

145kV Fluid filled termination

Porcelain insulator termination TOP145

Composite insulator termination TOC145

Application

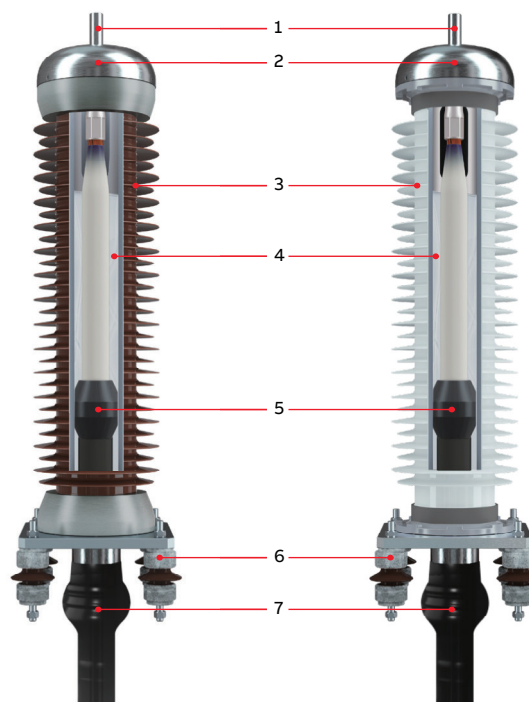
Suitable for 123 kV or 145 kV copper* Conductor XLPE insulated metal sheath cable, installed in the fixed connection point position and high pollution level of the occasion.

Standards

Designed to meet the requirements of international accepted standards, IEC 60840 and China standard GB/ T 11017.

Features

1. Top bolt
Crimping connector**, available for copper* conductor cables.
2. Shielding cover
High-quality aluminum alloy, good rainproof and uniform top corona performance.
3. Insulator
Porcelain or composite insulator, good hydrophobicity and corrosion resistance, up to 145 kV IV level of pollution conditions.
4. Insulating oil
Insulator filled with high quality polyisobutylene insulating oil.
5. Stress cone
The raw material liquid silicone rubber (LSR), enables a more compact structure. Different sizes are designed to fit cables with different cross-section area, to ensure optimal interface pressure between stress cone and cables, as well as the excellent electrical and insulation performance. All stress cone pass the routine test.
6. Supporting insulator
High strength electric porcelain.
7. Cable gland
Provides good sealing and grounding for the termination.



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Main electrical properties:

Standard, IEC 60840, GB/ T 11017	Type test kV	Routine test*** kV
Highest voltage for equipment, U_m	145	145
Rated voltage, U	132	132
Value of U_0 for determination of test voltage	76	76
Heating cycle voltage test, $2 U_0$	152/20cycles	/
Partial discharge test $<5 \text{ pC}$, $1.5 U_0$	114	114
Switching impulse voltage test	+/-650	/
AC-voltage test, $2.5 U_0$	190, (15mins)	190, (30mins)
Visual inspection	Preformed	Preformed

NOTE:

* Please contact ABB in case of aluminum conductor cable;

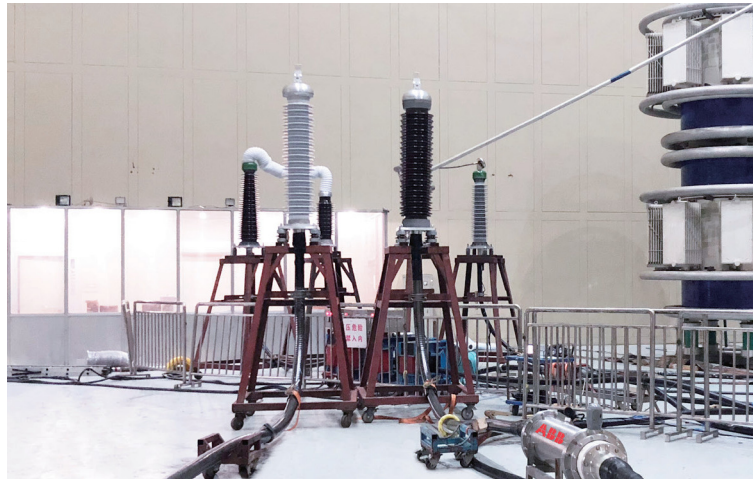
** Please contact ABB, if bolt connectors are required;

*** All stress cone pass the routine test.

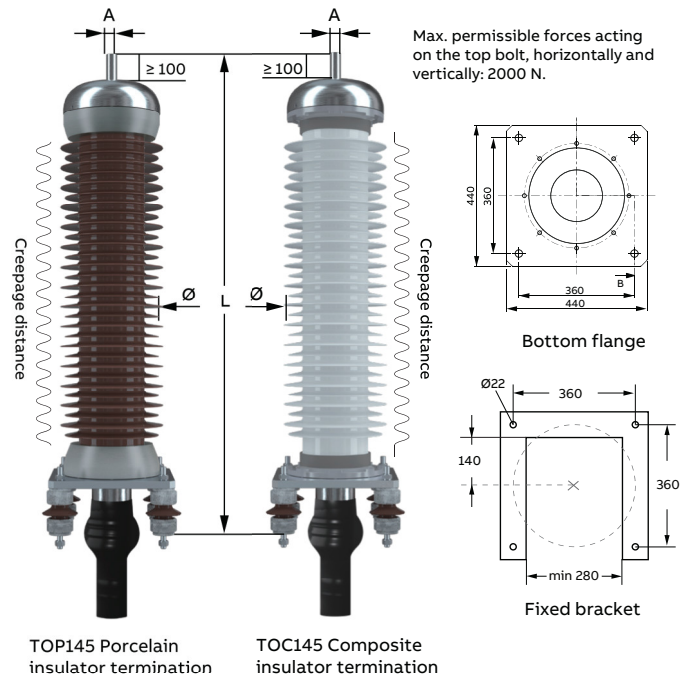
Technical specification

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High-voltage test



Size information:

Type	Dimensions(mm)		
Creepage distance	L	Ø	
TOP 145	≥ 3960	~1750	~375
TOP 145	≥ 4945	~1950	~375
TOC 145	≥ 4350	~1750	~398
TOC 145	≥ 5000	~1950	~398

Cable range applicable:

Cable type*	126 kV	145 kV
XLPE Ø(mm)	57-84	57-84
Conductor(mm ²)	240-1200	240-1200
Over sheath Ø(mm)	≤ 120	≤ 120

*Please contact ABB for 66 kV XLPE cables.

Storage:

When stored in original, unopened status at normal and dry conditions:

- The stress cone has a shelf life of five years from the date of manufacture
- Tape and grease have a shelf life of three years
- Insulating oil has a shelf life of three years
- Metal parts have no shelf life limit

Packaging information:

Type	Weight(kg)	Dimensions(mm)
TOP 145	~ 150	~ 2200x600x500*
TOC 145	~ 120	~ 2200x600x500*

*For further information, please contact ABB.

Top bolt dimensions:

Type	Conductor(mm ²)	A(mm)
TOP 145	240-400	Ø30
	500-1200	Ø40
TOC 145	240-400	Ø30
	500-1200	Ø40

Options:

Name	Conductor(mm ²)	Pitch-row(mm)	diameter(mm)
Outlet splint	240-400	40×40	4×Ø14
	500-1200	50×50	4×Ø18