

Integral premolded joint with waterproof housing (127/220 kV)



Product Descriptions

- The main insulation of the product is an integral premolded constructure. The high-voltage shield, sleeve and insulating parts are injected into one piece. The constructure is simple and easy to be installed.
- The outer shielding layer of the main insulator is injected with semi-conductive silicone rubber to avoid the shortcoming that the sprayed surface is easy to damage.
- The housing adopts high-strength copper protection case with high mechanical strength and good sealing performance.

Technical Requirements

- The joints are premolded.
- The connector and the copper conductor of the cable are connected by crimping, and the cable conductor connection has good electrical conductivity and mechanical strength.
- The joints have the same electrical and mechanical properties as the metal sheath and outer sheath of the cable. The joints are waterproof and corrosion resistant, and it has a reliable electrical connection to the metal sheath.
- For long periods of immersion in water during operation, additional FRP shells with waterproof sealant are required.

Additional option: There are two specifications of integral premolded insulated joints: integral premolded straight joints and integral premolded sectionalized joints.

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

Max.external dimensions(diameter × length)	∅ 420 × 2250 mm
Weight(excluding cable)	180 kg / 396.83 lbs
Anticorrosive coating	Heat shrink tubing
Protective measures	Three options: heat shrink tubing, protective copper shell and FRP shell
System of a laying joints	Tunnel
Storage temperature	0 °C~35 °C
Installation temperature	5 °C~35 °C

Electrical Test

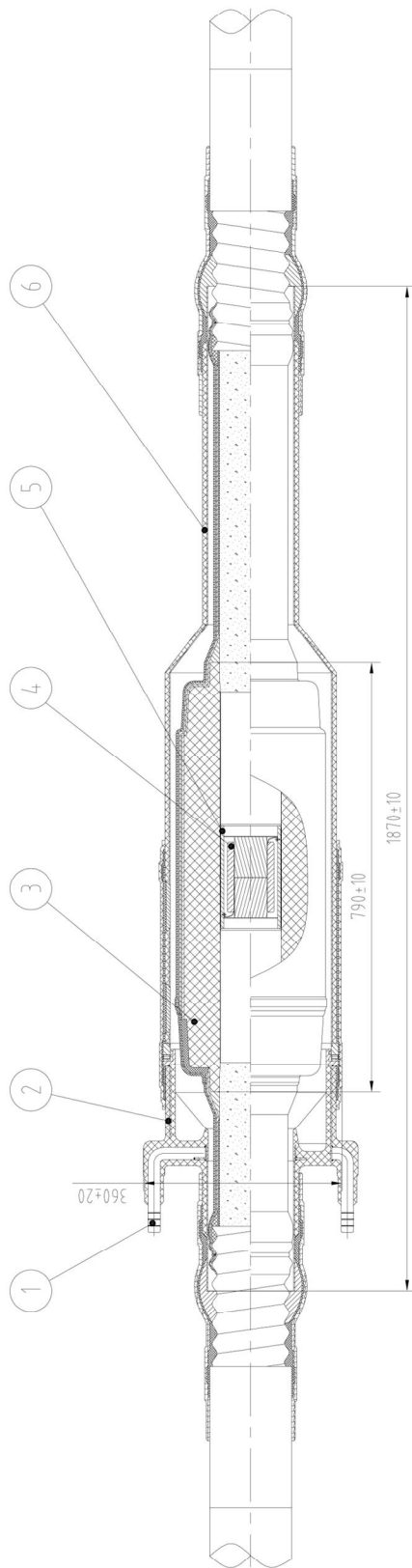
Electrical Type Test(IEC 62067)

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



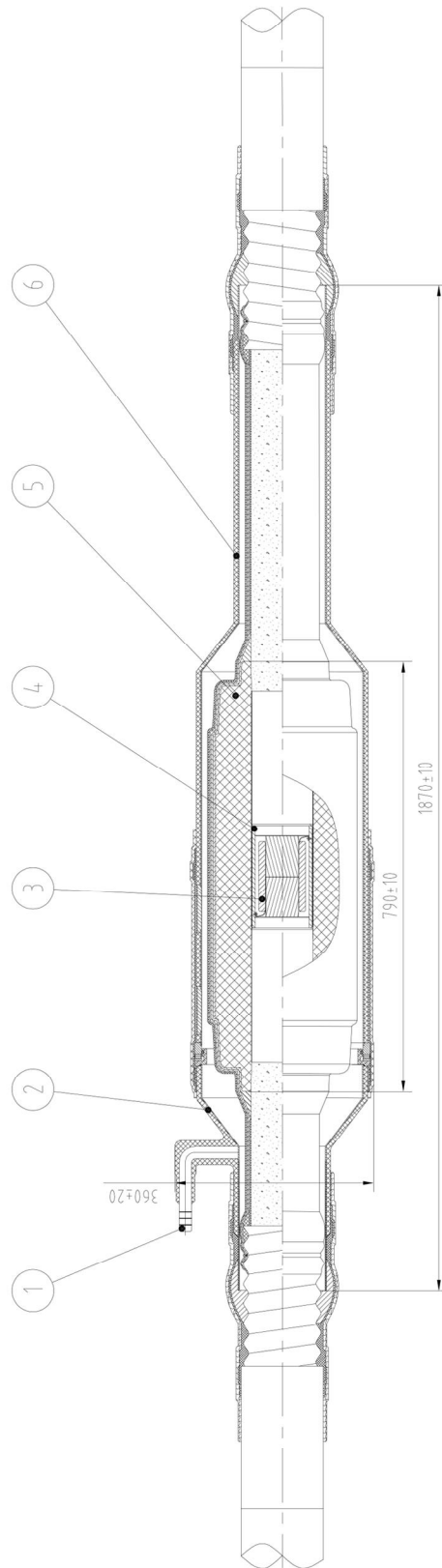
- 1. The connection of coaxial-cable
- 2. Copper housing of shorter end
- 3. Sleeve
- 4. Connector
- 5. Shielding corona
- 6. Copper housing of longer end

Note:

- 1. Mass:180kg approx.
- 2. Dimensions in mm.

DESIGN	WU JIAQI	DATE	2023.10.31	COMPANY NAME	Angelor(Jiangsu)Intelligent Electric Co. Ltd.
DRAWN	WU JIAQI	DATE	2023.11.1	NAME	
CHK	ZHANG HAI'AO	DATE	2023.11.8	NAME	
APPRO	ZHANG HAI'AO	DATE	2023.11.8	NAME	220kV Shield break connection joint
DRAWING MARK		MASS	SCALE	DRAWING NUMBER	
		180.00kg	1:8		YJJJJ12 127/220
REVISION NUMBER	Rev.01	REVISION NUMBER	-		

Structure Diagram



1. The connection of ground cable
2. Copper housing of shorter end
3. Connector
4. Shielding corona
5. Sleeve
6. Copper housing of longer end

Note:

1. Mass: 180kg approx.
2. Dimensions in mm.

DESIGN	Wu Jiaqi	DATE	2023.11.1	COMPANY NAME	Anglor(Jiangsu)Intelligent Electric Co. Ltd.
DRAWN	Wu Jiaqi	DATE	2023.11.6	NAME	220kV Straight joint
CHECK	Zhang Hailao	DATE	2023.11.8	SCALE	1:1
APPROVED	Zhang Hailao	DATE	2023.11.8	MASS	180.00kg
DRAWING MARK		SCALE	1:1	DRAWING NUMBER	YJJT12 127/220
REVISION NUMBER	Rev. 01	REVISION NUMBER	-		