A

AERIAL ELECTRICAL FITTINGS

ANCHORING BRACKET

ANCHORING CLAMP

FUSE SWITCH DISCONNECTOR

SUSPENSION CLAMP

PRE-INSULATED SLEEVE

PRE-INSULATED BIMETAL LUG

FIXING NAIL

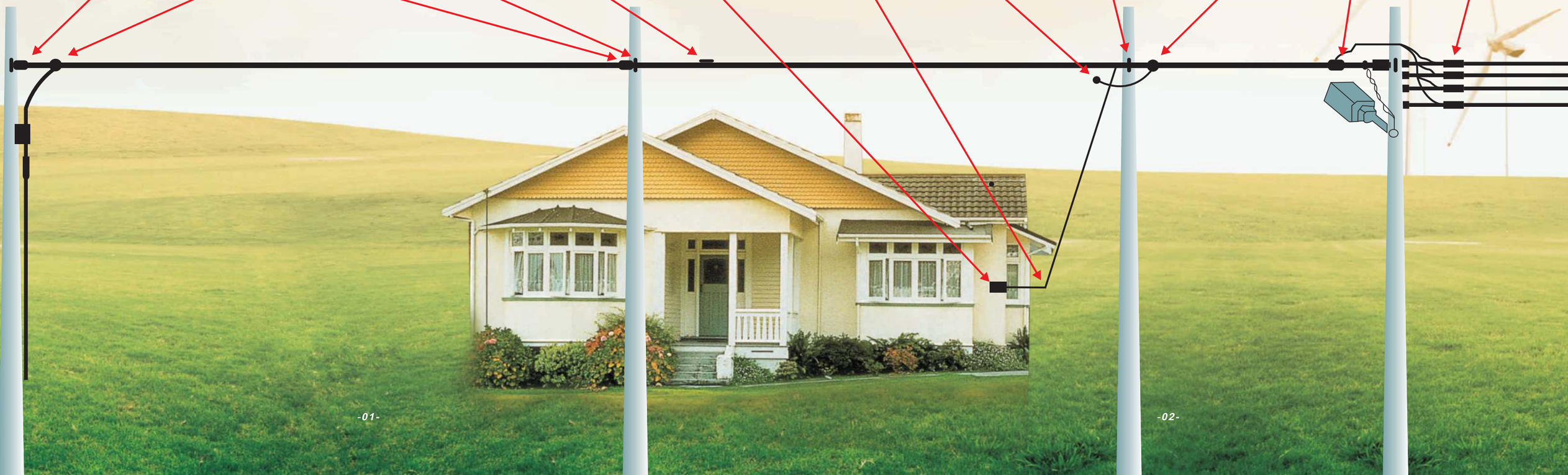
ANCHORING CLAMP

FIXING STEEL BELT

INSULATED PIERCING CONNECTOR

INSULATED PIERCING CONNECTOR (LIGHTING)

INSULATED PIERCING CONNECTOR (TRANSFORMATION)



General of insulation piercing connector(IPC)

1.1 Piercing connector, simple installation, need not strip the cable coat.

1.2 Moment nut, piercing pressure is constant, keep good electric connection and make no damage to lead.

1.3 Self-seam frame, wetproof, waterproof, and anti-corrosion, extend the using life of insulated lead and connector

1.4 Adopted special connecting tablet, apply to joint of Cu(Al) and Cu(Al) or Cu and Al

1.5 Small electric connecting resistance, connecting resistance less than 1.1 times of the resistance of branch conductor with the same length.

1.6 Special insulated case body, resistandce to illumination and environmental aging, the insulation strength can up to 12KV

1.7 Arc surface design, apply to connection with the same(different) diameter, wide connection scope(0.75mm2~400mm2)

(Performance testing)

2.1 Mechanical performance: the grip force of the wire clamp is 1/10 bigger than the break force of the lead. It comply with GB2314-1997

2.2 Temperature rise performance: under the condition of big current, the temperature rise of connector is less than that of connection lead.

2.3 Heat circle performance: conforms to GB/T2317.3-2000, the heat circle trial standard for electric fitting.

2.4 Waterproof insulation performance: conforms to the relevant requirements in Part 2 of GB/T13140.4-1998,

2.5 Resistance to corrosion performance: under the condition of SO_2 and salt fog, it can do three times of fourteen days circle testing.

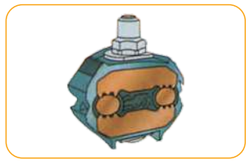
2.6 Environmental aging performance: under the circumstance of ultraviolet, radiation, dry and moist, expose if with change of temperature and heat impulse for six weeks.

2.7 Fire-proof performance: insulation material of the connector withstands glowing filament test. Conform to the requirements in Chapter4-10 of GB/T5169.4

Insulation Piercing Connectors(IPC)

Special nut and moment nut

Appearance diagram of installation



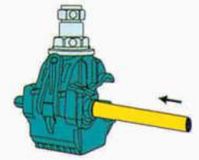
Section diagram of piercing effect

Piercing effect of insulated coat

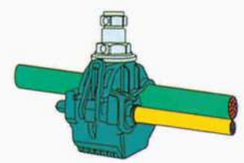
Piercing effect of wire core

(Simple installation)

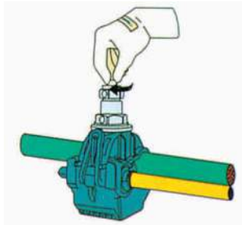
Adjust the connector nut to suitable location.



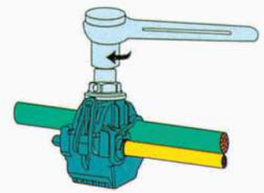
Put the branch wire into the cap sheath fully.



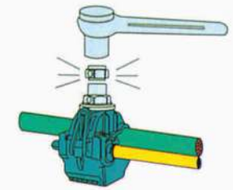
Insert the main wire, if there are two lays of insulated lay in the main cable, should strip a certain length of the first in length of the fist insulated lay from inserted end.



Turn the nut by hand, and fix the connector in suitable location.



Screw the nut with the sleeve spanner.



Screw the nut continually until the top part is cracked and dropped down.

The reason of choosing insulation piecring connector (IPC)

3.1 Simple installation

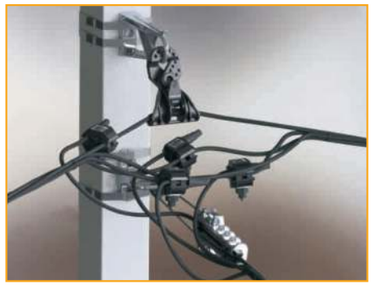
Con be branch of cable without striping the insulated coat and the joint is completely insulated. Make branch in the random location of cable without cutting off the main cable. Simple and reliable installation, just need sleeve spanner, can be installed with on live line.

3.2 Safe use

The joint has good resistance to distortion, quake, fire, wet, electrochemical corrosion and aging, need no maintenance. Has been used successfully for 30 years.

3.3 Economical cost

Small installation space, save the cost of bridge and land construction. In structural application, there need no terminal box, junction box and return wire of cable, save cable cost. The cost of cables and clamps is lower than other power supply system.



Insulation piercing connectors

SMEP

SM2–95

SM3–95

Product type and application scope

1KV Series products (Low voltage series)

Modle	Main line section	Branch section	Nominal current	Outline size	Weight	Piercing depth
SM756	0.75-6	0.75-6	41	21×27×23	10	1-1.5
SM041	6-10	1.5-6	41	26×39×54	85	1.5-2
SM101	1.5-2.5	1.5-10	55	27×41×62	55	1.5-2
SMEP	16-95	1.5-10	55	27×41×62	55	1-2
SM2-95	16-95	4-35(50)	157	46×52×87	160	1.5-2
SM2-150	50-150	6-35(50)	157	46×52×87	162	1.5-2.5
SM3-95	25-95	25-95	214	50×61×100	198	1.5-2
SM4-150	50-150	50-150	316	50×61×100	219	1.5-2.5
SM6	120-240	25-120	211	52×68×100	360	1.5-2.5
SM7	150-240	10-25	102	52×68×100	336	1.5-2.5
SM240	95-240	95-240	425	83×130×130	1040	1.5-2.5
SM300	300	ANY	425	83×130×130	1040	1.5-2.5
SM400	400	ANY	425	83×130×130	1040	1.5-2.5

JBC–1

JBC–2

JBC50–240

Modle	Conductor Range(mm^2)		No.Bolt
	Main	Tap	
JBC-1	35-70	6-35	1
JBC-2	35-150	35-150	1
JBC50-240	50-240	50-240	2

Insulation piercing connectors

TT2D82F

IPC3.1

IPC3.2

IPC3.3

IPC3.4

TTD121F

TTD151F

TTD201F

TTD281F

TTD451F

Modle	Conductor Range(mm^2)		No.Bolt
	Main	Tap	
IPC3.1	16-95	10-25	1
IPC3.2	70-95	70-95	1
IPC3.3	120-185	16-25	1
IPC3.4	70-185	70-185	2
TTD121F	25-95	2.5-25	1
TTD151F	25-95	(2.5)6-35	1
TTD201F	35-95	25-95	1
TTD281F	50-185	6-35	1
TT2D82F	25-95	25-35	1
TTD451F	95-240	95-240	2

DCNL–1

DCNL–2

DCNL–3

DCNL–4D

Modle	Conductor Range(mm^2)	
	Main (Al/Cu) (mm^2)	Tap (Al/Cu) (mm^2)
DCNL-1	10-95	1.5-10
DCNL-2	16-95	4-35
DCNL-3	25-120	25-95
DCNL-4	50-150	4-35
DCNL-5	35-150	35-150
DCNL-1D	10-95	1.5-10
DCNL-4D	50-150	4-35

Insulation piercing connectors


CT–1


CT–2


CT–3


CT–4


CT–5

Modle	Conductor Range(mm^2)	
	Main	Tap
CT-1	6-95	1.5-6
CT-2	6-150	2.5-25
CT-3	6-150	4-35
CT-4	25-150	25-95
CT-5	25-150	16-95


YN–1


YN–2


YN–3


YN–4

Modle	Conductor Range(mm^2)	
	Main	Tap
YN-1	6-25	6-25
YN-2	35-70	6-25
YN-3	35-70	35-70
YN-4/2	35-70	35-70


ABS


SMMA–2


SMHA


CPA

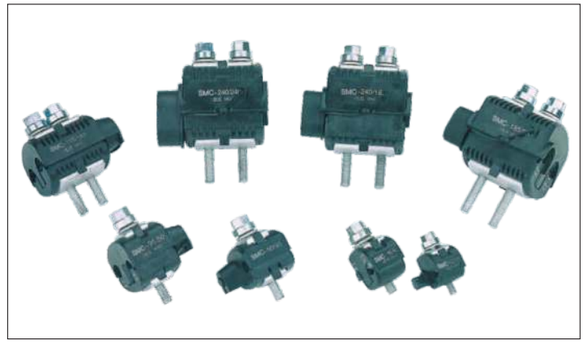

DP10

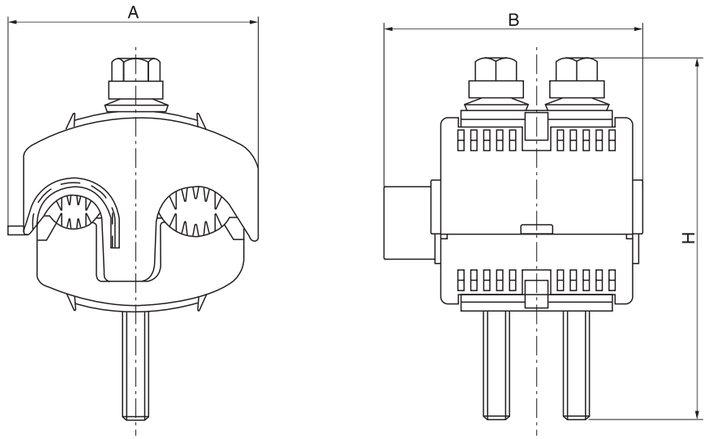
Modle	Conductor Range(mm^2)	
	Main	Tap
ABS	25-70	6-35
SMMA-1	16-95	16-25
SMMA-2	70-95	70-95
SMHA	70-185	70-120
CPA	16-70	16-70
DP10	50-70	50-70

SMC Piercing connector (1kV)

Application

Application to branch connection and succession for 1kV insulated overhead distribution systems.





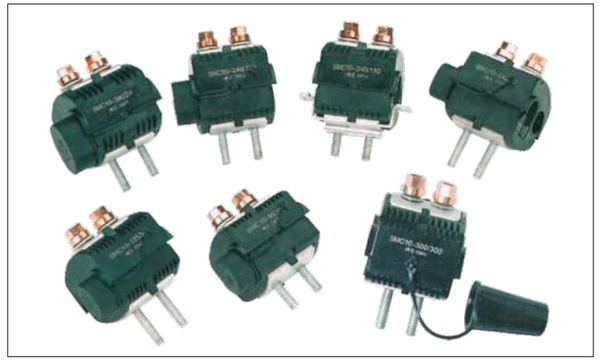
Technical Data

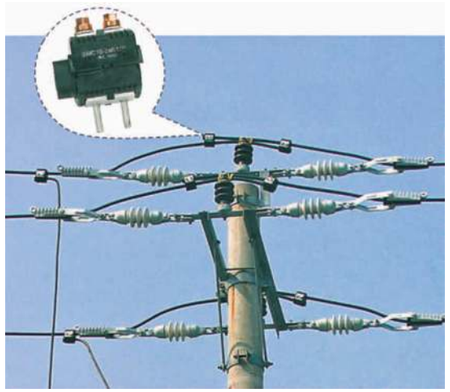
Modle	Applicable cable(mm^2)		Dimensions(mm)			Nominal Current(A)	Bolt No. (Piece)	Main application	Note
	Main line	Branch line	A	B	H				
SMC-150/150	35~150	35~150	65	53	87	342	2	The connection of main circuitries, the branch connection for main circuitries to house circuitries, electric appliances or street light.	Low-voltage double-insulation cable, available with the specifications of high-voltage piercing connector.
SMC-120/50	25~120	10~50	56	51	78	162	1		
SMC-95/50	25~95	6~50	54	51	78	162	1		
SMC-50/35	16~50	4~35	45	51	68	132	1		
SMC-95/10	25~95	1.5~10	37	25	58	75	1		
SMC-50/10	10~50	1.5~10	32	32	49	75	1		
SMC-240/240	95~240	95~240	90	85.5	113	476	2		
SMC-240/185	95~240	70~185	85.5	83	113	399	2		
SMC-240/50	150~240	16~50	76	83	113	162	2		
SMC-185/95	70~185	16~95	78.5	80.5	113	257	2		

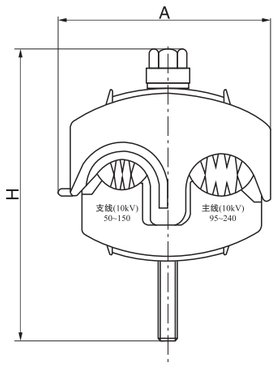
SMC 10 Piercing connector (10kV)

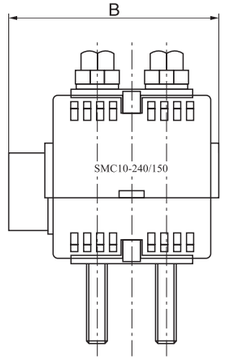
Application

Application to branch connection and succession for 10kV insulated overhead distribution systems.









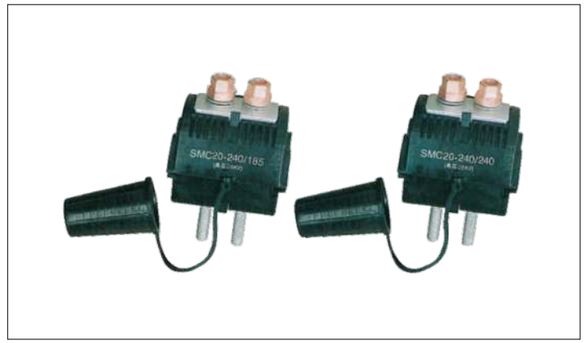
Technical Data

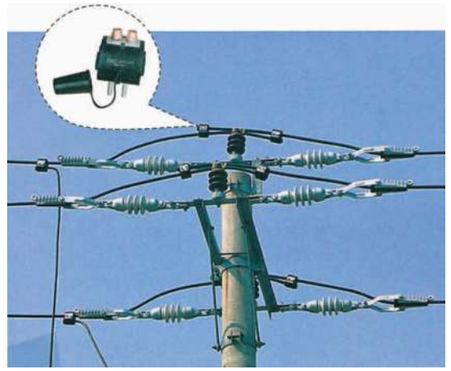
Modle	Applicable cable(mm^2)		Dimensions(mm)			Nominal Current(A)	Bolt No. (Piece)	Main application
	Main line	Branch line	A	B	H			
SMC10-300/300	150~300	150~300	100	85	136	600	2	The connection of main circuitries, the connection of main circuitry and branch circuitry.
SMC10-300/150	150~300	35~150	92	83	118	342	2	
SMC10-240/240	95~240	95~240	90	85.5	113	476	2	
SMC10-240/150	95~240	50~150	85.5	83	113	342	2	
SMC10-240/50	95~240	16~50	76	83	113	162	2	
SMC10-185/50	95~185	16~50	78.5	80.5	113	162	2	
SMC10-95/70	25~95	16~70	68	82.5	97.5	207	2	

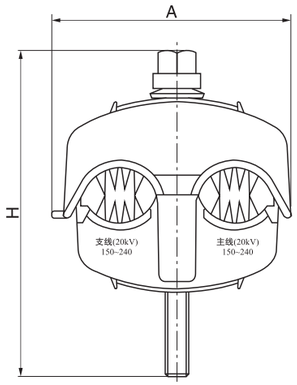
SMC 20 Piercing connector (20kV)

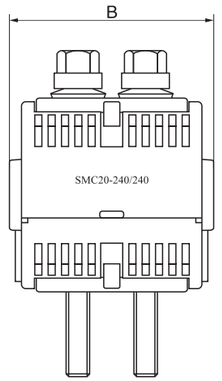
Application

Application to branch connection and succession for 20kV insulated overhead distribution systems.









Technical Data

Modle	Applicable cable(mm^2)		Dimensions(mm)			Nominal Current(A)	Bolt No. (Piece)	Main application
	Main line	Branch line	A	B	H			
SMC20-240/185	95~240	50~185	100	91	141	399	2	The connection of main circuitries, the connection of main circuitry and branch circuitry.
SMC20-240/240	150~240	150~240	100	91	141	476	2	

SMCF Piercing grounding protection(1kV)

Application

Application to grounding protection during electric power construction for 1kV or below insulated overhead line.

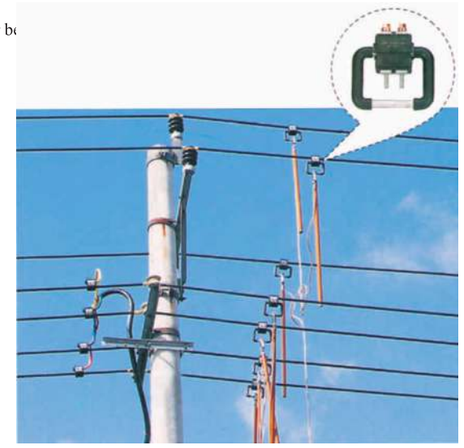
Technical Data

Modle	Applicable voltage(kV)	Applicable cable(mm^2)	Dimensions(mm)			Nominal Current(A)	Bolt No. (Piece)	Main application
			A	B	H			
SMCF-240/150	1	150~240	160	140	113	476	2	The grounded safety protection of main circuitry when electric power construction.
SMCF-185/95	1	95~185	158	140	113	399	2	
SMCF-120/35	1	35~120	152.5	106	87	299	2	
SMCF-95/16	1	16~95	139	88	78	257	1	

SMCF Piercing grounding protection(10kV)

Application

Application to grounding protection during electric power construction for 10kV or b



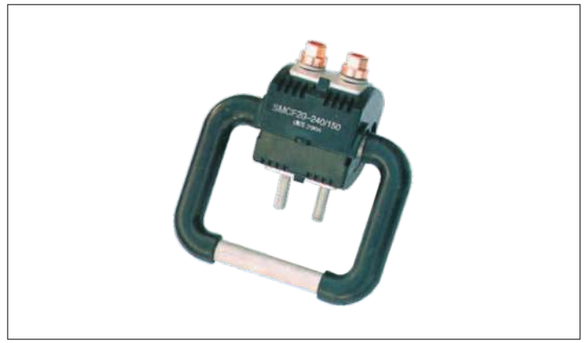
Technical Data

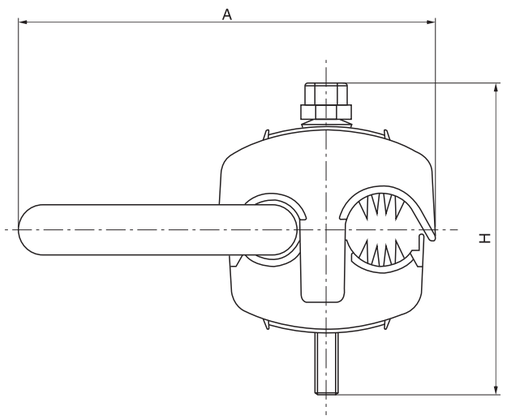
Modle	Applicable voltage(kV)	Applicable cable(mm^2)	Dimensions(mm)			Nominal Current(A)	Bolt No. (Piece)	Main application
			A	B	H			
SMCF10-300/150	10	150~300	167.5	140	118	600	2	The grounded safety protection of main circuitry when electric power construction.
SMCF10-240/150	10	150~240	160	140	113	476	2	
SMCF10-185/95	10	95~185	158	140	113	399	2	
SMCF10-95/25	10	25~95	148.5	140	98	257	2	

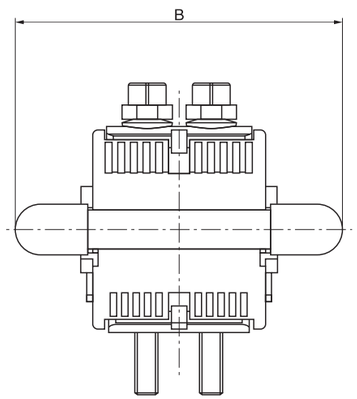
SMCF Piercing grounding protection(20kV)

Application

Application to grounding protection during electric power construction for 20kV or b







Technical Data

Modle	Applicable voltage(kV)	Applicable cable(mm^2)	Dimensions(mm)			Nominal Current(A)	Bolt No. (Piece)	Main application
			A	B	H			
SMCF20-120/35	20	35~120	166	140	123	299	2	The grounded safety protection of main circuitry when electric power construction.
SMCF20-240/150	20	150~240	170	140	140	476	2	

End cap

PC

Material: Plastic
Product property: It is used to waterproof and insulate the end of the conductor(0.6/1kV).

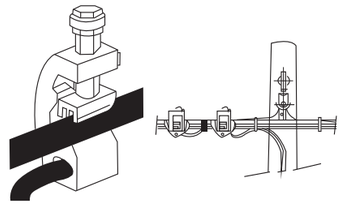
Modle	Conductor Cross–section(mm^2)
PC6-35	6-35
PC35-70	35-70
PC70-95	70-95
PC95-120	95-120
PC120-185	120-185

Insulated piercing connector

PI–71

CD–71

PC–150



P–71

P–72

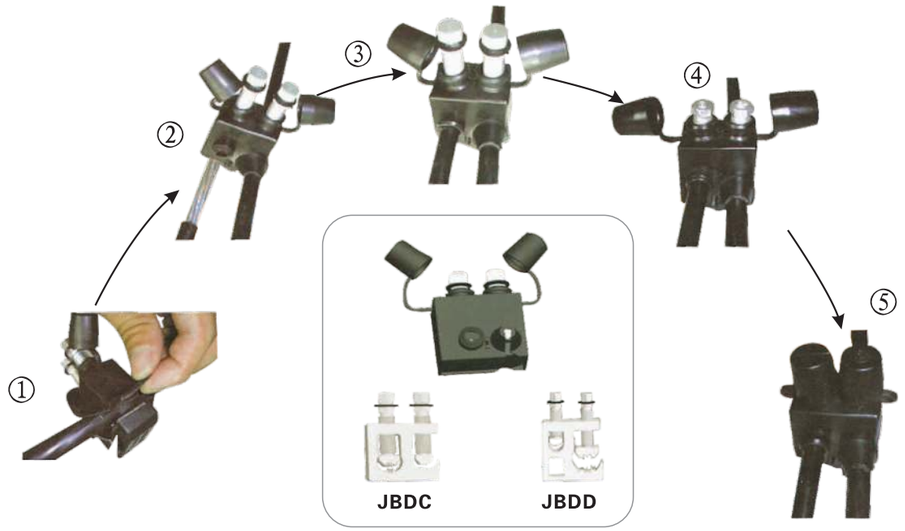
P–150

P–151

Material: High strength aluminium alloy, anti-UV plastic
A broad usage in the low voltage insulation lines, leading the branch connection to the main conductor. T-connection of low voltage insulation wire service and cable branch connection for building distribution system. The material for the inside body is high strength aluminum alloy, and the insulation cover is used polyvinyl chloride(PVC). The connectors with specially designed contact teeth, are suitable for the connection of aluminum. Put the main conductor and branch conductor parallel into the teeth grooves of the clamp, tighten the bolts, pierce the insulation of two conductors to make the conductors connect.
The insulation cover functions as waterproof and sealing perfectly.
At the breaking force of the conductor, the connector will not be distorted and broken. At the rated current and short circuit, rising temperature of the connector should be less than the connecting conductor.

Modle	Main Conductor Cross–section(mm^2)	Tap Conductor Cross–section(mm^2)
PI-71	35-95	4-54
CD-71	35-95	4-54
PC-150	35-150	4-50
P-71	35-95	4-50
P-72	35-95	2×(4-50)
P-150	70-150	2×(4-54)
P-151	16-150	6-95

Insulated piercing connector



Material: High strength aluminium alloy, anti-UV plastic

Product property: JBDC and JBDD series products have more functions than JBD.

JBDC is to lead the branch from the bare main line, while JBDD is to lead the branch from the insulated main line. Tighten the bolt with an ideal torque, which ensures the best quality of connection.

Modle	Bare Main Conductor Cross-section(mm^2)	Insulated Branch Conductor Cross-section(mm^2)
JBDC6-35/6-35	6-35	6-35
JBDC50-150/6-35	50-150	6-35
JBDC50-150/35-95	50-150	35-95

Modle	Insulated Main Conductor Cross-section(mm^2)	Bare Branch Conductor Cross-section(mm^2)
JBDD6-35/6-35	6-35	6-35
JBDD50-150/6-35	50-150	6-35
JBDD50-150/35-95	50-150	35-95

Insulated piercing connector

SM35-P35

H1

Modle	Conductor range (mm^2)	Torque(N・m)	Insulator Endurance(6KV・1min)	Ageing Test(salt spray)
SM35-P35	10-16	10	OK	OK
H1	16-35	10	OK	OK

Simple installation

I -INSTALLATION

- There is no need to adjust the pre-positioned shearhead bolts prior to assembly.
- If required,strip the conductor to the length specified on the connector.
- Begin the assemblywith the dead conductor.
- Insert each conductor fully along the axis of the connector.Hold the conductor in place whilst pre-tightening the shearhead bolts to locate the cable.

For Installation under load(max.90A)("RED" side only)

- Secure the connector with the 1st conductor installed,to the ABC bundle with tape or a cable tie.
- Secure the electrical contact between the stripped conductor and the end of the adaptor during the tightening.
- To complete the installation,tighten the shearhead bolt untill breaks off.

II-DISMANTLING "RED" SIDE ONLY

- The connector can be removed,off load,for the red side by use 2nd remaining hex head.
- To remove under load,cut the conductor approx,1 cm from the connector,using an appropriate cable cutter.Then lose the "red" screw and remove the remainingsection.
- Use the plug provided to reseal the connector.

III-REINSTALLATION"RED" SIDE ONLY

- Strip the conductor to the length specified on the connector.
- Insert the stripped end of the conductor into the connector,as instructed in section1.
- To complete the installation,tighten the hex head bolt to the torque level specified on the connector.

IV-CAUTION(SM35-P35)

- Care should be taken to ensure that the correctly prepared conductor is inserted into the correct end of the connector.
- "RED"load making sied for stripped conductor.
- "LACK"insulation piercing for un-stripped conductor.