

Integral premolded joint with waterproof housing (up to 145kV)



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:	240~1600 mm ²
Max.system voltage:	145 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)	∅ 270 × 2020 mm
Weight(excluding cable)	70 kg / 154.3 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

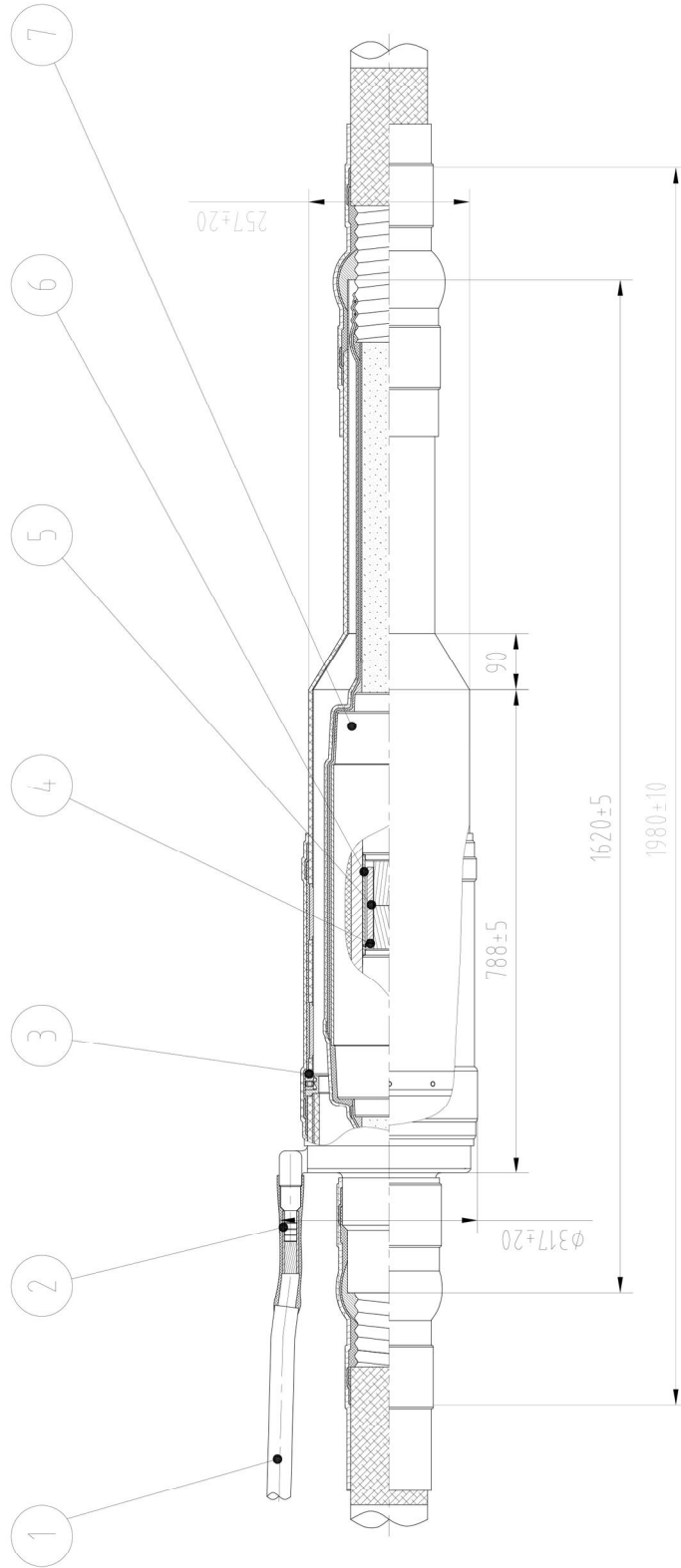
Electrical Type Test(IEC 60840)

Heating cycle voltage	152 kV
Partial discharge test at ambient and elevated temperatures	No detctable discharge exceeding the declared sensitivity (114kV, 3.6pC)
Lighting impulse voltage 1.2 μs/50 μs	650 kV

Electrical Routine Test(IEC 60840)

AC withstand voltage	190 kV
Partial discharge test	No detctable discharge exceeding the declared sensitivity (114kV, 3.6pC)

Structure Diagram



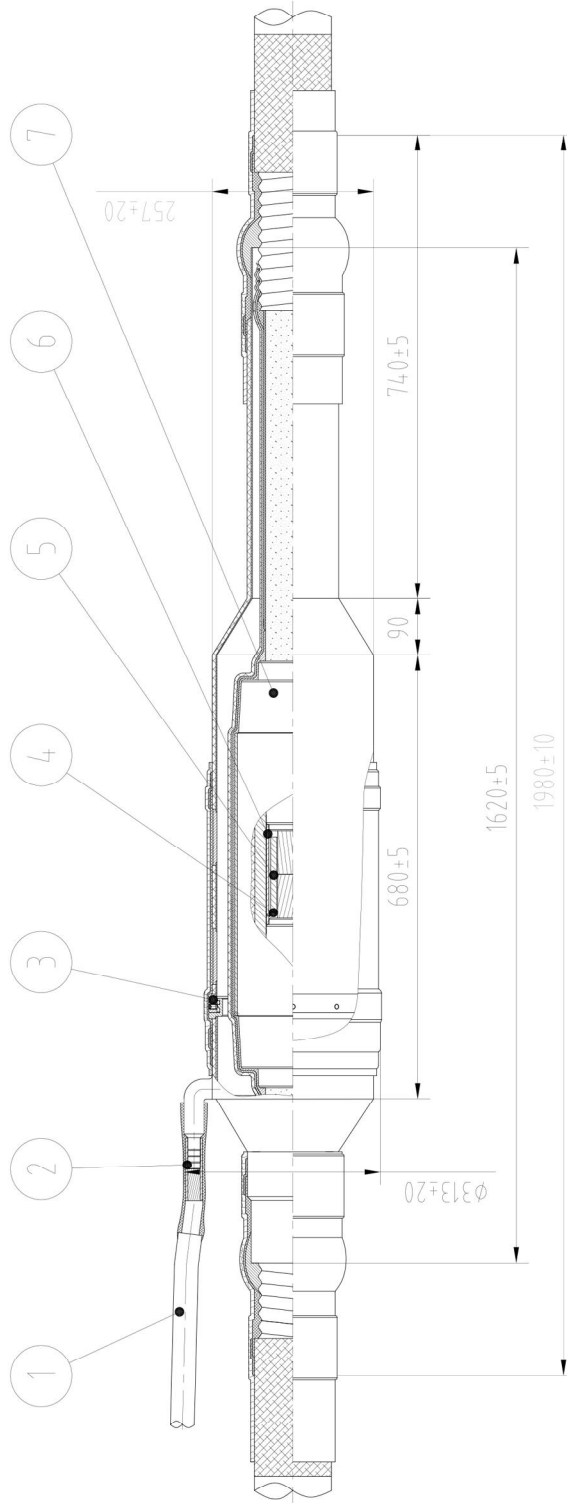
1. Ground cable 2. Ground connector 3. Copper housing 4. Braided copper wire
5. Compression connector 6. Shielding corona 7. Sleeve

Note:

1. Waterproof housing is optional and not in the basic configuration.
2. Mass: 80kg approx.
3. Dimensions in mm.
4. The ground cable is not included in the product.

DESIGN	WU Jiaqi	DATE	2023.9.4	COMPANY NAME	Angelor(Jiangsu)Intelligent Electric Co. Ltd.
DRAWN	WU Jiaqi	DATE	2023.9.8	NAME	110kV Shield break connection joint
CHK	Zhang Haitao	DATE	2023.9.27	SCALE	1:10
APVD	Zhang Haitao	DATE	2023.9.27	MASS	80.00kg
DRAWING MARK				REVISION NUMBER	YJJJ12 64/110
VERSION NUMBER	Rv.01				

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DESIGN	WU Jiaqi	DATE	2023.9.6	COMPANY NAME	Angelor(Jiangsu)Intelligent Electric Co. Ltd.
DWN	WU Jiaqi	DATE	2023.9.13	NAME	110kV Straight joint
CHK	Zhang Haitao	DATE	2023.9.27	DRAWING NUMBER	YJJT12 64/110
APVD	Zhang Haitao	DATE	2023.9.27	SCALE	1:10
DRAWING MARK		MASS	80.00kg	REVISION NUMBER	-
VERSION NUMBER	Rv.01				