului de suport 110 kV tip 1
(pentru înlocuirea izolatoarelor de tip ИОС-110-400 УХЛ1)**





Dalian Hivolt Power System Co., Ltd.

FOR A SAFE POWER LINE !

August 8, 2025

ELECTROCON Ltd
MD-2052, 19, Maria Dragan str.,
Chisinau,
Republic of Moldova

DECLARATION OF CONFORMITY

We, Dalian Hivolt Power System Co.,Ltd., No.2804, 75 Huili Street Ganjingzi District, Dalian Liaoning, China, as a reputable manufacturer of porcelain insulators), do hereby declare that :

Porcelain post insulator IOS-35-500-01 - Drawing HP308181;

Porcelain post insulator IOS-110-400 - Drawing HP308182;

Are designed, manufactured and tested according to following standards:

IEC 603383,

IEC 60168,

IEC 60273.

Name: Canning Zhao
Position: Sales Manager



Add. : No.2804, 75 Huili Street , Ganjingzi District, Dalian China

Tel : +86 411-8495 0806 Web. : www.hivoltinsulators.com E-mail: canning@hivoltinsulators.com



China National Accreditation Service for Conformity Assessment
LABORATORY ACCREDITATION CERTIFICATE
(Registration No. CNAS L0223)

Xi'an High Voltage Apparatus Research Institute Co., Ltd.

(Legal Entity: Xi'an High Voltage Apparatus Research Institute Co., Ltd.)

No.18, North Section of Xi'erhuan, Xi'an, Shaanxi, China

is accredited in accordance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories(CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence to undertake the service described in the schedule attached to this certificate.

The scope of accreditation is detailed in the attached schedule bearing the same registration number as above. The schedule forms an integral part of this certificate.

Effective Date: 2024-07-27

Expiry Date: 2030-07-26

Signed on behalf of China National Accreditation Service for Conformity Assessment

张朝华

China National Accreditation Service for Conformity Assessment (CNAS) is authorized by Certification and Accreditation Administration of the People's Republic of China (CNCA) to operate the national accreditation schemes for conformity assessment. CNAS is a signatory of the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement (ILAC MRA) and the Asia Pacific Accreditation Cooperation Mutual Recognition Arrangement (APAC MRA).
The validity of the certificate can be checked on CNAS website at <http://www.cnas.org.cn/english/findanaccreditedbody/index.shtml>.



Quality Management System Certificate

Certificate No.: 05324Q30540R2S

we hereby certify that

DALIAN HIVOLT POWER SYSTEM CO.,LTD.

Registered/Production/Business/Office Address: No.2804, 75 Huili Street, Ganjingzi District, Dalian China

Quality Management System complies with Standard requirement

GB/T 19001-2016/ISO 9001:2015

The certificate is valid for the following scope:

Manufacture, R&D and marketing of Porcelain insulators, composite insulators & glass insulators

Certificate Date: 15-10-2024

Certificate Valid Date: 15-10-2024~14-10-2027

Date of initial Certification: 25-10-2018

Unified Social Credit Code of the Certified Organization: 91210211588065306E



The validity of this certificate is maintained through regular supervision;
The status of the certificate can be inquired by scanning the QR code,
or it can be found on the official website of the Certification and Accreditation
Administration of the P.R.C(www.cnca.gov.cn).



中国认可
国际互认
管理体系

MANAGEMENT SYSTEM
CNAS C053-M

Zhaolong



Beijing NGV Certification Center Co.,Ltd.

Address: Unit 1101, Unit 2, 10/F, Block 2-1, No. 82, East 4th Ring Middle Road, Chaoyang District, Beijing.

Tel: 010-87531300 P.C.: 100124 Website: <http://www.ngv.org.cn>



(2006)国认监认字(059)号



2006000196Z

No. WJ-189-2008(E)

国家绝缘子避雷器质量监督检验中心

CHINA NATIONAL CENTRE FOR QUALITY SUPERVISION
AND TEST OF INSULATORS AND SURGE ARRESTERS

检验报告 TEST REPORT

C10-550

Object **Outdoor antipollution-type solid-core**
产 品 名 称 **post insulators of ceramic material**

Client **Dalian Hivolt Power System Co., Ltd.**
客 户 名 称

Classification **Prototype tests**
检 验 类 别

国 西 安
XIAN P.R.CHINA

2008 年 08 月 25 日

25



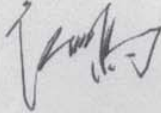
CHINA NATIONAL CENTRE FOR QUALITY SUPERVISION AND TEST OF INSULATORS AND SURGE ARRESTERS

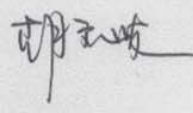
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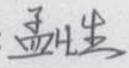
TEST REPORT

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Test object	Outdoor antipollution-type solid-core post insulators of ceramic material
Type	C10-550
Trade mark	Hivolt
Manufacturer	Dalian Hivolt Power System Co.,Ltd.
Client	
Address	No.137-139,Changxing Str. Shahekou District, Dalian, China
Telephone	+86 411 62655875
Fax	+86 411 39858800
Test classification	Prototype tests
Test items	All test items see Page 2 of this report
Reception date	26 Jul., 2008
Sample number	6
Series	No.1~No.6
Test date	26 ~ 30 Jul., 2008
Test basis	1. IEC 60168:1994 Tests on indoor and outdoor post insulators of ceramic material or glass for systems with nominal voltage greater than 1000V 2. IEC 60273:1990 Characteristics of indoor and outdoor post insulators for systems with nominal voltages greater than 1000V 3. The drawing of sample
Test conclusion	The insulator passed all prototype test items and is deemed to meet the test basis satisfactory.  Confirmed on 25 Aug., 2008
Remarks	The drawing number is C10-550

Approved: 

Checked: 

Reported: 

CHINA NATIONAL CENTRE FOR QUALITY SUPERVISION AND TEST OF INSULATORS AND SURGE ARRESTERS

WJ-189-2008(E)

TEST REPORT

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Test items

Routine tests	1	Visual inspection
	2	Bending withstand load test in four directions
Sample tests	3	Verification of the dimensions and tolerance verification of form and assembly position
	4	Temperature cycle test
	5	Mechanical failing load test
	6	Porosity Test
	7	Galvanizing test
Type tests	8	Dry lightning impulse withstand voltage tests
	9	Wet power frequency withstand voltage test
	10	Mechanical failing load test
Special tests	11	Test for deflection under load
	12	Radio interference test

CHINA NATIONAL CENTRE FOR QUALITY SUPERVISION AND TEST OF INSULATORS AND SURGE ARRESTERS

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TEST REPORT

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Routine tests

1 Visual inspection

Specimens No.1 ~ No.6 had fair appearance. All specimens were covered by a smooth and shining hard glaze free from crazes. No defects exceeding standard permission were observed. Met the standards satisfactory.

2 Bending withstand load test in four directions

Specimen No.	Load applied kN	Duration s	Result
1	5	3	No damage
2	5	3	No damage
3	5	3	No damage
4	5	3	No damage
5	5	3	No damage
6	5	3	No damage
Specifications	5.0, (50%×10)	≥3	No damage

The result met the test basis.

The results of routine tests met the test basis.

Sample tests

2 Verification of the dimensions and tolerance verification of form and assembly position

2.1 Individual units

Unit: mm

Specimen No.	Height	Creepage distance
1	1220.2	3199
2	1221.0	3209
3	1220.1	3214
4	1220.6	3196
5	1220.4	3203
6	1220.8	3208
Specifications	1220±1.5	≥3150

The result met the test basis.

2.2 Form and assembly position

Unit: mm

Specimen No.	Linearity	Parallelism between the flanges	Coaxiality between flanges	Angle deviation of fixing holes (°)	Distance between against fixing hole center (top/bottom)
1	1.5	0.2	1.2	0.35	127.1/127.1
2	1.0	0.2	1.1	0.25	127.1/127.1
3	1.5	0.1	1.2	0.30	127.1/127.1
4	1.0	0.2	1.3	0.25	127.1/127.1
5	1.0	0.2	1.1	0.30	127.1/127.1
6	1.5	0.1	1.2	0.30	127.1/127.1
Specifications	≤11.3	≤0.61	≤4.4	≤1	127/127

The result met the test basis.

CHINA NATIONAL CENTRE FOR QUALITY SUPERVISION AND TEST OF INSULATORS AND SURGE ARRESTERS

WJ-189-2008(E)

TEST REPORT

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4 Temperature cycle test

Specimens No.1 ~ No.6 passed the temperature cycle test satisfactory, the temperature of hot water at 76℃ was 50K higher than that of the cold water, specimens withstood 3 cycles of hot and cold bathing for 60min each.

5 Mechanical failing load test

5.1 Bending load test

5.1.1 Bending load test

Specimen No.	Load applied kN	Result
2	10	No damage
3	10	No damage
Specifications	10	No damage

The result met the test basis.

5.1.2 Bending failing load test

Specimen No.	Load applied kN	Failing status
2	16.78	Ceramic breakage near bottom flange
3	19.38	Ceramic breakage near bottom flange
Specifications	≥10	/

Provide datum only.

5.2 Torsion load test

5.2.1 Torsion load test

Specimen No.	Load applied kN·m	Result
4	4	No damage
5	4	No damage
Specifications	4	No damage

The result met the test basis.

5.2.2 Torsion failing load test

Specimen No.	Load applied kN·m	Result
4	9.42	slippage of top unit
5	8.82	slippage of top unit
Specifications	≥4	/

Provide datum only.

6 Porosity Test

Ceramic fragments from the specimens after item 5 and item 10 were immersed in a 3% alcohol solution of fuchsin. Under a pressure of 20MPa for 9h, No fragments had revealed any dye penetration, All specimens were successfully passed.

**CHINA NATIONAL CENTRE FOR QUALITY SUPERVISION AND
TEST OF INSULATORS AND SURGE ARRESTERS**

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TEST REPORT

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7 Galvanizing test

Unit: μm

Specimen No.	The min. value of single specimen		The average value of single specimen		The average value of all specimens	
	Top fittings	Bottom fittings	Top fittings	Bottom fittings	Top fittings	Bottom fittings
1	106	105	127	132	121	129
2	72	95	111	125		
3	87	92	122	130		
Specifications	/		≥70		≥85	

The result met the test basis.

The results of sample tests met the test basis.

Type tests

8 Dry lightning impulse withstand voltage test

$t_d=28.0^\circ\text{C}$, $t_w=24.5^\circ\text{C}$, $P=96.2\text{kPa}$, the arc distance $L=1092\text{mm}$

Specifications: 550kV , correction coefficient $K_f=1.028$, corrected voltage: 565.4kV

Specimen No.	Times	Voltage applied kV	Result
1	Positive polarity 15 times	569~572	No flashover
	Negative polarity 15 times	568~573	No flashover
Specifications	15	≥ 565.4	Flashover less than 2 times

The result met the test basis.

9 Wet power frequency withstand voltage test

$t_d=28.0^\circ\text{C}$, $t_w=24.5^\circ\text{C}$, $t_{\text{water}}=26.0^\circ\text{C}$, $P=96.3\text{kPa}$, the arc distance $L=1092\text{mm}$

Resistivity of water $\rho_{26.0}=89.5\Omega\cdot\text{m}$, corrected resistivity $\rho_{20}=101.1\Omega\cdot\text{m}$

Precipitation rate: horizontal component is 1.44mm/min , vertical component is 1.34mm/min .

Specified voltage: 230kV , correction coefficient $K=0.974$, corrected voltage: 224.0kV

Specimen No.	Voltage applied kV	Duration s	Result
1	230	60	No flashover
Specifications	≥ 224.0	60	No flashover

The result met the test basis.

10 Mechanical failing load test

10.1 Bending load test

10.1.1 Bending load test

Specimen No.	Load applied kN	Result
1	10	No damage
Specifications	10	No damage

The result met the test basis.

CHINA NATIONAL CENTRE FOR QUALITY SUPERVISION AND TEST OF INSULATORS AND SURGE ARRESTERS

WJ-189-2008(E)

TEST REPORT

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10.1.2 Bending failing load test

Specimen No.	Load applied kN	Failing status
1	17.74	Ceramic breakage near bottom flange
Specifications	≥ 10	/

Provide datum only.

10.2 Torsion load test

10.2.1 Torsion load test

Specimen No.	Load applied kN·m	Result
6	4	No damage
Specifications	4	No damage

The result met the test basis.

10.2.2 Torsion failing load test

Specimen No.	Load applied kN·m	Result
6	8.84	slippage of top unit
Specifications	≥ 4	/

Provide datum only.

The results of type tests meet the test basis.

Special tests

11 Test for deflection under load

Specimen No.	deflection at the top surface mm		
	2kN, (20% $\times$ 10)	5 kN, (50% $\times$ 10)	7 kN, (70% $\times$ 10)
1	4	7	9
2	3	7	9
3	3	8	8

Provide datum only.

12 Radio interference test

$t_d=29.0^{\circ}\text{C}$, RH=67%, P=96.0kPa

Measured frequency: 1.0MHz, back ground noise:6dB, sample mounted: vertical

Specimen No.	Voltage applied kV	Result	
		dB	μV
2	81	42	125.9
Specifications	81, (1.1 $\times$ U _p)	/	≤ 500

The result met the test basis.

Test Performed:
ZHONG yan dong
MENG fan sheng
LIU zhi qiang
ZHAO lei



Dalian Hivolt Power System Co., Ltd.
FOR A SAFE POWER LINE !

Routine & Sample test report

Report No. : HV24072HU03-2

Product Name: Porcelain post insulator

ИОС-35-500 – 01 УХЛ1

Date of Report: 02.09.2024

Tested by: 杨桂荣 Approved by : 李勇

Inspection Department of Dalian Hivolt Power System Co.,Ltd.



CONTENT

Brief information

Test Object: Porcelain post insulator

Type: WOC-35-500 – 01 YXJ11(brown0

Quantity: 200pcs

Sample quantity : 2pcs

Test Standard: IEC 60168 & IEC 60273 standard and the requirements of the drawing.

Test items

Routine tests:

1. Routine visual Inspection;

Sample Test:

- 2.1 Verification of the dimensions;
- 2.2 Temperature cycle test
- 2.3 Mechanical failing load test
- 2.4 Porosity test
- 2.5 Galvanizing test.



TEST RESULTS

1. ROUTINE TESTS

1.1 ROUTINE VISUAL INSPECTION

The insulators were tested one by one, Glazed surface is smooth, no defect exceeding the requirements. Marking under glaze is legible. The results showed the insulators were passed the visual inspection.

2. SAMPLE TESTS

2 samples were selected at random after the routine test, the samples were tested as following item:

2.1 VERIFICATION OF THE DIMENSIONS

2 samples were tested, the results showed as following:

Sample No.		Required value	1	2
Height	mm	440±1	440.3	440.0
Creepage distance	mm	≥750	847	847

2 top units were tested, the results showed as following:

Sample No.			Required value	1-1	2-1
Eccentricity	mm		≤2.9	1.0	0.4
Parallelism of the end faces	mm		≤0.5	0.2	0.4
Camber	mm		≤5.02	1.2	0.6
Angular deviation of fixing holes	°		≤1	0.2	0.8
Pitch circle diameter	top	mm	Φ99±1	99.0	99.0
	bottom	mm	Φ99±1	99.0	99.0
N/diameter of fixing holes	top	mm	4-M12	OK	OK
	bottom	mm	4-M12	OK	OK

2.2 TEMPERATURE CYCLE TEST

Sample No.	Hot pool		Cool pool		Temp. difference ≥50K	Recycle Times	Remark
	Temp.	Time	Temp.	Time			
1~2	73℃	30min	22℃	30min	51K	3	Passed



Dalian Hivolt Power System Co., Ltd.

FOR A SAFE POWER LINE !

2.3 MECHANICAL FAILING LOAD TEST

2.3.1 CANTILEVER FAILING LOAD TEST

Sample No.	Required value kN	Actual Value kN	Breakage condition	Results
1	≥5	23.5	Porcelain	Passed
2	≥5	22.0	Porcelain	Passed

2.4 POROSITY TESTS

Sample No.	Pressure requirement	Actual Product of pressure and time	Test results
(1)~(4)	Not less than 15MPa	Not less than 180MPa·h	No penetration appeared, this item of test has been passed.

2.5 GALVANIZING TEST

The top units have two flanges, top flange and bottom flange were tested, the results were given as follows:

Unit: μm

Sample No.	Average thickness of individual samples ≥70		Average thickness of all samples ≥85	Results
	1-1	2-1		
Top flange	138	140	139.0	Passed
Bottom flange	136	152	144.0	Passed

Conclusion

The insulators passed all the test items and deemed satisfactory to meet the test basis.





688820DH

ELECTRICAL PROPERTIES

1. Lightning Impulse Withstand Voltage 170kV
2. Power Frequency Withstand Voltage (Wet) 70kV

PHYSICAL PROPERTIES

1. Min. Creepage Distance 750mm

MECHANICAL PROPERTIES

1. Cantilever Strength 5kN
2. Torsion Strength 2kN.m

According to Standard: IEC 60168 & IEC 60273

Others

1. Insulation Material: Porcelain
2. Flanges Material: Galvanized ductile iron

D

1

2

3

4

5

Material	Weight		Title	Drawing No.
Porcelain	20kg		NOC-35-500-01 YXJ1	HP028889
Drawn	Date	Name	Post insulator	UNIT
Checked	2023-05-18	Wang G		SCALE
Approved				COLOUR
				mm
				NTS
				Brown

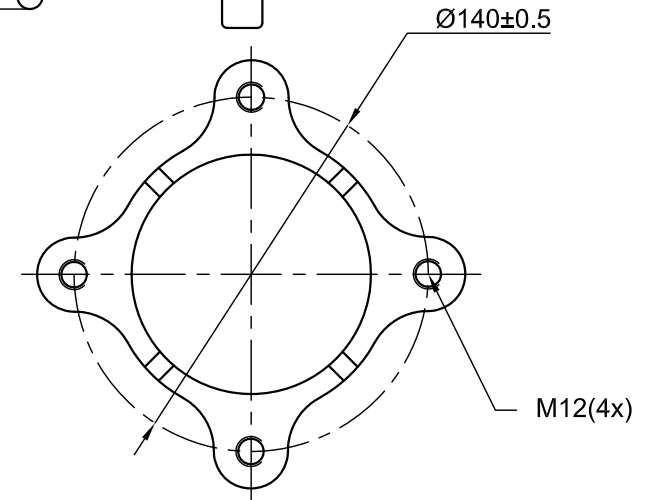
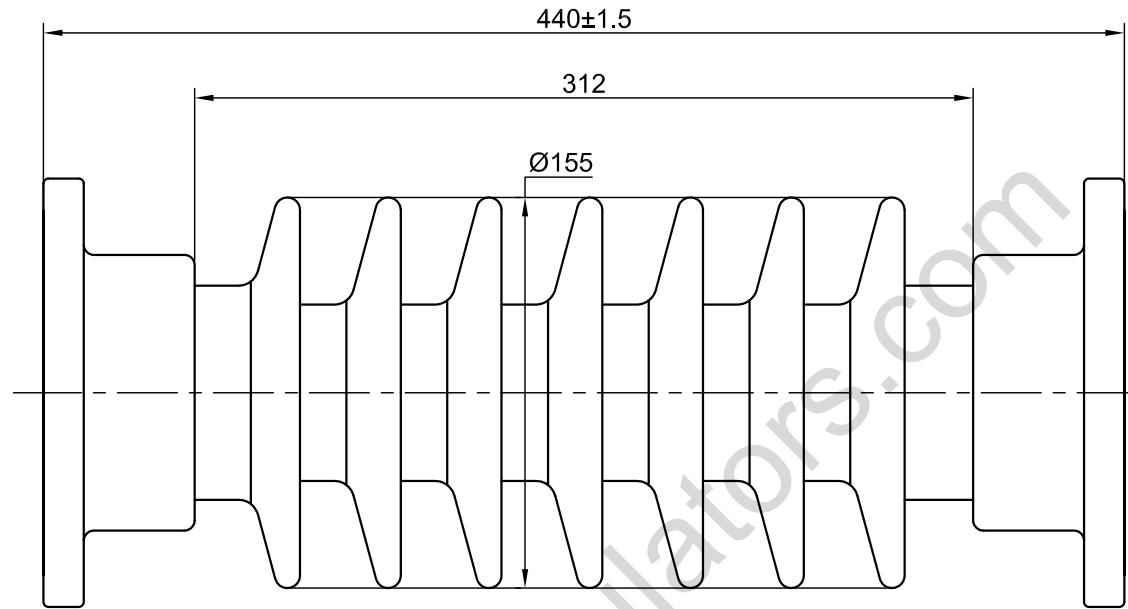
HIVOLT DALIAN HIVOLT POWER SYSTEM CO.,LTD.

Marking

Made in China
 NOC 35-500-01 YXJ1
 IEC 60168
 IEC 60273
 XX/XXXX
 XX

Top & Bottom View

HP308181



Top & Bottom View

ELECTRICAL PROPERTIES

- | | |
|--|-------|
| 1.Lightning Impulse Withstand Voltage | 170kV |
| 2.Power Frequency Withstand Voltage (Wet) | 70kV |

PHYSICAL PROPERTIES

- | | |
|-----------------------------|----------------|
| 1.Nominal Creepage Distance | 700mm |
| 2.Metal Material | Galv.cast iron |
| 3.Color | Brown / Gray |

MECHANICAL PROPERTIES

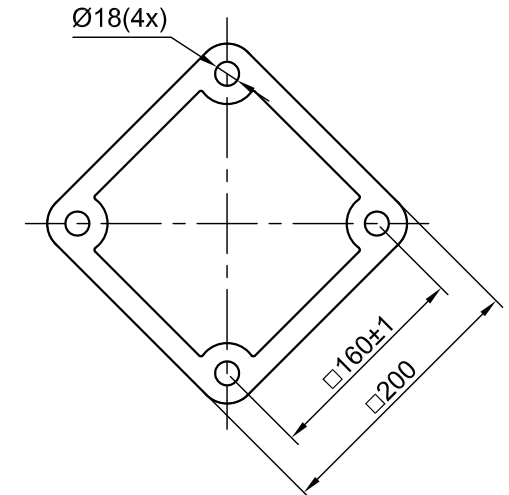
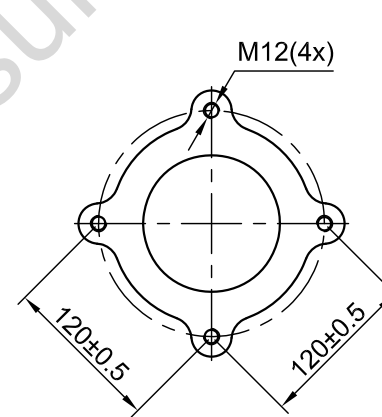
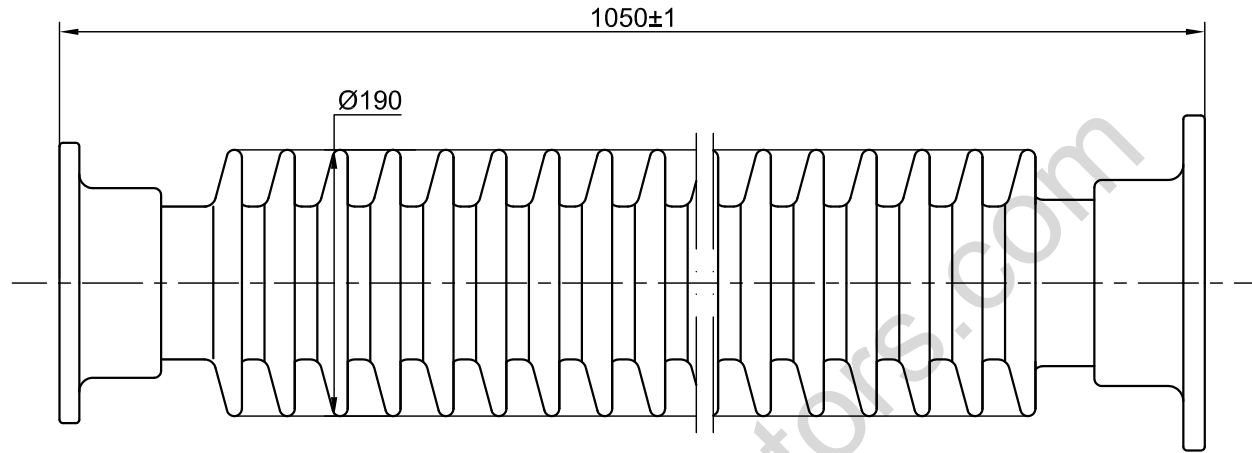
- | | |
|---------------------------|-----|
| 1.Cantilever Failing Load | 5kN |
|---------------------------|-----|

According to Standard:IEC 60168 & KDOP757522.001

Material	Weight	
Porcelain	12kg	
	Date	Name
Drawn	2025-08-18	Wang
Checked		
Approved		

Title		Drawing No.		
		HP308181		
NOC-35-500-01 Post insulator		UNIT	SCALE	COLOUR
		mm	NTS	
DALIAN HIVOLT POWER SYSTEM CO.,LTD.				

HP308182



Top View

Bottom View

ELECTRICAL PROPERTIES

- | | |
|--|-------|
| 1.Lightning Impulse Withstand Voltage | 450kV |
| 2.Power Frequency Withstand Voltage (Wet) | 185kV |

PHYSICAL PROPERTIES

- | | |
|--------------------------|----------------|
| 1.Nom. Creepage Distance | 2050mm |
| 2.Metal Material | Galv.cast iron |
| 3.Color | Brown / Gray |

MECHANICAL PROPERTIES

- | | |
|---------------------------|-----|
| 1.Cantilever Failing Load | 8kN |
|---------------------------|-----|

According to Standard:IEC 60168 & KDOP757522.001

Material	Weight		Title	Drawing No.		
Porcelain	50kg			HP308182		
	Date	Name	NOC-110-400 Post insulator	UNIT	SCALE	COLOUR
Drawn	2025-08-18	Wang		mm	NTS	
Checked				DALIAN HIVOLT POWER SYSTEM CO.,LTD.		
Approved						



Clarification letter

About porcelain post insulator IOC 35-500, according to IEC 60273 standard, 170kV lightning corresponds to the height of 445mm, and 195kV lightning can be reached only with 475mm.

273 © IEC

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TABLEAU IV

*Supports isolants cylindriques d'extérieur,
en matière céramique ou en verre,
à armatures métalliques externes*

TABLE IV

*Outdoor cylindrical post insulators
of ceramic material or glass
and with external metal fittings*

1	2	3	4	5	6	7	8	9	10	11	12
Désignation du support isolant Post insulator designation	Tension de tenue aux chocs de foudre Lightning impulse withstand voltage	Tension de tenue aux chocs de manœuvre, sous pluie Switching impulse withstand voltage, wet	Tension de tenue à fréquence industrielle, sous pluie Power-frequency withstand voltage, wet	Hauteur du support isolant Height of post insulator	Longueur minimale nominale de la ligne de fuite Minimum nominal creepage distance		Diamètre nominal maximal de la partie isolante Maximum nominal diameter of insulating part	Charge de rupture A la flexion Bending	Charge de rupture A la torsion Torsion	Diamètre du cercle de fixation de l'armature métallique du sommet Top metal fitting pitch circle diameter	Diamètre du cercle de fixation de l'armature métallique de la base Bottom metal fitting pitch circle diameter
	(kV)	(kV)	(kV)	h (mm)	(mm)	(mm)	D (mm)	P _B (N)	(Nm)	(mm)	(mm)
C4-60 C6-60 C8-60 C10-60	60	—	20	190 ± 1	120	190	175 175 185 185	4 000 6 000 8 000 10 000	600 600 800 1 000	76 76 76 76	76 76 76 76
C4-75 C6-75 C8-75 C10-75	75	—	28	215 ± 1	190	280	180 180 190 190	4 000 6 000 8 000 10 000	600 600 800 1 000	76 76 76 76	76 76 76 76
C4-95 C6-95 C8-95 C10-95 C12,5-95	95	—	38	255 ± 1	280	380	190 190 190 210 210	4 000 6 000 8 000 10 000 12 500	800 800 1 200 1 200 1 800	76 76 76 76 76	76 76 76 76 76
C4-125 C6-125 C8-125 C10-125 C12,5-125	125	—	50	305 ± 1	380	500	195 195 195 230 230	4 000 6 000 8 000 10 000 12 500	800 800 1 200 1 200 2 000	76 76 76 76 76	76 76 76 76 76
C4-150 C6-150 C8-150 C10-150 C12,5-150	150	—	50	355 ± 1	450	660	195 195 195 235 235	4 000 6 000 8 000 10 000 12 500	1 000 1 200 1 500 1 800 2 500	76 76 76 76 76	76 76 76 76 76
C4-170 C6-170 C8-170 C10-170 C12,5-170	170	—	70	445 ± 1	580	850	205 205 205 245 245	4 000 6 000 8 000 10 000 12 500	1 200 1 500 2 000 2 500 3 000	76 76 76 76 127	76 76 76 76 127
C4-200 C6-200 C8-200 C10-200 C12,5-200	200	—	70	475 ± 1	680	950	210 210 210 245 245	4 000 6 000 8 000 10 000 12 500	1 200 1 800 2 000 2 500 3 000	76 76 76 76 127	76 76 76 76 127
C4-250 C6-250 C8-250 C10-250 C12,5-250	250	—	95	560 ± 1	835	1 200	215 215 215 255 255	4 000 6 000 8 000 10 000 12 500	1 800 2 000 2 500 3 000 4 000	76 ou/or 127 76 ou/or 127 127 127 127	76 ou/or 127 76 ou/or 127 127 127 127

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DALIAN HIVOLT POWER SYSTEM CO.,LTD.

19.03.2024

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Tel : +86 411-8495 0806 Web. : www.hivoltinsulators.com E-mail: canning@hivoltinsulators.com





Dalian Hivolt Power System Co., Ltd.
FOR A SAFE POWER LINE !

TABLEAU IV

*Supports isolants cylindriques d'extérieur,
en matière céramique ou en verre,
à armatures métalliques externes*

TABLE IV

*Outdoor cylindrical post insulators
of ceramic material or glass
and with external metal fittings*

1	2	3	4	5	6	7	8	9	10	11	12
Désignation du support isolant Post insulator designation	Tension de tenue aux chocs de foudre Lightning impulse withstand voltage (kV)	Tension de tenue aux chocs de ma- nœuvre, sous pluie Switching impulse withstand voltage, wet (kV)	Tension de tenue à fréquence indus- trielle, sous pluie Power-fre- quency with- stand voltage, wet (kV)	Hauteur du support isolant Height of post insulator h (mm)	Longueur minimale nominale de la ligne de fuite Minimum nominal creepage distance Classe Class I Classe Class II		Diamètre nominal maximal de la partie isolante Maxi- mum nominal diameter of insu- lating part D (mm)	Charge de rupture Failing load A la flexion Bending A la torsion Torsion P _b (N) (Nm)		Diamètre du cercle de fixation de l'armature métallique du sommet Top metal fitting pitch circle diameter (mm)	Diamètre du cercle de fixation de l'armature métallique de la base Bottom metal fitting pitch circle diameter (mm)
C4-60 C6-60 C8-60 C10-60	60	—	20	190 ± 1	120	190	175 175 185 185	4 000 6 000 8 000 10 000	600 600 800 1 000	76 76 76 76	76 76 76 76
C4-75 C6-75 C8-75 C10-75	75	—	28	215 ± 1	190	280	180 180 190 190	4 000 6 000 8 000 10 000	600 600 800 1 000	76 76 76 76	76 76 76 76
C4-95 C6-95 C8-95 C10-95 C12,5-95	95	—	38	255 ± 1	280	380	190 190 190 210 210	4 000 6 000 8 000 10 000 12 500	800 800 1 200 1 200 1 800	76 76 76 76 76	76 76 76 76 76
C4-125 C6-125 C8-125 C10-125 C12,5-125	125	—	50	305 ± 1	380	500	195 195 195 230 230	4 000 6 000 8 000 10 000 12 500	800 800 1 200 1 200 2 000	76 76 76 76 76	76 76 76 76 76
C4-150 C6-150 C8-150 C10-150 C12,5-150	150	—	50	355 ± 1	450	660	195 195 195 235 235	4 000 6 000 8 000 10 000 12 500	1 000 1 200 1 500 1 800 2 500	76 76 76 76 76	76 76 76 76 76
C4-170 C6-170 C8-170 C10-170 C12,5-170	170	—	70	445 ± 1	580	850	205 205 205 245 245	4 000 6 000 8 000 10 000 12 500	1 200 1 500 2 000 2 500 3 000	76 76 76 76 127	76 76 76 76 127
C4-200 C6-200 C8-200 C10-200 C12,5-200	200	—	70	475 ± 1	680	950	210 210 210 245 245	4 000 6 000 8 000 10 000 12 500	1 200 1 800 2 000 2 500 3 000	76 76 76 76 127	76 76 76 76 127
C4-250 C6-250 C8-250 C10-250 C12,5-250	250	—	95	560 ± 1	835	1 200	215 215 215 255 255	4 000 6 000 8 000 10 000 12 500	1 800 2 000 2 500 3 000 4 000	76 ou/or 127 76 ou/or 127 127 127 127	76 ou/or 127 76 ou/or 127 127 127 127

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