



Instruction on Cable Selection

1. Like ordinary cables, low-smoke, low-halogen (halogen-free) and anti-flaming cables should be produced in accordance with IEC 60502, GB/T 19666-2005 and GB/T 12706.
2. Low-smoke, low-halogen (halogen-free) and anti-flaming cables takes advantage of a variety of low-halogen or halogen-free anti-flaming materials and reasonable structure, realize low-smoke and low-halogen (halogen-free) performance without any change in electric insulating properties and material parameters, and make the flame resistance satisfy the requirements of group burning test specified by Class B or Class A under GB/T 18380.3-2008.
3. Compared with cables of general specifications, the performances of low-smoke, low-halogen (halogen-free) and anti-flaming cable including operating temperature, conductor resistance, insulation resistance, carrying capacity, bending radius, laying conditions, application occasions, installation method, and so on can be deemed equal to the general cables.
4. The expressive methods of low-smoke, low-halogen (halogen-free) and anti-flaming cable
 DD- low-smoke and low-halogen WD- low-smoke and halogen-free
 ZA- Class-A group burning test ZB- Class-B group burning test Y- Polyolefin
 The expressive methods of other symbols and numbers should be equal to general cable.
 For example: DDZA-VV22 PVC insulated and sheathed, steel tape-armored, low-smoke, low-halogen and anti-flaming Cat A power cables.
 WDZA-YJY23 XLPE crosslinked, polyolefin insulated, low-smoke (halogen-free) sheathed, steel tape armored and anti-flaming Cat A power cables.
5. In case of radial, mechanical, and external force, steel-armored cables (Model 22 and 23) can be adopted; in case of 90 C operating temperature, crosslinked polythene insulated cables can be selected; in case of densely-populated places and underground public facilities, low-halogen and low-smoke cables can be selected (Model DD); in case of luxury hotels, office buildings, subway, hospital and important facilities, halogen-free and low-smoke cables can be selected (Model WD).
6. Schematic diagram of low-smoke, low-halogen (halogen-free), and anti-flaming cables.
7. According to customer requirements, performance against termites can be added.

电缆型号、规格及范围 Cable type, specifications, and scope

一、PVC 绝缘电力电缆 PVC insulated power cables

GB/T 19666-2005/GB/T 12706-2008

型号 Model	芯数 Core number	额定电压 Rated voltage kV		
		0.6/1	1.8/3	3.6/6
		标称截面 Nominal section (mm ²)		
DDZA(B)-VV DDZA(B)-VV22	1	4-630	10-630	10-630
	2	4-300	10-300	10-300
	3	4-400	10-400	10-400
	3+1	4-400	10-400	10-300
	4	4-400	10-400	10-300
	5	4-400	4-300	10-300
	4+1	4-400	4-300	10-300
	3+2	4-400	4-300	10-300

注：单芯电缆铠装应采用非磁性材料或采用减少磁损耗结构
 Note: For the armor of single-core cables, nonmagnetic materials should be adopted or loss structure should be reduced.

二、耐火电缆类 Fire-resistant cables

型号 Model	电压等级 Voltage class kV	芯数 Core number	截面 Section (mm ²)
DDN-VV、DDN-YJV、 DDN-VV22、DDN-YJV22、 WDN-YJY、WDN-YJY23、	0.6/1	1、(VV、YJV、YJY类)	4-630
		2、3、3+1、4	4-300
		3+2、4+1、5	4-240
注：耐火电缆耐火等级符合GB/T 19216.21-2008要求 Note: The fire-resistant cables conform to GB/T 19216.21-2008			

三、XLPE 绝缘电力电缆 XLPE insulated power cables

GB/T 19666-2005/GB/T 12706-2008

型号 Model	芯数 Core number	额定电压 Rated voltage kV			
		0.6/1	1.8/3	3.6/6	8.7/15
		标称截面 Nominal section (mm ²)			
DDZA(B)-YJV WDZA(B)-YJY DDZA(B)-YJV22 WDZA(B)-YJY23	1	4-630	10-630	25-630	25-300
	2	4-300	—	—	—
	3	4-400	10-400	25-400	25-300
	3+1	4-400	10-400	25-300	—
	4	4-400	10-400	25-300	—
	5	4-400	10-400	25-300	—
	3+2	4-400	10-400	25-300	—
	4.1	4-400	10-400	25-300	—
注：单芯电缆铠装应采用非磁性材料或采用减少磁损耗结构 Note: For the armor of single-core cables, nonmagnetic materials should be adopted or loss structure should be reduced.					