

直流海底电缆

DC Submarine Power Cable

产品结构图

Product Structure Diagram



产品描述

柔性直流输电系统又称基于电压源型换流器（VSC）的高压直流输电，是近年发展起来的一种新型直流输电技术。系统包括直流海缆、换流变压器及相关附件。

Product Description

IDC power transmission system includes the DC Submarine cable, converter transformers and related accessories.

适用范围

电力传输、多个交流网互联和控制、不同电网并入、如海岛电网、海上平台、风力发电等、连接分散的小型发电厂、大距离供电、

Scope of Application

It mainly used in Power transmission, AC power network interconnection and control, different networks, such as Island Power grid, offshore platforms, wind power, connecting power plants, long distance power supply and marine power supply.

产品特点

- ◎ 输送效率高、线路损耗小，有利于长距离输电
- ◎ 易于调节电流和改变功率传送方向，稳定性高
- ◎ 不产生大的短路和环路电流
- ◎ 与交流系统相比具有更长寿命
- ◎ 提高配电网电能质量

Features

- ◎ Efficient transportation, slighter loss and long-distance transmission
- ◎ Easy to adjust and change the current power transmission direction and high stability
- ◎ No larger short circuit current and ring circuit current
- ◎ Longer life than AC system
- ◎ Improving the power quality of distribution

直流海底电缆主要技术参数 The Main Technical Parameters

截面 Cross Section	载流量 Current capacity(A)		± 30kV海缆传输功率 Transmission Power				± 80kV海缆传输功率 Transmission Power			
	铜导体 Conductor (mm ²)	并排敷设 Abreast Installation	定距敷设 Parallel Instillation	并排敷设 Abreast Installation(MW)	定距敷设 Parallel Instillation(MW)	电缆重量 Weight of Cable (mm)	电缆外径 Cable Diameter (mm)	并排敷设 Abreast Installation(MW)	定距敷设 Parallel Instillation(MW)	电缆重量 Weight of Cable (mm)
95	285	330	17.1	19.8	5.1	44.2	45.6	52.8	6.3	51.4
120	325	380	19.5	22.8	5.5	45.6	52.0	60.8	6.8	52.8
150	365	425	21.9	25.5	6.0	47.2	58.4	68.0	7.3	54.4
185	420	485	25.2	29.1	6.0	48.8	67.2	77.6	7.8	56.0
240	485	575	29.1	34.5	7.4	51.0	77.6	92.0	8.7	58.2
300	555	655	33.3	39.3	8.3	53.2	88.8	104.8	10.6	62.4
400	645	755	38.7	45.3	9.6	56.4	103.2	120.8	12.1	66.6
500	740	875	44.4	52.5	11.1	60.2	118.4	140.0	14.4	72.3
630	855	1020	51.3	61.2	14.1	67.0	136.8	163.2	16.3	75.8
800	985	1175	59.1	70.5	15.5	71.2	157.6	188.0	19.0	80.5
1000	1125	1340	67.5	80.4	19.5	76.7	180.0	214.4	21.8	84.8
1200	1240	1470	74.4	88.2	22.4	81.3	198.4	235.2	26.3	91.5
1600	1450	1740	87	104.4	29.1	90.3	232.0	278.4	31.9	99.5

注：海床滩涂敷设：深埋1.0m,温度28℃，热阻1.2K.W/m.

Note:Seabed Intertidal installation:Buried depth 1.0m, Temperature 28℃,Thermal resistance 1.2K.W/m

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300	530	605	159	181	131.1	73.6	265	302	19.6	92.6
400	615	700	184	210	15.0	77.5	307	350	21.5	96.1
500	710	810	213	243	16.9	81.5	355	405	23.8	101.0
630	820	945	246	283	20.4	87.1	410	472	26.1	105.0
800	950	1095	285	328	23.1	91.3	475	547	29.0	109.0
1000	1080	1255	324	376	26.2	96.7	540	627	32.7	115.0
1200	1190	1375	357	412	29.4	101.0	595	687	38.2	121.0
1600	1405	1640	421	492	35.1	108.0	702	820	40.4	128.0
2000	1605	1875	481	562	41.1	116.0	802	937	50.3	135.0
2500	1830	2146	549	643	50.0	125.0	915	1072	57.6	142.0
3000	2035	2395	610	718	56.7	131.2	1017	1197	64.5	148.0

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