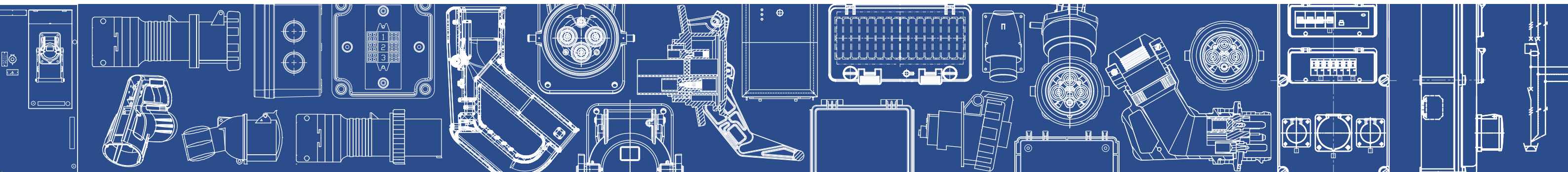


# CONNOTEC®



ENCLOSURES | INDUSTRIAL PLUGS AND SOCKETS | ELECTRICAL CONNECTORS AND SHORE CONNECTION SYSTEMS | COMBINED UNITES | ECO-MOBILITY

## CONNOTEC®

**Jiangsu Jianlong Electrical Co., Ltd.**

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Official website



## Company Profile



Jiangsu Jianlong Electrical CO., LTD was founded in 1992, now it has more than 500 employees. Its headquarter is located in mechanical and electrical industry park in Yixing. The marketing center is located in Pudong New Area which is the international financial center in Shanghai.

Jianlong has the certificates of British BSI, German TÜV, Russian

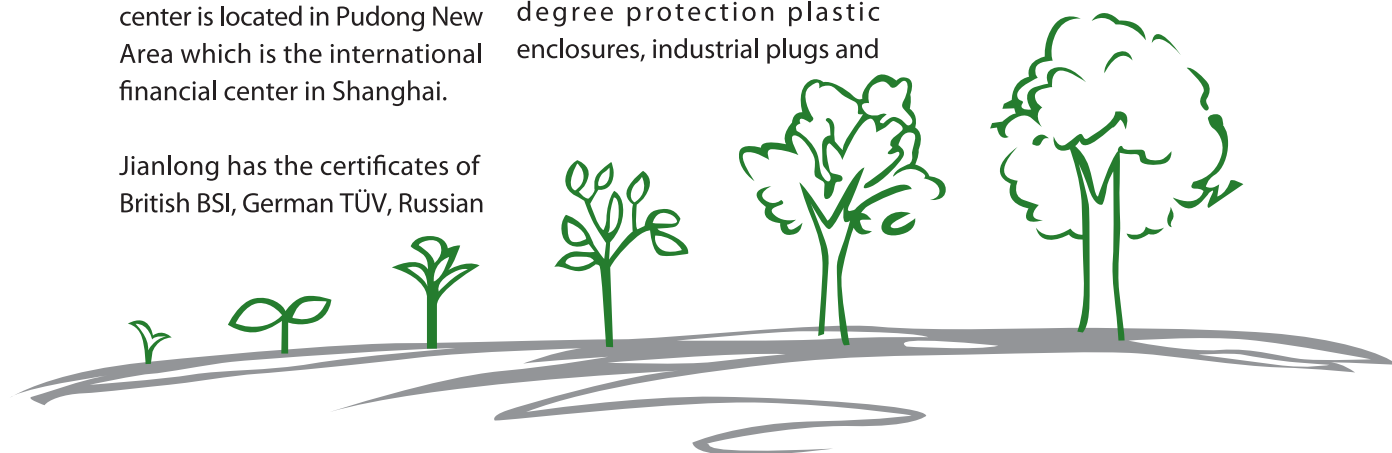
EAC and Gost-R, UL, CE and ROHS, ISO14001, OHSAS18001 and ISO9001. Meanwhile Jianlong is also the the first Chinese enterprise who got CCS certification in the area of shore connectors.

Jianlong has many product lines, providing various types of high degree protection plastic enclosures, industrial plugs and

sockets, combined boxes, high current plugs and sockets, waterproof plugs and sockets, waterproof switches, car charging equipments, etc for the ports, ships, transportation, instrumentation, automation, mining and other industries. After 26 years' working, Jianlong can provide customized services, such as die sinking, holes drilling, dyeing, lettering, etc.



# CONNOTEC







TUV Rheinland certificate



UL American certification



CE European certificate



CU-TR CIS certificate



Test Report



Test Report



3C safety test report



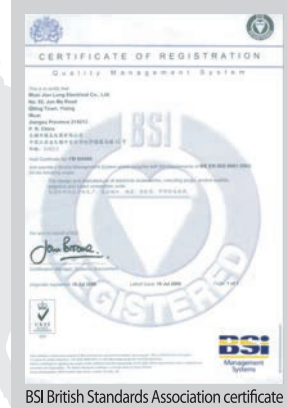
3C safety test report



BSI British Standards Association certificate



ISO 9001:2008 certificate / BSI British Standards Association certification



BSI British Standards Association certificate



SGS Swiss certificate



Environmental management system certificate



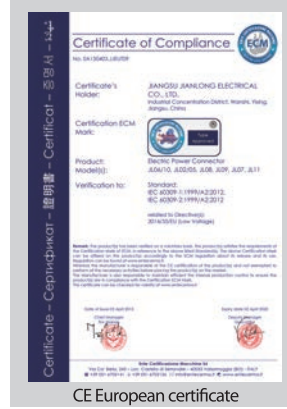
Occupational health and safety management system certificate



CCC certificate



China Classification Society certificate



CE European certificate



CE European certificate



TUV Rheinland Test Report



Gost-R Russian certificate



CCC certificate



Mandatory test report



Test Report



Test Report



ROHS test report



ISO 9001:2008 certificate / BSI British Standards Association certification



ISO 9001:2008 certificate / BSI British Standards Association certification



EAC CIS exemption letter



Test Report



Test Report



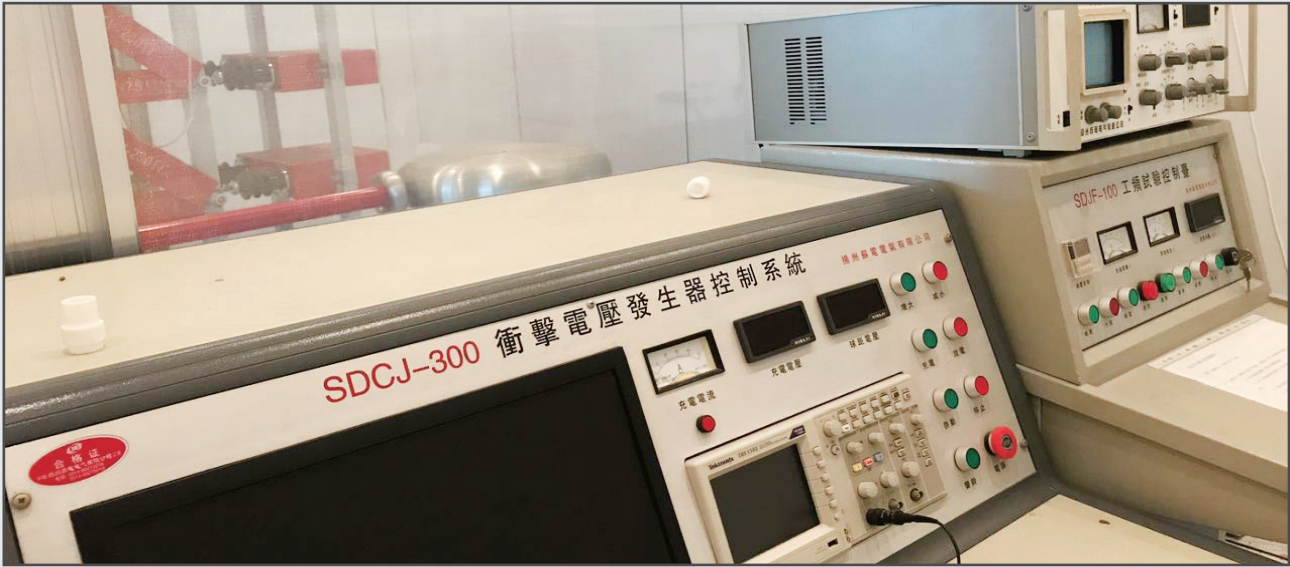
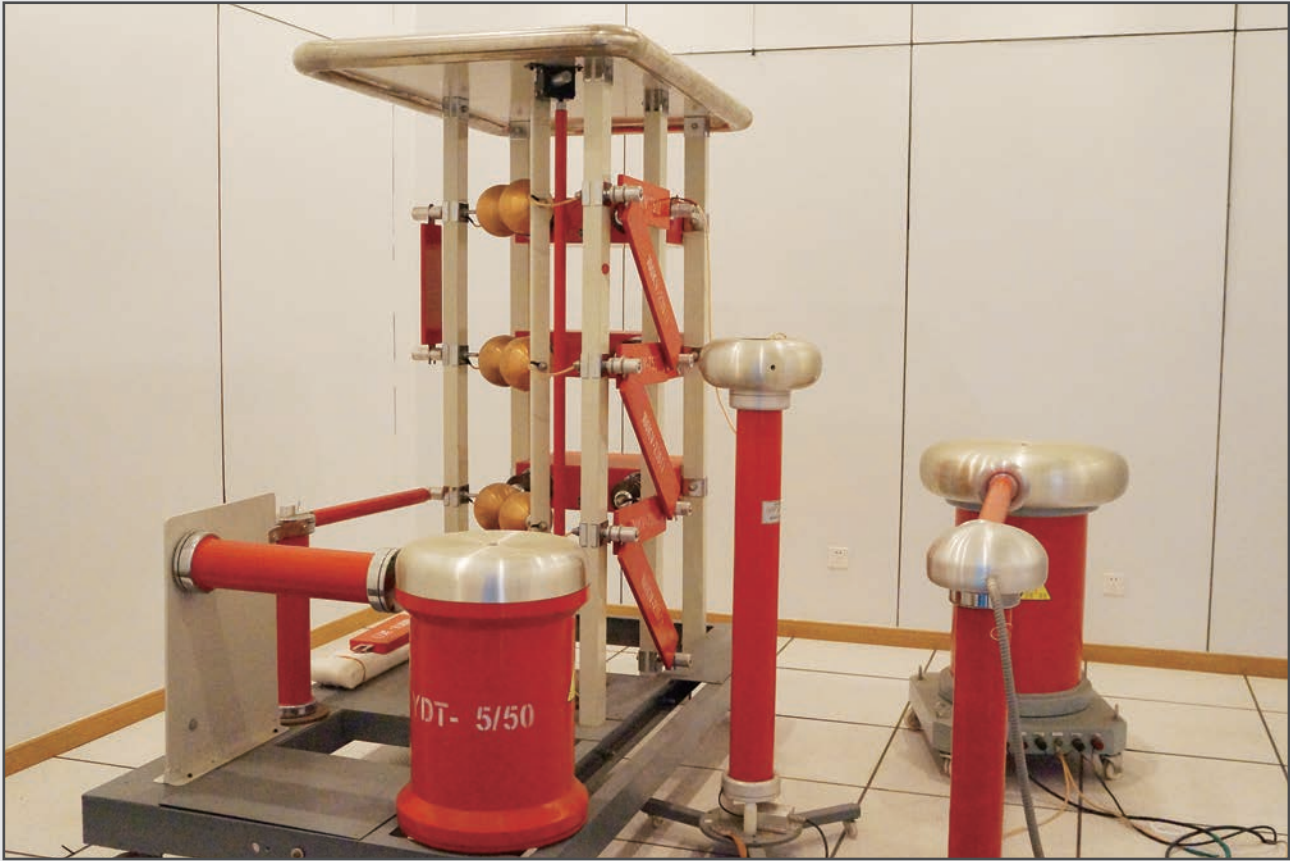
Test Report



Test Report



Professional and complete laboratory testing equipment to ensure the safety of shore connection systems  
√ Security    √ Stable    √ Reliable



Impulse Voltage Generator and Power Frequency Experiment Control Instrument



Anti-salt spray test equipment



Dust test equipment



Constant temperature and pressure incubator



Waterproof test equipment



Leakage trace tester



Aging test chamber



Glow wire tester



Three-phase temperature rise high current generator



Shock test equipment



## Catlogue

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- Electrical plastic enclosures**
- Product protection grade
- The structure features of plastic enclosures
- Products
- JL-P Plastic hinge type
- JL-S Plastic screw type
- JL-ID Double door type
- JL-J Plastic splicing box
- JL-N Plastic button box
- JL-FX Plastic junction box
- JL-AL Aluminum screw type
- JL-PW Window type
- JL-FS Waterproof plugs & sockets
- Accessory



Electrical connectors and shore connection systems



Product description

All the connectors in the catalogue are electrically interlocked through signal contacting pin.

In the actual operation of connection and disconnection process, the contact pin is not only the latest to be connected, but also the earliest pin to disconnect. The connector uses an internal slotted circlip to increase the contact area between the male and female contacts.

When the sleeve is heated and deformed, the circlip will increase the contact pressure between all contacts' surface. This contact pressure allows the extra current to pass through the rated contact size while making the connection and disconnection of male and female contacts more easily.

Code Description

JL

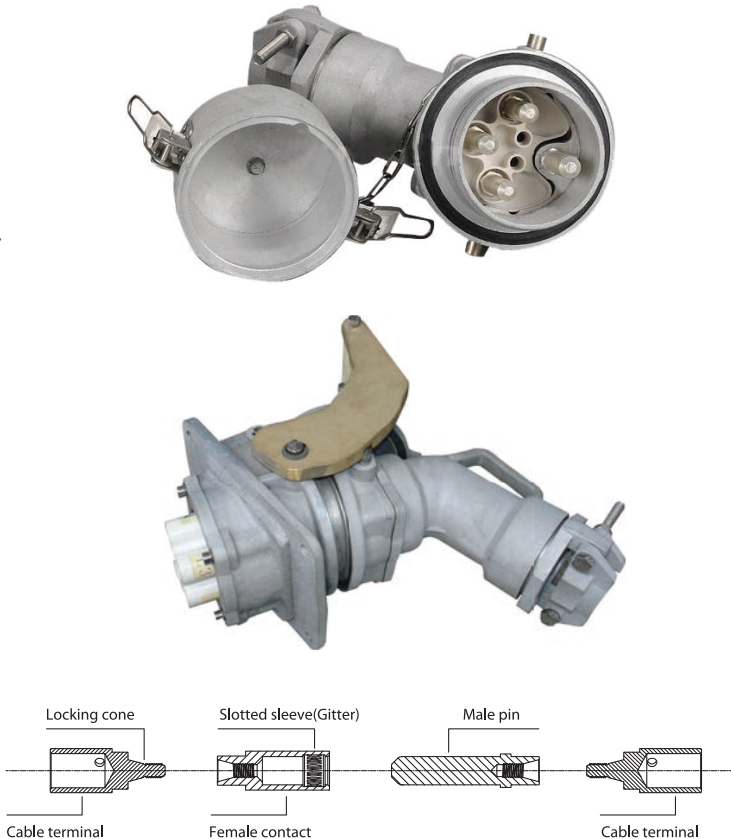
AP

01

Serial Number:  
01&11=≤440V, ≤160A&200A  
03&04=≤690V, ≤250A  
06&10=≤690V, ≤320A  
02&05=≤690V, ≤420A  
17=≤690V, ≤350A  
07=≤7200V, ≤350A  
08=≤1100V, ≤660A  
09=≤12000V, ≤500A

AP= plug  
AS= socket  
BP= socket with male pin  
BS= plug with female pin  
AR= connector  
BR= conversion connector

Factory code



Product Features

Housing and fasteners

Housing is made of tempered cast aluminum (A57G). Sealing material is made of Neoprene to ensure the protection grade to be IP66. Fasteners are made of stainless steel. Alodine conductive oxidation protection.

Insulators

The single-piece insulators are made of nylon PA6. Insulators for male and female contacts are interchangeable inside the connector.

Contacts

Contacts are made of the silver-plated copper alloy. Contacts' withstand temperature up to 200°C(392°F). Cable terminals are press-type and removable.

Auxiliary contacts

Standard configuration is 2 guide contacts.

Earthing

Earth contacts to ensure earth continuity.

Cable terminals

Connect terminals by pressing or welding method. Female contacts are equipped with patented internal slotted sleeve (GITTER) for easy using.

- A large number of independent contacts greatly increase the current load capacity of the contacts.
- Low friction between the contacts to reduce the insertion force for long life span.
- A wide temperature range of the contacts which could also remain effective by temperature at 200°C(392°F).



Model and parameter of low voltage electrical plug

Rated voltage	Maximum current	Contact number	Cable cross-sectional area	Male pin type	Female pin type	Product chart
440V	160A	4+2	≤35/50mm²	JLAP01	JLBS01	
	200A			JLAP11	JLBS11	
690V	250A	4+2	70/95mm²	JLAP03	JLBS03	
		5+2		JLAP04	JLBS04	
690V	320A	4+2	120mm²	JLAP06	JLBS06	
		5+2		JLAP10	JLBS10	
690V	420A	4+2	120mm²	JLAP02	JLBS02	
		5+2		JLAP05	JLBS05	
690V	350A	4+4	120mm²	JLAP17	JLBS17	
1100V	660A	4+2	185/240/300mm²	JLAP08	JLBS08	

Model and parameter of low voltage electrical socket

Rated voltage	Maximum current	Contact number	Cable cross-sectional area	Male pin type	Female pin type	Product chart
440V	160A	4+2	≤35/50mm²	JLAS01	JLBP01	
	200A			JLAS11	JLBP11	
690V	250A	4+2	70/95mm²	JLAS03	JLBP03	
		5+2		JLAS04	JLBP04	
690V	320A	4+2	120mm²	JLAS06	JLBP06	
		5+2		JLAS10	JLBP10	
690V	420A	4+2	120mm²	JLAS02	JLBP02	
		5+2		JLAS05	JLBP05	
690V	350A	4+4	120mm²	JLAS17	JLBP17	
1100V	660A	4+2	185/240/300mm²	JLAS08	JLBP08	

Model and parameter of high voltage electrical plug

Rated voltage	Maximum current	Contact number	Cable cross-sectional area	Male pin type	Female pin type	Product chart
7200V	350A	4+3+FO	50/70/95/120mm²	JLAP07	N/A	
12000V	500A	4+2	185/240mm²	JLAP09	JLBS09	

Model and parameter of high voltage electrical socket

Rated voltage	Maximum current	Contact number	Cable cross-sectional area	Male pin type	Female pin type	Product chart
7200V	350A	4+3+FO	50/70/95/120mm²	JLAS07	N/A	
12000V	500A	4+2	185/240mm²	JLAS09	JLBP09	

Model and parameter of electrical connector

Rated voltage	Maximum current	Contact number	Cable cross-sectional area	Male pin type
440V	160A	4+2	≤35/50mm²	JLAR01
	200A			JLAR11
690V	250A	4+2	70/95mm²	JLAR03
		5+2		JLAR04
690V	320A	4+2	120mm²	JLAR06
		5+2		JLAR10
690V	420A	4+2	120mm²	JLAR02
		5+2		JLAR05
690V	350A	4+4	120mm²	JLAR17



Shore connection socket box

- Comprehensive standards

Applicable to IEC/ISO/IEEE/JTS/JTT and other international and domestic shore industry standards, equipped with optical fiber communication standards and standard ST interfaces.
- High protection grade

Plugs and sockets no less than IP66, socket box no less than IP55.
- Good safety performance

Equipped with power interlock, emergency stop button, heating dehumidification, lightning protection device, etc.
- Excellent customized service

Customize high/low voltage high-quality shore connection systems and power plugs/sockets of wide range capacity according to different projects and different customers' requirements.
- Good compatibility

Shore plugs/sockets are able to connect other brands' products which meet IEC standards.

Introduction of shore connection socket box

**Box material:** made of 304 stainless steel or 316 stainless steel; box thickness is no less than 4mm. Special box material can be customized.

**Box size:** can be customized according to customer requirements.

**Number of sockets:** 1-4 sockets are available in one socket box to meet the customer's customization needs.

**Box style:** vertical type and horizontal type are the main type, special style (such as pit horizontal) shore connection box can be customized.

Type example



Product overview of socket box

Description of low voltage series product:

Rated voltage	440V	690V	1100V
Shore connection capacity	Configure the specifications of the high-voltage socket boxes according to users' requirements, regular capacity is: 200KVA, 400KVA, 800KVA, 1MVA, 2MVA.		
Rated frequency	60Hz or 50Hz		
Protection grade	Plugs and sockets no less than IP66, socket boxes no less than IP55.		
Communication Interface	Equipped with optical fiber communication device and standard ST interface; Can realize real-time monitoring of shipyard, data sharing, alarm information transmission and other functions (Optional, need system integrator design).		
Safety protection measures	Electrical and mechanical interlock design to ensure shore connection system safe. When the high voltage socket is energized, the shore cabinet door or socket cover can't be opened. When the shore cabinet door or socket cover is open, the high voltage socket is not energized.		
Related configuration	General equipped with emergency stop button, running lights, three-color alarm lights, high-voltage surge protection devices, high voltage lightning protection, etc.		
Special conditions	Could be used in the conditions of anti-condensation, oil mist, salt spray.		
Ambient temperature	-30°C~+50°C		
Relative humidity	<95%		

Description of high voltage series product

Rated voltage	7.2KV/6.6KV	12KV/11KV
Shore connection capacity	Configure the specifications of the high-voltage socket boxes according to users' requirements, regular capacity is: 2MVA, 3MVA, 4MVA, 6MVA, 8MVA, 12MVA, 16MVA.	
Rated frequency	60Hz or 50Hz	
Protection grade	Plugs and sockets no less than IP66, socket boxes no less than IP55.	
Communication Interface	Equipped with optical fiber communication device and standard ST interface; Can realize real-time monitoring of shipyard, data sharing, alarm information transmission and other functions (Optional, need system integrator design).	
Safety protection measures	Electrical and mechanical interlock design to ensure shore connection system safe. When the high voltage socket is energized, the shore cabinet door or socket cover can't be opened. When the shore cabinet door or socket cover is open, the high voltage socket is not energized.	
Related configuration	General equipped with emergency stop button, running lights, three-color alarm lights, high-voltage surge protection devices, high voltage lightning protection, etc.	
Special conditions	Could be used in the conditions of anti-condensation, oil mist, salt spray.	
Ambient temperature	-30°C~+50°C	
Relative humidity	<95%	

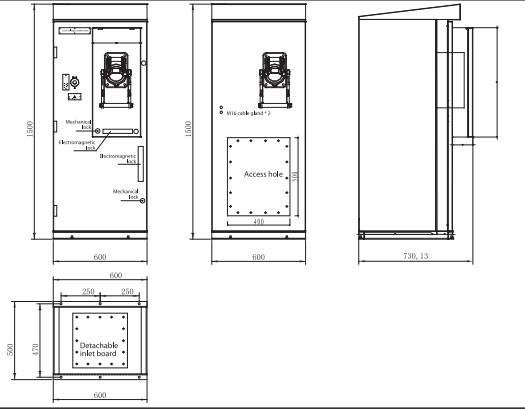
Typical cases

Industry Applications - Shore connection cases in ports and ships

Typical case of low voltage vertical shore connection box

◆ Technical Parameters

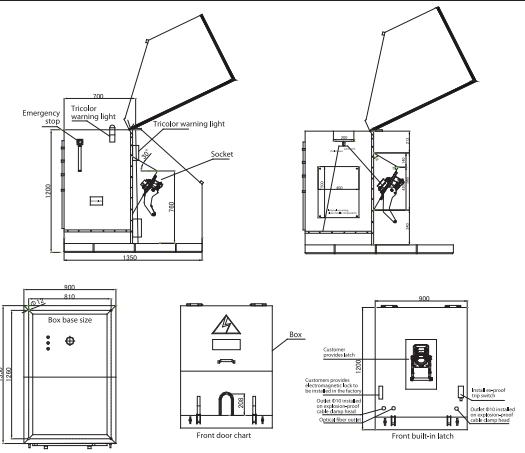
Rated output voltage	440V
Capacity	200KVA
Rated frequency	60Hz or 50Hz
Output socket	1pc 420A, 4P + 2pilot, 440 V
Communication	Equipped with optical fiber communication device and standard ST interface
Related configuration	Emergency stop button, running indicator, dehumidification heater
Special conditions	Anti-condensation, anti-oil mist, anti-salt spray and other measures
Box material	4mm 304 stainless steel
Protection grade	Box IP55, socket IP66



Typical case of highvoltage horizontal shore connection box

◆ Technical Parameters

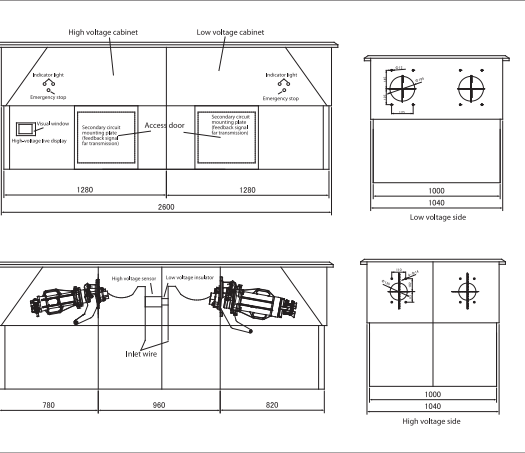
Rated output voltage	6.6KV
Capacity	2MVA
Rated frequency	60Hz or 50Hz
Output socket	1pc 350A, 4P + 2pilot, 7.2KV
Communication	Equipped with optical fiber communication device and standard ST interface.
Related configuration	Emergency stop button, running indicator, three-color alarm light, high voltage display device, high voltage lightning protection device, high voltage surge protection device.
Special conditions	Anti-condensation, anti-oil mist, anti-salt spray and other measures; Explosion-proof grade ExdellBT4 (can be customized).
Box material	4mm 304 stainless steel
Protection grade	Box IP55, socket IP66.



Typical case of high / low Voltage mixed shore connection box

◆ Technical Parameters

Rated output voltage	High voltage cabinet 6.6KV; low voltage cabinet 440V
Capacity	4MVA; low voltage cabinet: 400KVA
Rated frequency	60Hz or 50Hz.
Output socket	2pcs 350A, 4P + 2pilot, 7.2KV; 2pcs 420A, 4P + 2pilot, 440V.
Communication	Equipped with optical fiber communication device and standard ST interface.
Related configuration	Emergency stop button, running indicator and three-color warning lights; dehumidification heater; high-voltage display device, high voltage lightning protection device, high voltage surge protection device.
Special conditions	Anti-condensation, anti-oil mist, anti-salt spray and other measures.
Box material	4mm 304 stainless steel
Protection grade	Box IP55, socket IP66



Jianlong actively responded to the Chinese development plan, combining with the trends of shore technology application and technology development, relying on 26 years electrical R&D and production experience, focusing on Chinese and overseas' ports features, successfully using of shore connection socket boxes in the area of ports, ships and shore connections. Based on providing customers with safe, reliable shore connection systems, Jianlong are promoting the construction of green ports and helping the ports transforming and upgrading.

Shore connection business advantages

- ◆ Classification society certification  
In the area of shore connection system, Jianlong is the first and only domestic-funded enterprise in China that has obtained the certification of China Classification Society and Det Norske Veritas.
- ◆ National standards drafter  
As the standard drafter, Jianlong drafted the "high-voltage shore connection system", "industrial plug and socket connector" and other national standards together with the relevant state departments and companies.
- ◆ Full range of products' coverage  
Covering from 440V low voltage to 12,000V high voltage, from 160A to 660A high current full range and dozens of specifications of the electrical connectors and shore connection socket boxes. According to the applications of the ports, it covers container ports, cruise ports, bulk ports, hazardous ports, etc.

The summary of shore connection systems

