

# Production Catalog

## PVC insulated cable with rated voltage of 450/750V and below

### Product overview

This product apply to power plant, fixed wiring and flexible connected electric appliance with rated voltage of 450/750V and below.

**Voltage grade:**

**IEC standard:**  $U_0/U$ : 300/500V、450/750V、300/300V

**Note:**  $U_0$ —Rated power frequency voltage between earth and metal shield to conductor for cable design

$U$ —Rated power frequency voltage among conductors for cable design

**Executive standard:**

**IEC 60227**

PVC insulated cable with rated voltage of 450/750V and below

### Product features

**Working temperature:**

60227IEC07(BV-90): 90°C;

60227IEC08(BV-90): 90°C;

Other types: 70°C

**Cable laying temperature:** the ambient temperature during cable laying shall not less than 0°C.

**Bending radius:**  $OD \leq 25mm$ : Bending radius  $\geq 4OD$ ;

$OD > 25mm$ : Bending radius  $\geq 6OD$ ;

**Note:** OD—finished cable diameter

### Typical cable type and manufacturing scope

Type	Voltage grade	Specification	Name
60227 IEC 01 (BV)	450/750V	1.5 ~ 400mm <sup>2</sup>	General use single core hard conductor unsheathed cable
60227 IEC 02 (RV)	450/750V	1.5 ~ 240mm <sup>2</sup>	General use single core flexible conductor unsheathed cable
60227 IEC 05 (BV)	300/500V	0.5 ~ 1mm <sup>2</sup>	Single core solid conductor unsheathed cable with conductor temperature of 70°C for internal wiring
60227 IEC 06 (RV)	300/500V	0.5 ~ 1mm <sup>2</sup>	Single core flexible conductor unsheathed cable with conductor temperature of 70°C for internal wiring

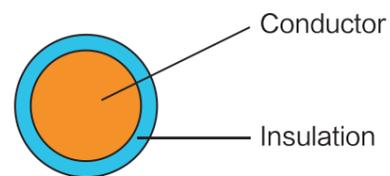
Type	Voltage grade	Specification	Name
60227 IEC 07 (BV-90)	300/500V	0.5 ~ 2.5mm <sup>2</sup>	Single core solid conductor unsheathed cable with conductor temperature of 90°C for internal wiring
60227 IEC 08 (RV-90)	300/500V	0.5 ~ 2.5mm <sup>2</sup>	Single core flexible conductor unsheathed cable with conductor temperature of 90°C for internal wiring
60227 IEC 10 (BVV)	300/500V	No. of cores: 2, 3, 4, 5 Cross section: 1.5 ~ 35mm <sup>2</sup>	Light PVC sheathed cable
60227 IEC 52 (RVV)	300/300V	2 × 0.5、 2 × 0.75 3 × 0.5、 3 × 0.75	Light PVC sheathed flexible wire
60227 IEC 53 (RVV)	300/500V	No. of cores: 2, 3, 4, 5 Cross section: 0.75 ~ 2.5mm <sup>2</sup>	Ordinary PVC sheathed flexible wire
60227 IEC 56 (RVV-90)	300/300V	No. of cores: 2, 3, 4, 5 Cross section: 0.75 ~ 2.5mm <sup>2</sup>	Heat resistant light PVC sheathed flexible wire with conductor temperature of 90°C
60227 IEC 57 (RVV-90)	300/500V	No. of cores: 2, 3, 4, 5 Cross section: 0.75 ~ 2.5mm <sup>2</sup>	Heat resistant ordinary PVC sheathed flexible wire with conductor temperature of 90°C
BV	300/500	0.75-1.0	Copper core PVC insulated cable
BLV	450/750	2.5-400	Aluminum core PVC insulated cable
BVR	450/750	2.5-185	Copper core PVC insulated flexible cable
BVV	300/500	0.75-185	Copper or aluminum core PVC insulated PVC sheathed round cable
BLVV	300/500	2.5-185	Copper or aluminum core PVC insulated PVC sheathed round cable

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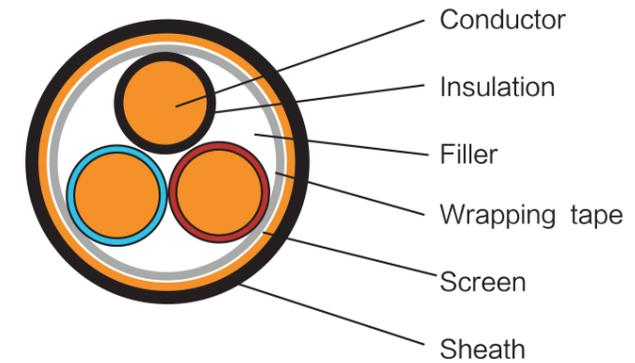
Type	Voltage grade	Specification	Name
BVVB	300/500	No. of cores: 2、3 Cross section: 0.75-10	Copper or aluminum core PVC insulated PVC sheathed flat cable
BLVVB	300/500	No. of cores: 2、3 Cross section: 2.5-10	Copper or aluminum PVC insulated PVC sheathed flat cable
RVS	300/300	No. of cores: 2 Cross section: 0.5-6	Copper core PVC insulated twisted flexible cable
RVB	300/300	No. of cores: 2 Cross section: 0.5-6	Copper PVC insulated flat unsheathed flexible cable
RVV	300/500	No. of cores: 2-41 Cross section: 0.5-10	Copper core PVC insulated PVC sheathed flexible cable
RVVP	300/300	No. of cores: 1、2、3-10、12、14、19、24、16、20、26 Cross section: 0.5-4	Copper core PVC insulated PVC sheathed screened flexible wire
RVP	300/300	No. of cores: 1、2 Cross section: 0.5-2.5	Copper PVC insulated screened flexible wire

### Typical structure drawing

60227 IEC 01(BV)



RVVP



### Main performance index for cable

S.N	Items	Technical performance
1	Conductor D.C resistance test	As per IEC 60227 standard
2	Insulated core voltage test	Rated voltage: 300/300V For the thickness not more than 0.6mm, test voltage: 1500V For the thickness more than 0.6mm, test voltage: 2000V Rated voltage: 300/500V For the thickness not more than 0.6mm, test voltage: 1500V For the thickness more than 0.6mm, test voltage: 2000V Rated voltage: 450/750V For the thickness more than 0.6mm, test voltage: 2500V, 5min, no breakdown occurs on insulation.
3	Finished cable voltage test	Rated voltage: 300/300V, test voltage: 2000V Rated voltage: 300/500V, test voltage: 2000V Rated voltage: 450/750V, test voltage: 2500V 5min, no breakdown occurs on insulation
4	Dimension	The average dimension of cable shall be in the range of product standard. The diameter difference (ovality) of any two points on the same cross section of round sheathed cable shall be not more than 15% of specified average diameter.

# Export performance

S.N	Contractor	Country	Project Name
1	China Energy Engineering Group Guangdong Power Engineering Co., Ltd.	Jordan	Jordan oil shale project
2	Wuxi Power Plant Auxiliary Equipment Co., Ltd.	Jordan	Jordan 2 × 235MW Attarat oil shale power station EPC project
3	Shandong Electrical Construction 3rd Engineering Company	Jordan	SAMRA power plant expansion project unit engineering
4	Shandong Electrical Construction Tiejun Electrical Engineering Company	Jordan	Hussein Re-powering Project
5	DQE International (Middle East) Branch	Iraq	Halfaya owned power plant pweriphery project
6	China Energy Construction Group Tianjin Electric Construction Company	Iraq	Iraq Maysan Project
7	China Shandong Foreign Economic & Technical Cooperation Group Co., Ltd.	Iraq	Overhead cable project in Iraq
8	China Petroleum Pipeline & Material Equipment Corp.	Iraq	Graff pipeline project in Iraq
9	Daqing oilfield construction Refco Group Ltd	Iraq	Halfaya CFPE oil tank engineering
10	China Petroleum Pipeline & Material Equipment Corp.	Iraq	GAZPROM Crude oil pipeline project in Iraq
11	China Petroleum Pipeline & Material Equipment Corp.	Iraq	Badr crude oil pipeline project in Iraq
12	China Petroleum Engineering and Construction Corp.	Iraq	Halfaya production project in Iraq
13	China Petroleum Pipeline & Material Equipment Corp.	Iraq	Halfya project in Iraq
14	China Petroleum Engineering and Construction Corp.	Iraq	Halfaya oilfield development project

S.N	Contractor	Country	Project Name
15	China Petroleum Pipeline & Material Equipment Corp.	Iraq	Ai Hardy Bbu oil pipeline project in Iraq
16	Harbin Electric International Engineering Co., Ltd.	Turkey	Turkey (SOMA)2x255MW Coal-fired Power Plant Project
17	Hubei Electric Power Construction First Engineering Company	Turkey	ATLAS phase I 2*600MW coal fired power station project in TurkeyATLAS
18	Dongfang Boiler Group Co., Ltd. (DBC)	Turkey	Desulfurization project in Turkey
19	China Energy Engineering Group Anhui No. 2 Electric Power Construction Co., Ltd.	Vietnam	Phu-Yen and Vihn Hao photovoltaic project in Vietnam
20	China Energy Engineering Group Anhui No. 2 Electric Power Construction Co., Ltd.	Vietnam	Hai Duong electric power station project in Vietnam
21	Zhongnan Engineering Corporation Limited	Vietnam	LongAn 50MWp photovoltaic EPC project in Vietnam
22	Jiaozuo Creation Reshipment Co., Ltd.	Vietnam	Vietnam Hoa Phat bulk cargo transport system
23	Shanghai Electric Group Co., Ltd.	Pakistan	Pakistan Karachi K2/K3 nuclear power project (ACP1000)
24	Dongfang Electric Coporation International Cooperation Co., Ltd.	Uzbekistan	4 hydropower station proejcts in Pakistan
25	Shanxi Zhongke International Trading Co., Ltd.	Vietnam	Vietnam Hoa phat Dung Quat steel Joint Stcok Company 2 million tons coke oven project (phase I)
26	Sinohydro Construction Group International Engineering Company	Equatorial Guinea	Bata urban power grid phase II power supply home-entry reorganization and expansion project in Equatorial Guinea
27	Beijing Huatai Coking Engineering Technology Co., Ltd.	Vietnam	Vietnam Hoa Phat Dung Quat Steel Joint Stock Company phase I 2*130 T/H dry quenching project

# Export performance

S.N	Contractor	Country	Project Name
28	China Energy Engineering Group Guangdong Power Engineering Co., Ltd.	Bangladesh	Bangladesh Gurashao power station #4 unit renovation project
29	China City Environment Protection Engineering Co., Ltd.	Vietnam	Vietnam Hoa Phat Dung Quat Steel Joint Stock Company 4x60 MW generation project phase I
30	CRRC Ziyang Locomotive Co., Ltd.	Bangladesh	Bangladesh ASHUGONJ 150MW heavy oil power plant project
31	Dongfang Electric Coporation International Cooperation Co., Ltd.	Angola	Angola diesel and photovoltaic complementation distributed generation EPC project (320MW diesel engine project)
32	TBEA Xinjiang New Energy Co., Ltd.	Egypt	28-4---Egypt Acciona 60 MW EPC project- ALSUBH SOLAR POWER S.A.E.
33	Hubei Electrical Construction No.2 Engineering Company	Laos	Laos Nansha project purchase
34	Sinohydro Construction Group International Engineering Company	Uganda	Karuma hydro power station and transmission and transformation project in Uganda
35	CRRC Ziyang Locomotive Co., Ltd.	Bengal	DPDC 8 Nos. 33/11kV gas insulated switchgear (GIS) substations project
36	Sinosteel Equipment Company	Algeria	Algeria 2.3 million tons per year steel-making and steel rolling project
37	China Harbor Engineering Compnay LTD (Namibia Branch)	Namibia	National oil storage facilities project: Walvis Bay, Namibia
38	China Energy Construction Group Tianjin Electrical Construction Compnay	Pakistan	CPHGC 2x660MW coal fired power plant project
39	Sinosteel Equipment Company	Algeria	Algeria Helical Weld Pipe Project
40	China Energy Construction Group Hunan Thermal Power Construction Company	Pakistan	Pakistan 50MW (2*25MW) Coal-fired Power Plant Project
41	Wuhan Kaidi Entironment Science and Technology Company	Vietnam	Thang Long 2*300MW Thermal Power Plant Project in Vietnam

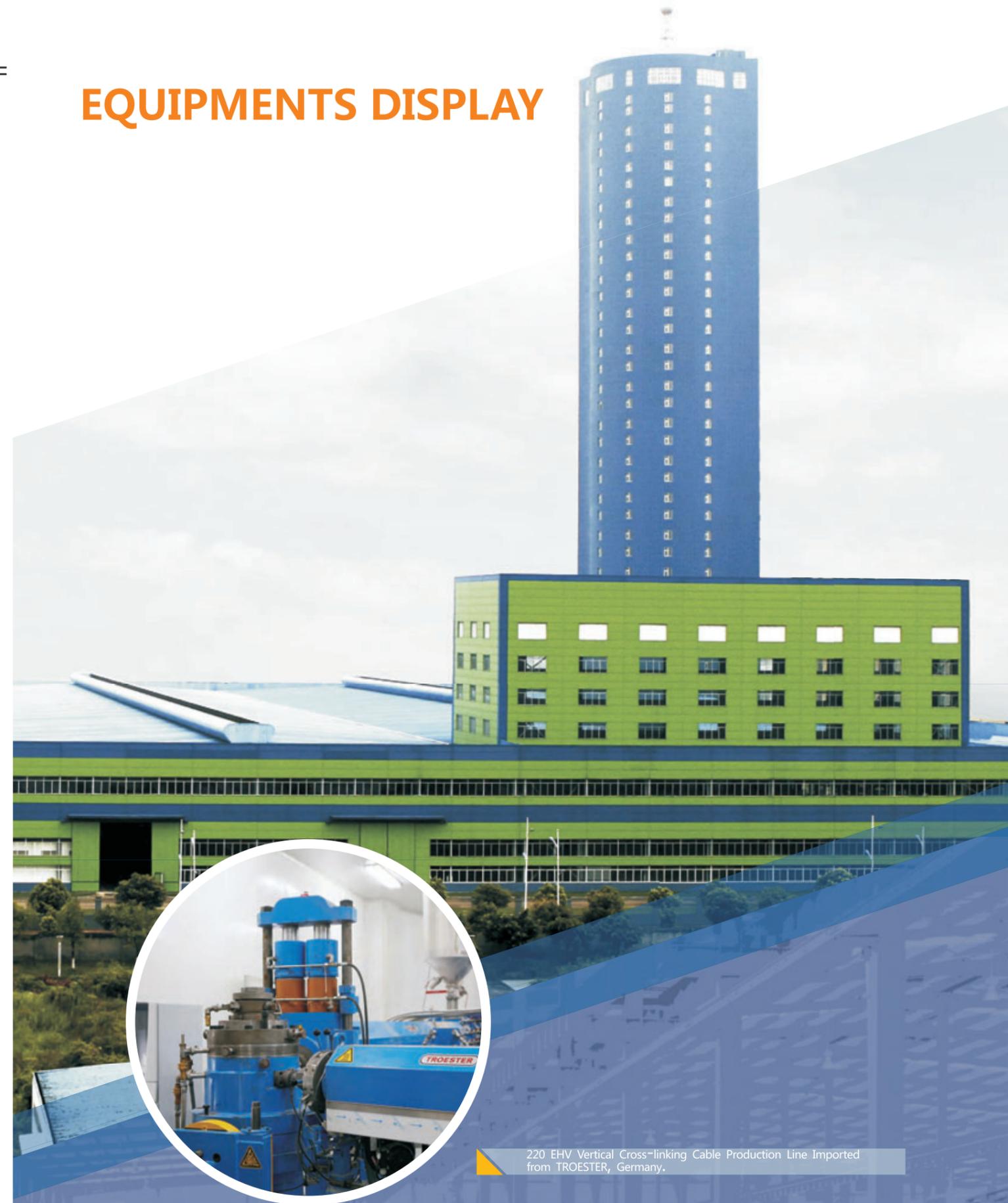
S.N	Contractor	Country	Project Name
42	Sinosteel Equipment Company	Algeria	Algeria DRI Project
43	China Energy Construction Group Tianjin Electric Construction Company	Pakistan	Sacy Val Thermal Power Generation Project in Pakistan
44	China Energy Construction Group Tianjin Electrical Construction Compnay	Pakistan	Balloki 1180MW Combined Cycle Power Station in Pakistan
45	Wuhan Kaidi Electric Power Environmental Protection Company	Vietnam	2x600MW Unit Flue Gas Desulfurization Project of Taiping Power Plant 2nd Phase in Vietnam
46	Sinosteel Equipment Company	Algeria	Cable for Old Plant of 2.5 Million Tons DRI Project in Algeria
47	Tangshan Bohai Metallurgy Equipment Co., Ltd.	Vietnam	Cable procurement project for 1503 Engineering (Vietnam) steel-making and steel rolling system
48	China Energy Construction Group Tianjin Electric Construction Company	Pakistan	Bahbik 1180MW Combined Cycle Power Station in Pakistan
49	China Energy Construction Group Northeast Electrical 3th Engineeringing Company	Bangladesh	Project in Bangladesh
50	Xi'an West Mine Environmental Protection Science and Technology Co., Ltd.	Iran	XKM14801/803 Iran project
51	China Hydropower Engineering Consulting Group International Engineering Company	Ethiopia	Urban Power Grid Upgrading and Rebuilding Porject in Addis, Ethiopia
52	China Petroleum Pipeline & Material Equipment Corp.	Angola	Luanda oil depot project of fishing port in Angola
53	Beijing Oriental Qianpeng Energy Engineering Technology Co Ltd	Sudan	Inspection and maintenance project in Sudan
54	China Petroleum Engineering and Construction Corp.	Kazakhstan	China-Kazakhstan Gas Pipeline Line C



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S.N	Contractor	Country	Project Name
77	China Petroleum Pipeline & Material Equipment Corp.	Kazakhstan	Central Asian gas pipeline ( Kazakhstan )
78	Sichuan Petroleum Management Bureau Material Corp.	Kazakhstan	Block A project on the right bank of Amu Darya in Turkmenistan
79	Sichuan Petroleum Management Bureau Material Corp.	Turkmenistan	Ground engineering in block A area of bagtyjjarlyk contractual area in Turkmenistan
80	Sichuan Machinery and Equipment Import and Export Co., Ltd.	India	Tengda 2*330MW coal-fired power plant in India
81	China Petroleum Pipeline & Material Equipment Corp.	Kenya	KPC PROPOSED LINE-1 CAPACITY ENHANCEMENT PROJECT
82	China Petroleum Pipeline & Material Equipment Corp.	Sudan	Finished oil tank project in Sudan
83	China Petroleum Gas & Pipeline Bureau Libya Project Dept.	Libya	Water injection project in Libya
84	Sichuan Eastern Electric Power Equipment Co Ltd – India power plant	Vietnam	2*300MW Haiphong thermal power project in Vietnam
85	Sichuan Eastern Electric Power Equipment Co Ltd – India power plant	Pakistan	Pakistan watts hydropower station electrical and Mechanical Engineering
86	Sichuan Eastern Electric Power Equipment Co Ltd – India power plant	India	2*300MW Sagardighi coal-fired power plant in West Bengal, India

# EQUIPMENTS DISPLAY



220 EHV Vertical Cross-linking Cable Production Line Imported from TROESTER, Germany.