

Outdoor single core termination – CDTO-1C

For polymeric cables– Coldfit termination

Generally meets the requirements of CENELEC HD 629.1S2 –
IEEE 48 – IEC 60502-4

Coldfit®

Medium Voltage (MV)
Up to 19/33 (36) kV
MV Terminations
Référence: CDTO-1C



Product Application and Design

Utilisation

- Outdoor, subject to severe climatic conditions, solar radiation and pollution.
- Terminating cables onto overhead lines or busbars.

Cables

- Single core polymeric insulation (PE, XLPE, EPR ...).
- Copper or aluminium conductors, solid or stranded.
- Semi-conducting screen either extruded or taped.
- Metallic screen of Cu wire (T3), Cu tape (T2) or polylam (T1) type.
- Non-armoured or armoured (either tape, wire or polylam type).
- Insulation voltage up to 19/33 (36) kV.
- Conductor sizes: 25 to 1000 mm².

Packing

Supplied as a kit of three single termination containing all the necessary components, including the shear-bolt lugs.

Shipping weight and volume (approx): 1.5 kg / 0.010m³

- 12 kV	➔	1.7 kg / 0.007 m ³
- 17.5 kV	➔	2 kg / 0.01 m ³
- 24 kV	➔	2.2 kg / 0.01 m ³
- 36 kV	➔	2.5 kg / 0.01 m ³

Other products

Indoor coldfit terminations for 1/C polymeric cables up to 19/33 (36) kV CDTI-1C.

Indoor and outdoor coldshrink terminations for 3/C polymeric cables up to 36 kV CDTI-3C, CDTO-3C.

Installation features

Coldshrink : no need for special tools, no heating or filling.

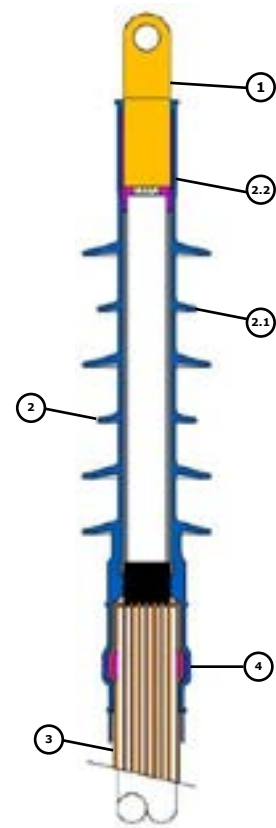
Vertical or angled (30°) position.

Energizing may take place immediately after completion of the termination.



Description

- ① **Conductor lug**
Copper or aluminium. Crimped, deep indented or bolted type.
- ② **Insulation body**
Coldshrink element, moulded in non-tracking silicone rubber and expanded on a removable carrier.
- ②.1 **Stress relief tube**
Integrated, made of high permittivity material. Controls the distribution of the electrical field at the cable screen cutback.
- ②.2 **Sealing mastic**
Industrially applied on the removable carrier.
- ③ **Earth fault device**
Fitted as necessary, depending on cable design (T1-T2-T3).
- ④ **Sealing mastic**



Selection guide

1- Select in the table below the kit model corresponding to the diameter over insulation of cable.

Voltage	Diam. Over insulation in mm		Conductor size in mm ² (for guidance only)		Kit reference
	min	max	min	max	
12 kV	14.5	25	35	150	CDTO-1C-12-A
	17	28	70	185	CDTO-1C-12-B
	19	33	95	300	CDTO-1C-12-C
	21.5	38	150	500	CDTO-1C-12-E
	23	42	185	630	CDTO-1C-12-F*
	27.5	50	300	630	CDTO-1C-12-G
	36	65	630	1000	CDTO-1C-12-I*
17 kV	14.5	25	25	120	CDTO-1C-17-A
	17	28	50	150	CDTO-1C-17-B
	19	33	95	240	CDTO-1C-17-C
	21.5	38	150	400	CDTO-1C-17-E
	23	42	150	500	CDTO-1C-17-F*
	27.5	50	300	630	CDTO-1C-17-G
	36	65	630	1000	CDTO-1C-17-I*
24 kV	17	28	25	120	CDTO-1C-24-B
	19	33	50	240	CDTO-1C-24-C
	21.5	38	95	300	CDTO-1C-24-E*
	23	42	150	500	CDTO-1C-24-F
	27.5	50	185	630	CDTO-1C-24-G
	36	65	630	1000	CDTO-1C-24-I*
36 kV	21.5	38	25	185	CDTO-1C-36-E
	23	42	35	300	CDTO-1C-36-F
	27.5	50	95	500	CDTO-1C-36-G
	29	53	120	630	CDTO-1C-36-H
	36	65	630	1000	CDTO-1C-36-I*

* Consult us

For high gradient cables (reduced insulation thickness) or other cross-sections, please contact us.

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www.prysmiangroup.com

2- Select suitable earthing device in the table below.









Earthing Device Reference	Type of Metallic Screen of Cable
T1	polylam
T2	Copper tape
T3	Copper wires

Example of order

1x300mm² 24 kV cable with 30 mm insulation diameter and copper wire metallic screen : **CDTO-1C-24-G-Ne-T3-300**.

On request : conductor lug: crimped, deep indented or bolted type.

Overall dimensions & pollution level according to IEC/TS60815-1 : 2008

6.35/11 (12) kV 6/10 (12) kV	8.7/15 (17.5) kV	12.7/22 (24) kV 12/20 (24) kV	19/33 (36) kV 18/30 (36) kV		
 <p>315 min</p> <p>Minimum creepage distance 372 mm</p>	 <p>315 min</p> <p>Minimum creepage distance 438 mm</p>	 <p>390 min</p> <p>Minimum creepage distance 600 mm</p>	 <p>490 min</p> <p>Minimum creepage distance 721 mm</p>	MEDIUM 34.7 mm/kV (Nc)	
				 <p>560 min</p> <p>Minimum creepage distance 900 mm</p>	HEAVY 43.3 mm/kV (Nd)
		 <p>390 min</p> <p>Minimum creepage distance 543 mm</p>	 <p>490 min</p> <p>Minimum creepage distance 744 mm</p>	 <p>645 min</p> <p>Minimum creepage distance 1116 mm</p>	VERY HEAVY 53.7 mm/kV (Ne)

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Coldfit®



Medium Voltage (MV)
Up to 12/20 (24) kV
For 36 kV, please consult us.
MV Terminations
Reference: CDTI-1C

Product Application and Design

Utilisation

- Indoor.
- In boxes and compact switchgears.
- In terminal boxes located outdoor and subject to condensation.

Cable

- Single core polymeric insulation (PE, XLPE, EPR ...).
- Copper or aluminium conductors.
- Semi-conducting screen either extruded or taped.
- Metallic screen of Cu wire (T3), Cu tape (T2) or polylam (T1) type.
- Non-armoured or armoured (either tape, wire or polylam type).
- Insulation voltage up to 12/20 (24) kV.
- Conductor sizes: 25 to 630 mm².

Packing

Supplied as a kit of three single termination containing all the necessary components, including the shear-bolt lugs. (if requested)

Shipping weight and volume (approx): please consult us.

Other products

Indoor coldfit terminations for 1/C polymeric cables up to 18/30 (36) kV CDTO-1C.

Indoor and outdoor coldshrink terminations for 3/C polymeric cables up to 36 kV CDTI-3C, CDTO-3C.



Installation features

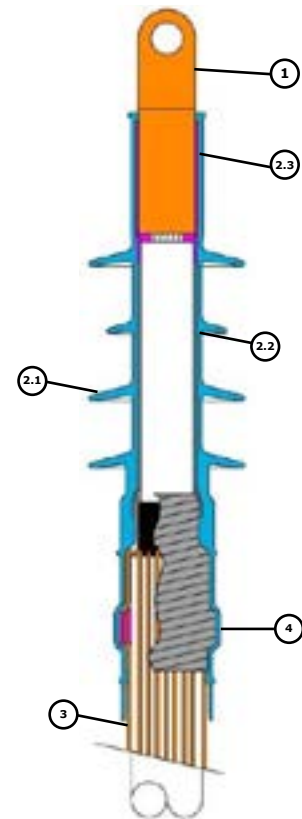
Coldshrink : no need for special tools, no heating or filling.

Vertical or angled (30°) position.

Energizing may take place immediately after completion of the termination.

Description

- ① **Conductor lug**
Copper or aluminium. Crimped, deep intended or bolted type.
- ② **Termination body**
Coldshrink elements expanded on a removable carrier composed with :
 - ②.1 **Insulation body with 4 SHEDS**
Moulded in non-tracking silicone rubber.
 - ②.2 **Stress relief tube.**
Industrially applied on the removable carrier.
 - ②.3 **Sealing mastic**
Already integrated with the body.
- ③ **Earth fault device**
Fitted as necessary, depending on cable metallic screen design.
(T1 - T2 - T3)
- ④ **Sealing mastic**



Selection guide

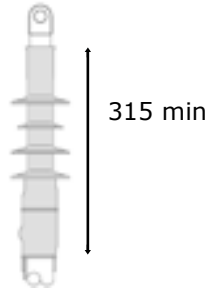
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For cables with reduced insulation thickness or other cross-sections, please contact us.

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	27.5	50	95	500	CDTI-1C-36-G
	29	53	120	630	CDTI-1C-36-H
	36	65	630	1000	CDTI-1C-36-I*

* Consult us

Description



Minimum creepage distance 372 mm.

2. Select suitable earthing device in the table below.

Earthing Device Reference	Type of Cable Metallic Screen
T1	polyam
T2	Copper tape
T3	Copper wires
Please contact us	Other

Example of order

1x240 mm², 24 kV cable with 30mm insulation diameter and copper wire metallic screen : **CDTI-1C-24-E-T3-240.**

On request : conductor lug: crimped, deep indented or bolted type.