

Porcelain insulation outdoor termination (127/220 kV)

Product Descriptions

- The product uses high-strength porcelain sleeve which has the advantage of high mechanical strength, good stability, no aging, especially suitable for coastal and natural environment harsh areas.
- The product adopts the structure of big and small umbrella skirt, and the experiment has proved that this structure has excellent pollution resistance.
- It has a good sealing performance to prevent flooding, oil leakage and other possible defects.
- Porcelain insulator comes in two sizes. One specification is 1280mm high and 3150mm creepage distance, which is suitable for III-level dirty areas. The other specification is 1400mm high and the creepage distance is 3906mm, which is suitable for IV-level dirty areas.

Technical Requirements

- Only vertical installation, cannot be installed at a certain angle or inverted installation.
- The connector can be chosen as the compression or sheat bolt.
- When installing outdoor terminations, users need to provide assistance in erecting installation platforms and sheds and hoisting casing.



Technical Specifications

Area Of Application

Applicable cable cross-sections:	240~2500 mm ²
Max.system voltage:	252 kV
System rated frequency:	50 Hz
Elevation:	≤2000 m
Operation temperature;	-55 °C~45 °C
Cable Shield Style	Tape/wire/corrugated Al

Design Data

Height		3140±30 mm
Weight(excluding cable)		550 kg / 1212.54 lbs
Composite insulator	Bending moment resistance	≥5000 kN
	Internal withstand pressure	2.4 MPa
	Breakdown pressure	3.5 MPa
Filling fluid(material)		PIB/Gel
Creepage distance		≥8300 mm
Permissible horizontal pull of connecting wire		≥2 kN
Storage temperature		0 °C~35 °C
Installation temperature		5 °C~35 °C

Electrical Test

Electrical Type Test (IEC 62067)

Heating cycle voltage	254 kV
Partial discharge test at ambient and elevated temperatures	No detctable discharge exceeding the declared sensitivity(191 kV, 3.8pC)
Lighting impulse voltage	±1050 kV

Electrical Routine Test (IEC 62067)

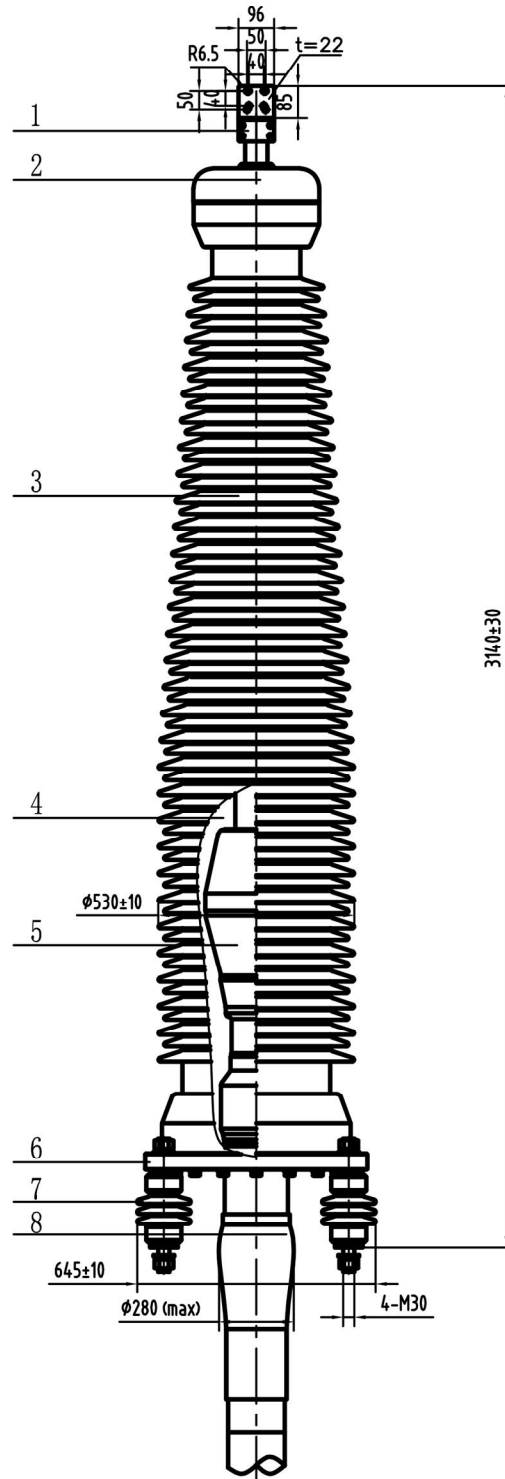
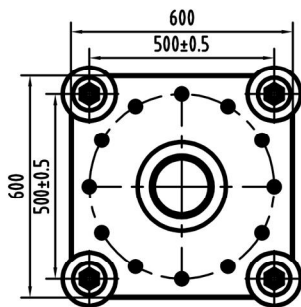
AC withstand voltage (wet,1 min)	460 kV
Partial discharge test	No detctable discharge exceeding the declared sensitivity(191 kV, 3.8pC)

Structure Diagram

1. Palm
2. Corona shield
3. Porcelain insulation
4. Filling fluid
5. Stress cone
6. Base plate
7. Post insulator
8. End bell

Note:

1. Mass: 700kg approx.
2. Dimensions in mm.



DESIGN	Wu Jiagi	DATE	2023.10.13	COMPANY NAME	Angelor(Jiangsu)Intelligent Electric Co. Ltd.
DWN	Wu Jiagi	DATE	2023.10.16	NAME	220kV Porcelain insulation outdoor termination
CHK	Zhang Haitao	DATE	2023.10.19	DRAWING NUMBER	YJZWY4 127/220
APVD	Zhang Haitao	DATE	2023.10.19	MASS	700.00kg
DRAWING MARK		SCALE	1:12	REVISION NUMBER	-