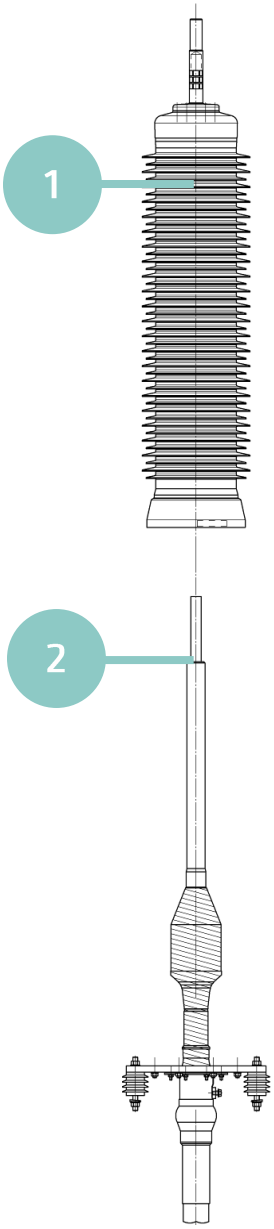
OTC-123-X

Composite Outdoor Termination

ClickFit

Product Description

Termination designed to connect an extruded high voltage cable to outdoor apparatus or overhead lines.



BASIC COMPONENTS

1) INSULATOR

- Outdoor cable termination for very heavy polluted condition
- Composite type insulator with glass fiber reinforced epoxy resin tube and silicon rubber sheds, shed color light grey
- Top and bottom flanges bonded to the composite insulator
- Corona shield integrated in top flange
- Solid rod top connector

2) CABLE END

- Pre-moulded and factory-tested stress cone
- Base plate
- Copper casing provided with M12 earth connection
- Support insulators (epoxy resin), with stainless steel studs
- Un-pressurized synthetic oil as an insulating medium

BASIC FEATURES

- Easy installation
- Maintenance free

ADDITIONAL OPTIONS

- Arcing horns
- Aerial lugs
- Integration of optical fiber exit in the copper casing
- Integration of PD sensor

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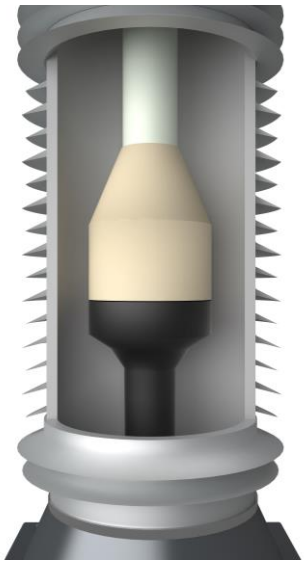
RANGE OF APPLICATION [1]



- Maximum system voltage : 123 kV
- Aluminium round solid conductor : 150 – 2500 mm^2
- Aluminium round stranded or Milliken conductor : 150 – 2500 mm^2
- Copper round stranded or Milliken conductor : 150 – 2500 mm^2
- Maximum cable insulation diameter (prepared) : 100 mm

CREEPAGE DISTANCE

- Minimum guaranteed flashover distance : 1138 mm
- Minimum guaranteed creepage distance : 3976 mm
- Pollution level IEC-60815-2008, incl. K=1 : e-Very Heavy

INSTALLATION

- Condition : Protected against rain and dust
- Installation : By certified/trained jointers only
- Installation temperature : min 0 °C / max +40 °C
- Ambient operating temperature : min -60 °C / max +50 °C

RECOMMENDATION FOR AERIAL LUGS (Nema Pads)

Aerial lugs are not part of the accessory kit, but can be included on request.

Depending on the conductor material of the cable, the following solutions are possible:

Aluminium Conductor (Al top connector)	Copper Conductor (tinned Cu top connector)
Aluminium lug	Copper bronze lug
Transition lug (Al - Cu)	Transition lug (Cu-Al)
Tinned copper lug	

Installation of the aerial lug needs to be done according to Prysmian specifications or those of the aerial lug supplier.

[1] Deviating cable specifications possible on request

Electrical Information

RATED VOLTAGE

24 hours AC	: 190 kV
1 minute AC	: 230 kV
Lightning impulse withstand voltage (+10 / -10)	: 550 kV

SUPPORT INSULATOR WITHSTANDS VOLTAGES

AC voltage	: 10 kV for 1 min
DC voltage	: 20 kV for 1 min
Impulse discharge voltage (+10 / -10)	: 40 kV

ELECTRICAL ROUTINE TEST

AC voltage withstand test	: 220 kV for 30 min
Partial discharge test	: Free of discharges at 174 kV

CURRENT CAPACITY

Nominal operating current	: Limited by cable specification
Short circuit current (1 second)	: 60 kA [2]

ALL TYPE TESTS ACCORDING TO REQUIREMENTS

National and International Standards	: IEC-60840 NEN-HD 632 IEEE Std.48

MISCELLANEOUS

Maximum allowed inclination with vertical	: 30°
Maximum allowed force on top connector	: 4000 N (horizontal)
Approximate weight	: 150 kg

[2] Depending on conductor size

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Typical Drawing

Conductor cross section	L	D
[mm²]	[mm]	[mm]
150 – 400 Al	1755	40
500- 1200 Al	1810	40
>1200 – 1600 Al	1700	60
150- 400 Cu	1705	40
500 – 800 Cu	1760	40
1000 – 1200 Cu	1760	60
>1200 – 2500 Cu	1760	60

Note:

→ for the US market:

"D" will be 1,5 inch instead of 40mm and 2 inch instead of 60mm