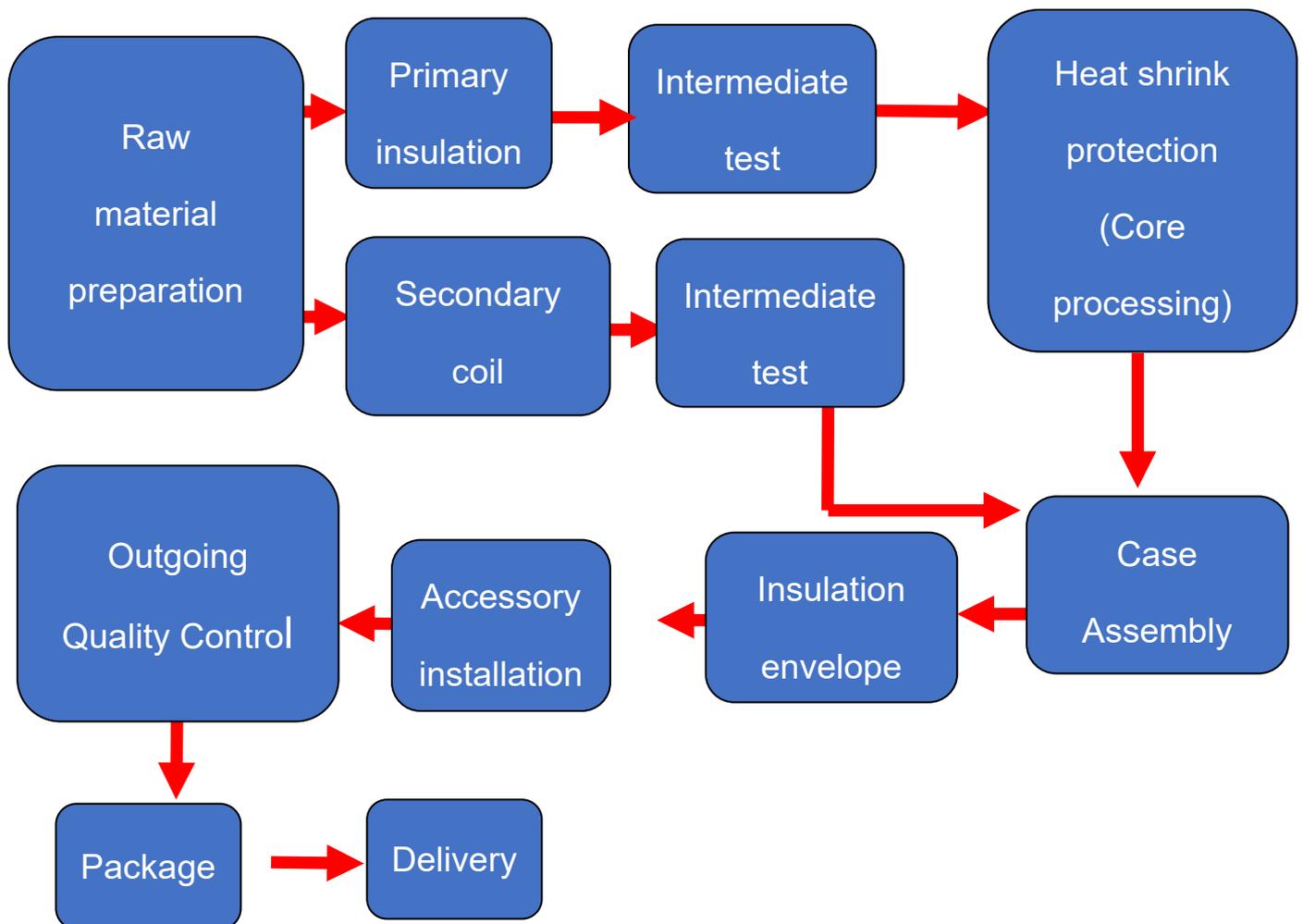


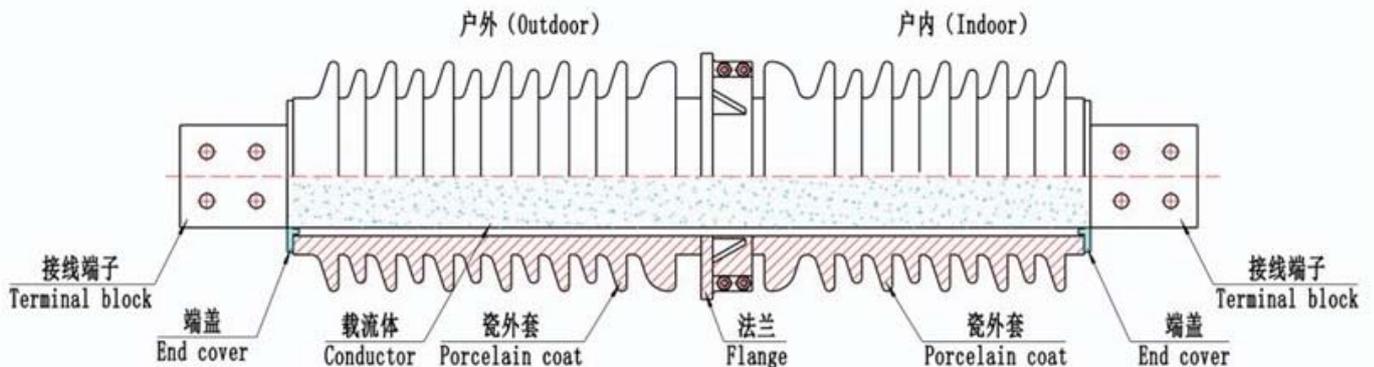
Bushing and CT production process flow chart

1~40.5kV Porcelain wall bushing

CWW Porcelain wall bushing is composed of porcelain bushing, conductor, mounting flange and end accessory. The main insulator is porcelain sheds. The mounting flange is normally grounded. The conductor passes through the heavy current. The current-carrying conductor is busbar.



- Standard: IEC60137.
- Rated voltage: 1~40.5kV
- Rated current: 10A-8000A
- Operation temperature: -50 °C to +55°C
- Operation altitude: 1000m (conferring with customer if above 1000m)
- Pollution level: III for indoor, IV for outdoor.



Key technical parameters		IEC 60137			IEEE C57.19.01-2017		
Highest voltage for equipment Um	kV	24	36	52	25	34.5	46
Rated frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60
Dry power frequency withstand voltage 1 minute	kV	55	77	105	60	80	105
Lightning impulse (BIL)	kV	125	170	250	150	200	250
Rated Current	A	10000	10000	10000	10000	10000	10000
Temperature range	°C	-60°C~+55°C			-60°C~+55°C		

12~500kV Condenser wall bushing

FCRG dry type condenser wall bushing is Lipa-covered Film bushing. Its condenser core is formed by winding the insulating PTFE film over the rod or tube in layers. Insulating oil fills the tiny gaps between the films. The outside insulation uses composite silicon rubber or porcelain. The bushing connects the HV transmission line with the indoor switchyard and form indoor switchyard to power transformers.

Features

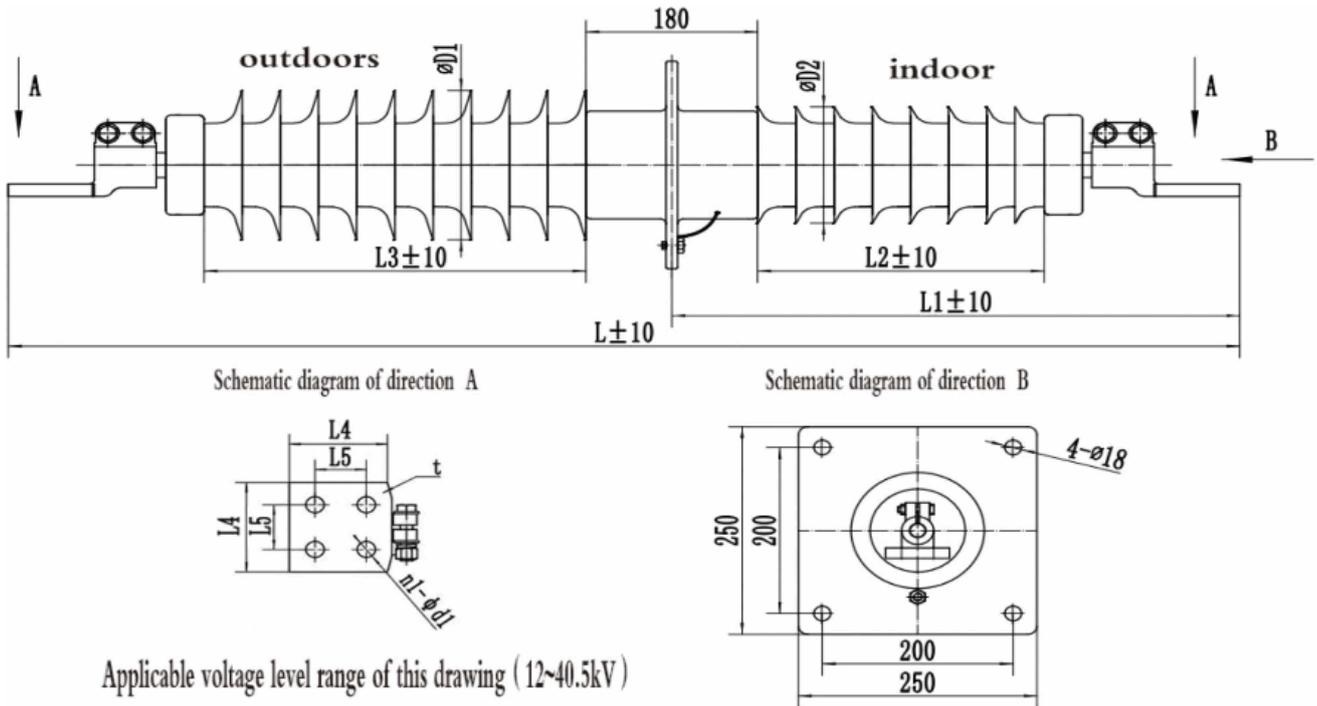
no-gas, no-oil filled, fireproof, explosion proof
Maintenance-free.
Smaller volume, lighter weight.

Parameters

Standard: IEC 60137
Rated voltage: 12~550kV
Rated current: 100~5000A
Rated frequency: 50Hz、60Hz
Temperature: -40~+50°C
Altitude: 1000m (conferring with consumer if above 1000m)
Pollution class: II、III、IV



Highest voltage(Um) (kV)	Rated Voltage(Ur) (kV)	Power frequency withst and voltage (kV)		BIL(kV)	pC	Tanδ (%)	Ith(kA)
		dry	wet				
12	10	28	28	75	≤ 5	≤ 0.3	25lr
24	20	50	50	125	≤ 5	≤ 0.3	25lr
40.5	35	95	80	200	≤ 5	≤ 0.3	25lr
72.5	66	160(140)	140	350(325)	≤ 5	≤ 0.3	25lr
126	110	230(185)	230(185)	550(450)	≤ 5	≤ 0.3	25lr
252	220	460(395)	460(395)	1050(950)	≤ 5	≤ 0.3	25lr



12~40.5kV Dry type composite wall bushing dimension (Unit:mm)

Model	L	L1	L2	L3	φ D1	φD2	Terminal block			
							L4	L5	t	n1-φd1
FCRG-12/630~1250	945	435	140	215	140	140	80	40	12	4-φ14
FCGR-12/1500~2500	1005	465	140	215	140	140	100	50	15	4-φ18
FCRG-24/630~1250	1070	475	180	300	140	140	80	40	12	4-φ14
FCGR-24/1500~2500	1130	505	180	300	140	140	100	50	15	4-φ18
FCGR-40.5/630~1250	1300	600	300	400	180	140	80	40	12	4-φ14
FCGR-40.5/1500~2500	1350	625	300	400	180	140	100	50	15	4-φ18

Dry type composite wall bushing terminal block size (Unit:mm)

Rated current(A)	Terminal block			
	L5	L6	t	n1-φd1
≤ 1250	80	40	12	4-φ14
1500~2000	100	50	15	4-φ18
2500	125	60	20	4-φ18

Condenser wall bushing with CT

FCRG-L dry-type condenser wall bushing with current transformer is based on the following principles.:

A. Electromagnetic induction principle static transmission of AC electrical energy and change of AC.

B. Reduce the high voltage gradually through the capacitive voltage division principle. The lead wire of the capacitive terminal is led out through the capacitive terminal hole on the flange and connected to the ground bolt. Thus, the high-voltage lead wire can be safely passed through the wall or floor, etc., to play the role of insulation and support the diversion of the above two principles made of the device.



Structure

FCRG-L wall bushing with CT is divided into two types: integrated and separated type. It is composed of the primary winding, heat shrink tube, silicone rubber sheds, grading shield at both ends, shell, secondary winding, and conductive clamp, etc. Pollution class: II、III、IV

Wall bushing with CT diagrams (integrated type and separated type)

