STOCK CODE: 300351



YONGGUI

YGC - ROLLING STOCK AND INDUSTRY CONNECTOR HANDBOOK

Content



External Vehicle Connecter



Internal Vehicle Connecter



Dual-Purpose Vehicle Connecter



New Energy connectors

© 2025 Yonggui. All rights reserved.

External Vehicle Connector

External Vehicle Connector Series



- E-Coupler Series
- External Power Supply Connector
- EMY Motor Connector Series
- GTC Series Electrical Connector
- Push-pull Series Electrical Conncetor
- CIR Series Electrical Connector
- Vehicle Heavy Loading Series Electrical Connector

YONGGUI

© 2025 Yonggui. All rights reserved.

External Vehicle Connector--E-Coupler Series



Product Series

City Railway: 32 pin, 40pin, 50 pin, 70 pin

EMU series : 75 pin, 98 pin, 140 pin, 196 pin

Applications

Applied to the re-connection between trains, which achieves:

1) Control signal transmission between trains;

2) Support 100M, 1000M and 10G Ethernet signal transmission;

3) Power transmission up to 350A.

YONGGUI

© 2025 Yonggui. All rights reserved.

External Vehicle Connector--External Power Supply Connector



Product Series

Direct Current : 350A, 400A, 450A, 530A

Alternating Current : 350A, 400A, 450A

Applications

Applied to the external power supply access during the repair and maintenance of rolling stock. It is suitable for the power supply system up to 1500VDC and 500VAC. According to customized requirements, cover protection, conduction confirmation or interlock protection is available as extra feature.

YONGGUI

© 2025 Yonggui. All rights reserved.

External Vehicle Connector--EMY Motor Connector Series



Product Series

Circular Series : 200A, 240A, 300A

Rectangular Series: 200A, 240A, 300A

Applications

The circular product employs a quick bayonet connection with a secondary locking mechanism, while the rectangular version utilizes a threaded connection. It is primarily used in the motors of various equipment, with a high current overload capacity and voltage resistance. The structure is reliable, and it offers excellent protective performance.

YONGGUI

© 2025 Yonggui. All rights reserved.

External Vehicle Connector--GTC Series



Product Series

5 pin – 85 pin GTCM Control Series

5 pin – 19 pin GTCF Fiber Series

100M, 1000M, 10G single/multiple pin GTCN network

Single/multiple pin GTCH HV Series

Applications

The product features a quick bayonet connection equipped with a secondary locking mechanism, ensuring high reliability and meeting the stringent requirements for use in harsh external vehicular environments.

YONGGUI

© 2025 Yonggui. All rights reserved.

External Vehicle Connector--Push-pull Series Electrical Conncetor



Product Series

TYL – Control Series, 2/3/4/5/7 pin

TYH – HV Series, 150A, 300A, 450A, 600A

Applications

Utilizing a push-pull quick-locking mechanism, it is suitable for connection and separation in confined spaces, with the high-voltage series capable of withstanding a maximum working voltage of up to 1500V.

YONGGUI

© 2025 Yonggui. All rights reserved.

External Vehicle Connector--CIR Series Electrical Connector



Product Series

5 pin, 10 pin, 17 pin, 26 pin

Applications

The product lineup complies with the specifications of MIL-5015, featuring a quick bayonet connection and an insulator made of rubber material, which ensures high reliability. It is particularly suitable for the connection and transmission of control signals that require potting.

YONGGUI

© 2025 Yonggui. All rights reserved.

External Vehicle Connector--Vehicle Heavy Loading Series



Product Series

18 pin, 24 pin, 27 pin, 35 pin, 37 pin

Applications

The product is designed for external heavy coupling connections between rail vehicles, enabling the transmission of control signals and network signals.

YONGGUI

© 2025 Yonggui. All rights reserved.

Internal Vehicle Connector

Internal Vehicle Connector Series



- DSC Series Electrical Connector
- DSL Series Electrical Connector
- CD4 Series Electrical Connector
- QX Series Electrical Connector
- D-SUB Series Electrical Connector
- DBK Board Connector
- DSN Series Electrical Connector
- QLE Series Electrical Connector

YONGGUI

© 2025 Yonggui. All rights reserved.

Internal Vehicle Connector--DSC Series Electrical Connector



Product Series

Power Type – 15 pin, 19 pin

Signal Type – 32 pin, 48 pin, 96 pin

Applications

Suitable for the connection and transmission of cabinet machine control signals.

YONGGUI

© 2025 Yonggui. All rights reserved.

Internal Vehicle Connector--DSL Series Electrical Connector



Product Series

V Series – VA, VB, VC, VE

B Series

Applications

Suitable for the connection and transmission of cabinet machine control signals.

© 2025 Yonggui. All rights reserved.

Internal Vehicle Connector--CD4 Series Electrical Connector



Product Series

A Series – 27 pin, 8+26 pin, 44 pin, 50 pin

B Series – 30 pin, 44 pin

Applications

Suitable for the connection and transmission of cabinet machine control signals.

YONGGUI

© 2025 Yonggui. All rights reserved.

Internal Vehicle Connector--QX Series Electrical Connector



Product Series

32 pin, 52 pin

Applications

Suitable for the connection and transmission of cabinet machine control signals.

© 2025 Yonggui. All rights reserved.

Internal Vehicle Connector--D-sub Series Electrical Connector



Product Series

Signal Series – 9 pin, 15 pin, 25 pin, 37 pin, 50 pin, etc

Power Series – 2W2, 3W3, 5W5

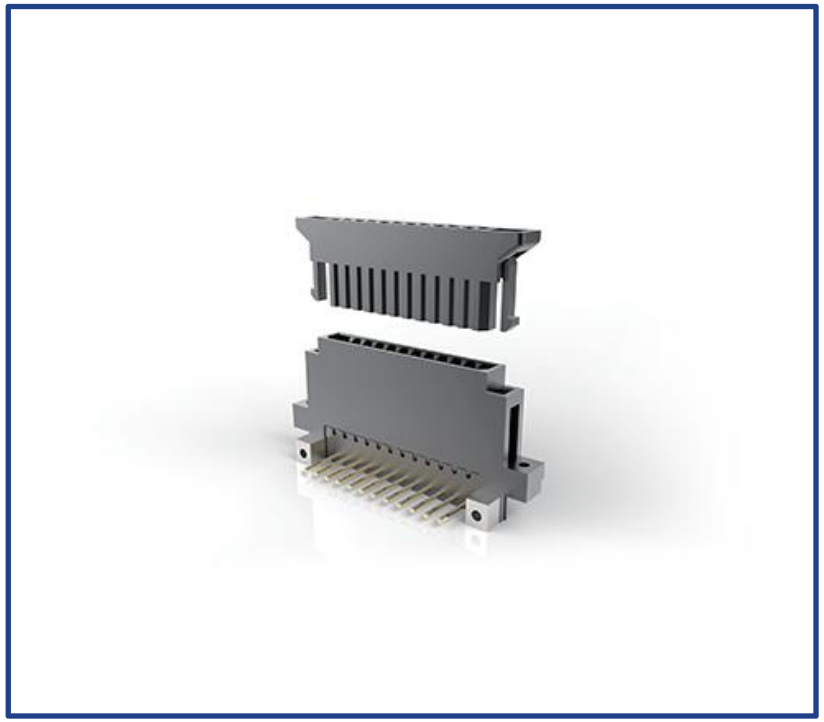
Applications

It features a variety of models and contact components, capable of meeting the connection and transmission needs for networks, signals, and power. It is applied in onboard signal equipment cabinets, PIS systems, and more.

YONGGUI

© 2025 Yonggui. All rights reserved.

Internal Vehicle Connector--DBK Board Connector



Product Series

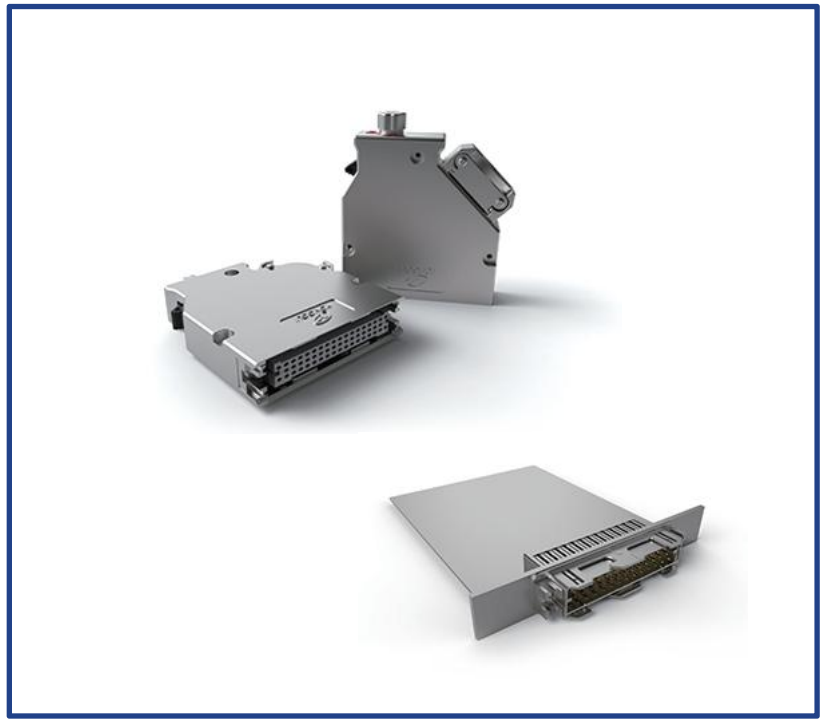
4 pin, 8 pin, 12 pin

Applications

Suitable for power connections between wires and boards within cabinets, with the current not exceeding 10A.

© 2025 Yonggui. All rights reserved.

Internal Vehicle Connector--DSN Series Electrical Connector



Product Series

41 pin, 52 pin

Applications

Suitable for the connection and transmission of cabinet machine control signals.

YONGGUI

© 2025 Yonggui. All rights reserved.

Internal Vehicle Connector--QLE Series Electrical Connector



Product Series

4 pin, 5 pin, 8 pin, 8X pin

Applications

Featuring a quick push-pull locking mechanism, the product range complies with the IEC 61076-2-101 standard. It is suitable for in-vehicle control and network connections and transmission, capable of supporting 100M, 1000M and 10G Ethernet applications.

YONGGUI

© 2025 Yonggui. All rights reserved.

Dual-Purpose Vehicle Connector

Dual-Purpose Vehicle Connector Series



- Vehicle Heavy-Duty Series Electrical Connector
- QAL Series Electrical Connector
- QS Series Electrical Connector
- QB Series Electrical Connector
- M23 Series Electrical Connector
- M40 Series Electrical Connector
- Fluid Connector
- M12 Series Electrical Connector

YONGGUI

© 2025 Yonggui. All rights reserved.

Dual-Purpose Vehicle Connector--HDC Series



Product Series

HDC-HQ, HDC-HD, HDC-HE, HDC-HM, etc, ranging from 2 pin to 216 pin.

Applications

The Heavy-Duty series connectors(HDC) are widely utilized in fields such as rail transportation, wind power generation, and industrial control. This series has robust modular capabilities, allowing for the integration of various functional components such as power, control, communication, fiber optics, gas, and fluid into a single unit as required.

YONGGUI

© 2025 Yonggui. All rights reserved.

Dual-Purpose Vehicle Connector--QAL Series



Product Series

3 pin, 6 pin, 7 pin, 10 pin, 12 pin, 14 pin, 19 pin, 37 pin,
60 pin, 85 pin

Applications

The product range complies with the MIL-5015 standard, featuring a quick bayonet connection, and is suitable for the connection and transmission of control signals throughout the vehicle.

YONGGUI

© 2025 Yonggui. All rights reserved.

Dual-Purpose Vehicle Connector--QS Series



Product Series

2 pin, 3 pin, 5 pin, 7 pin, 10 pin, 12 pin, 19 pin, etc

Applications

Featuring internal bayonet quick-lock mechanism. Suitable for the connection and transmission of low-current control signals.

YONGGUI

© 2025 Yonggui. All rights reserved.

Dual-Purpose Vehicle Connector--QB Series



Product Series

Φ1 Series – 3 pin, 7 pin, 9 pin, 19 pin

Φ1.6 Series – 3 pin, 5 pin, 7 pin, 9 pin

Φ2.4 Series – 2 pin, 4 pin

Applications

Featuring the bayonet quick-lock mechanism, with a five-key foolproof design. Suitable for the connection and transmission of power and control signals with currents less than 20A.

YONGGUI

© 2025 Yonggui. All rights reserved.

Dual-Purpose Vehicle Connector--M23 Series



Product Series

M23 Signal – 12 pin, 17 pin

M23 High Load – 4+3 pin

Applications

The products are mainly used in wind turbine pitch motor encoders, industrial robot signal communication, and wind turbine pitch motor power systems, etc. It features a compact size and simple operation.

YONGGUI

© 2025 Yonggui. All rights reserved.

Dual-Purpose Vehicle Connector--M40 Series



Product Series

4+3 pin

Applications

The products are primarily utilized in the field of wind power generation, serving as power connectors for wind turbine pitch motors. They are available in various configurations, including threaded connections and quick-lock mechanisms.

YONGGUI

© 2025 Yonggui. All rights reserved.

Dual-Purpose Vehicle Connector--M12 Series



Product Series

4 pin, 5 pin, 8 pin, 8X pin

Applications

Utilizing an M12 threaded locking connection, the product range complies with the IEC 61076-2-101 standard. It is suitable for in-vehicle control and network connections and transmission, capable of supporting 100M, 1000M and 10G Ethernet applications.

YONGGUI

© 2025 Yonggui. All rights reserved.

Dual-Purpose Vehicle Connector--Fluid Connector



Product Series

LTF/LTFP Series Blind-mate Connector

LTA/LTAX Series Bayonet Connector

LTC Series Push-pull Connector

Applications

To establish or disengage fluid communication. Enable the rapid connection and disconnection of fluid transmission channels (such as between pipelines, between boards, or between pipelines and equipment) without the need for tools, thereby offering dual sealing capabilities.

YONGGUI

© 2025 Yonggui. All rights reserved.

New Energy Products



- New Energy Connector
- Charging Product
- Energy Storage Connector

YONGGUI

© 2025 Yonggui. All rights reserved.

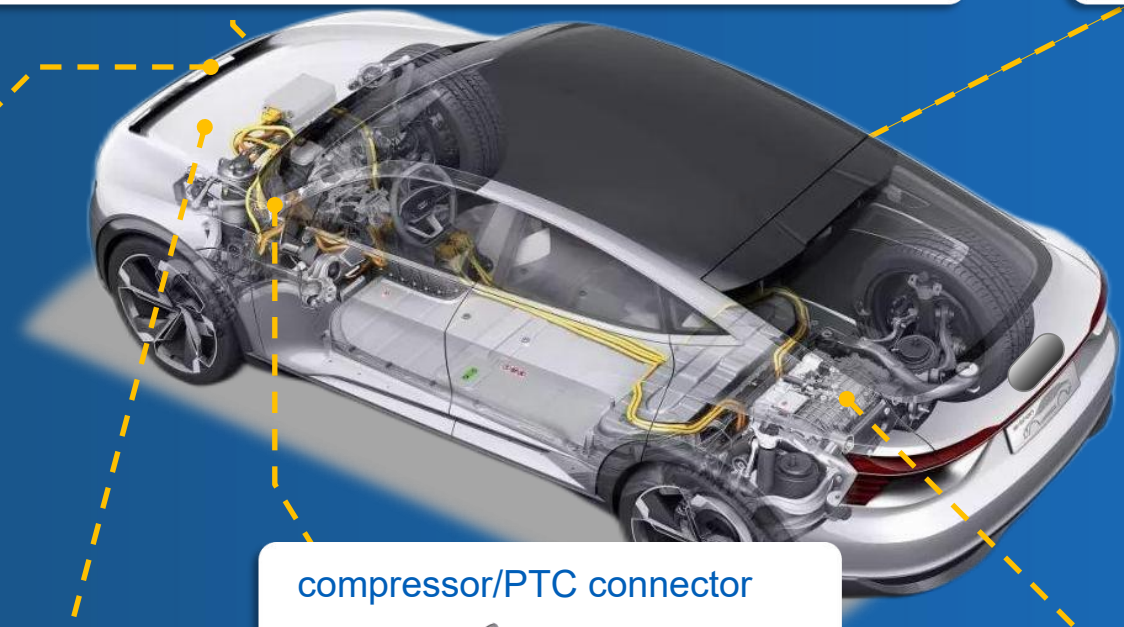
New Engergy Connectors – Connector Application Sketch

batteries/motors high current connectors

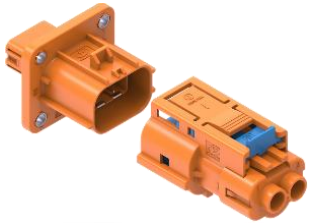


wire harness





OBC low current connector



MSD



PDU/BDU/junction box



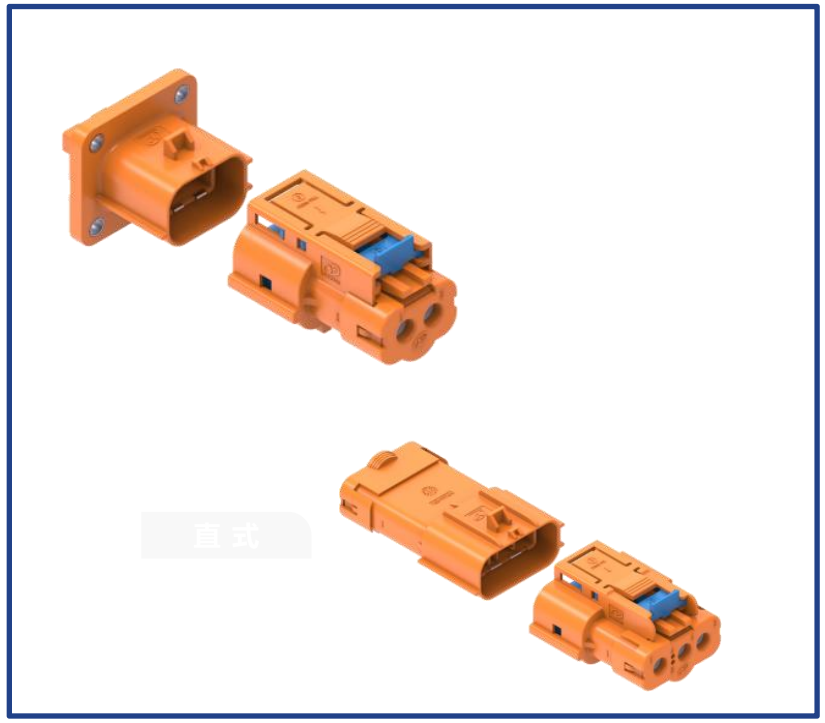
compressor/PTC connector



vehicle-mounted discharge panel



Typical New Energy Connector--YGEV2 Series

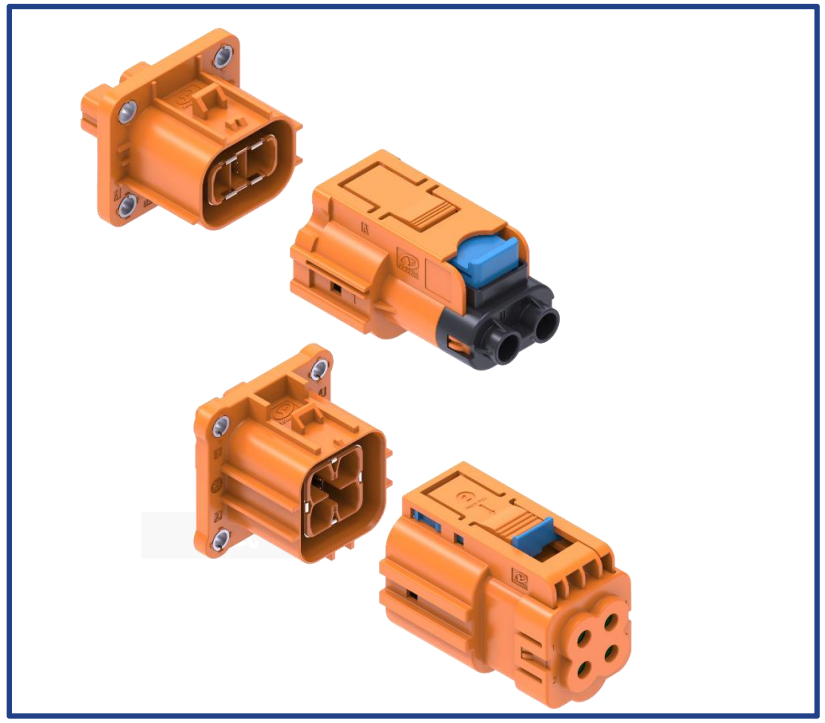


Rated Current	16-20A
Rated Voltage	800V
Ambient Temperature	-40-125℃
Protection Level	IP67&IP6K9K、 IPXXB
Circuits Number	2 - 3
Feature	360° Individual Shielding Stamping Contacts 2.5mm2、4mm2、6mm2
Application	AC compressor、 PTC、 Charging Equipment、DCDC、 HV Box/Cabinent

YONGGUI

© 2025 Yonggui. All rights reserved.

Typical New Energy Connector--YGEV4 Series

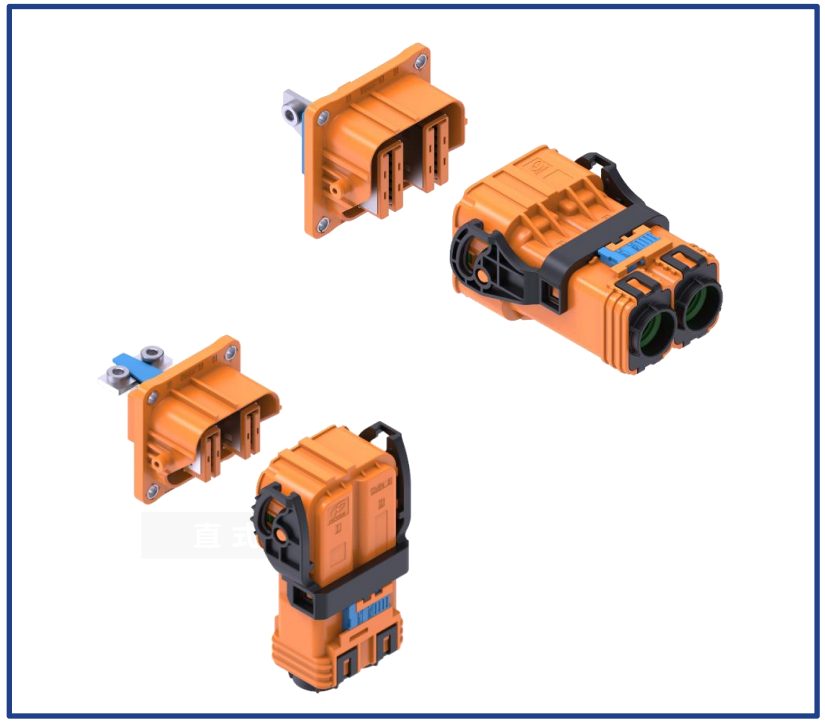


Rated Current	16-40A
Rated Voltage	800V
Ambient Temperature	-40-125℃
Protection Level	IP67&IP6K9K、 IPXXB
Circuits Number	2 - 4
Feature	360° Individual Shielding Stamping Contacts 35mm2、50mm2
Application	AC compressor、 PTC、 Charging Equipment、DCDC、 HV Box/Cabinent

YONGGUI

© 2025 Yonggui. All rights reserved.

Typical New Energy Connector--YGEV5 Series



Rated Current	200-300A
Rated Voltage	1000V
Ambient Temperature	-40-140℃
Protection Level	IP67&IP6K9K、 IPXXB
Circuits Number	2
Feature	360° Individual Shielding Stamping Contacts 50mm2、70mm2
Application	MCU, Battery pack, high-voltage box, etc

YONGGUI

© 2025 Yonggui. All rights reserved.

Typical New Energy Connector--YGEV6 Series



Rated Current	300-400A
Rated Voltage	1000V DC
Ambient Temperature	-40-140℃
Protection Level	IP67&IP6K9K、IPXXB
Circuits Number	2
Feature	360° Individual Shielding Stamping Contacts 70mm2、95mm2
Application	MCU, Battery pack, high-voltage box, etc

YONGGUI

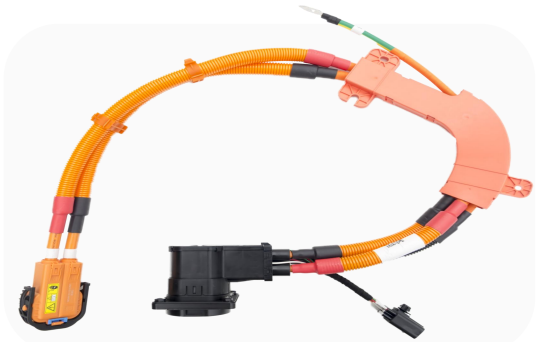
© 2025 Yonggui. All rights reserved.

Typical New Energy Connector--Customized Connector Cable Assembly

◆Customized Cable Assembly:



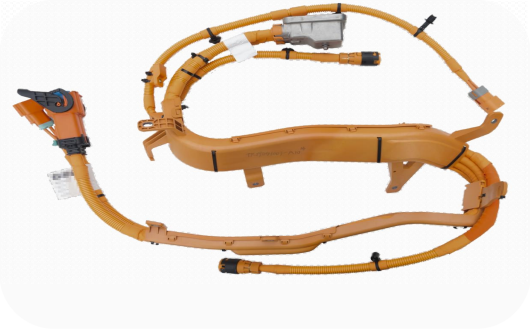
AC Vehicle Inlet Cable Assembly



DC Vehicle Inlet Cable Assembly



AC/DC Hybrid Vehicle Inlet Cable Assembly



DC Bus Cable Assembly



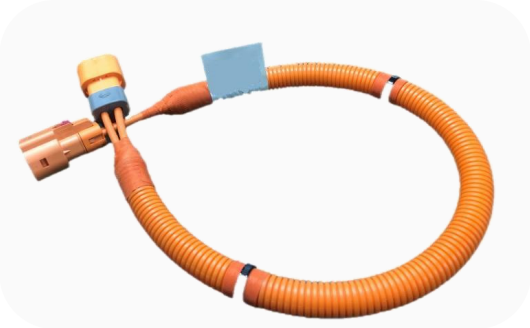
3-Phase Motor Cable Assembly



Air Conditioner Cable Assembly



MCU Cable Assembly



Heater Cable Assembly

YONGGUI

© 2025 Yonggui. All rights reserved.

Charging Products – **Application Sketch**

Inlet, sockets & accessories



DC Charger





AC Charger



Mode 2 charger with control box



Discharge series



Liquid cooling integrated system



Charging Product--MCS Charging System

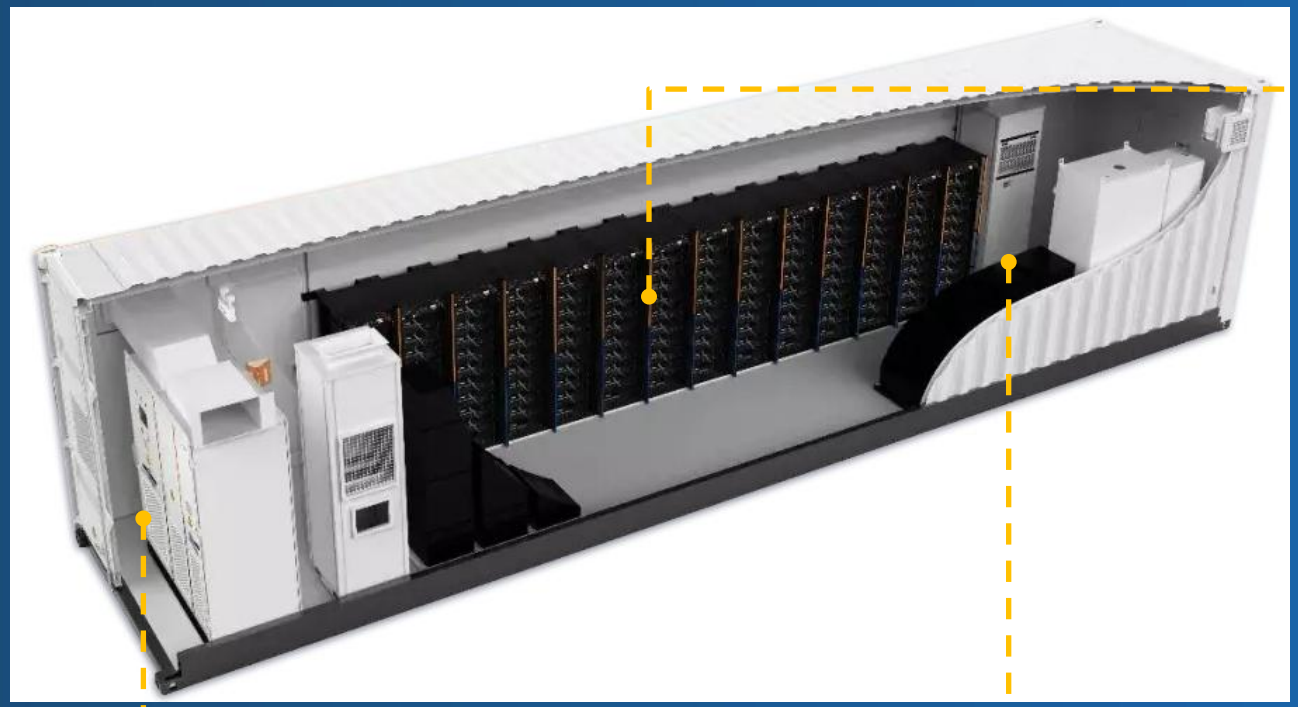


Rated Current	1000-1500A DC
Rated Voltage	1000-1500V DC
Ambient Temperature	-30-50℃
Protection Level	IP44, IP54、IP67
Life Cycles	>10000
Feature	Mode 4, Connection Type C UL94-V0, Liquid Cooling
Application	Track, Vessel, Mining Machinery, Railway etc.

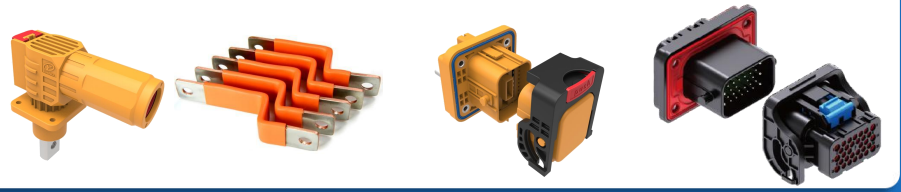
YONGGUI

© 2025 Yonggui. All rights reserved.

Energy Storage Connectors -- **Application Sketch**



Cell Pack & BMS



EMS



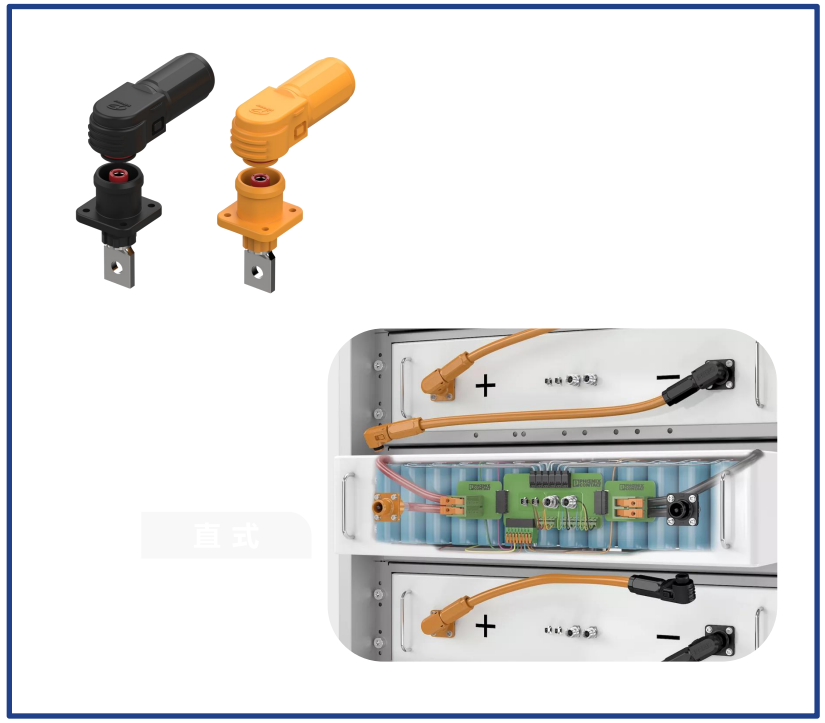
PCS



YONGGUI

© 2025 Yonggui. All rights reserved.

Typical Energy Storage Connector--ESC-HP

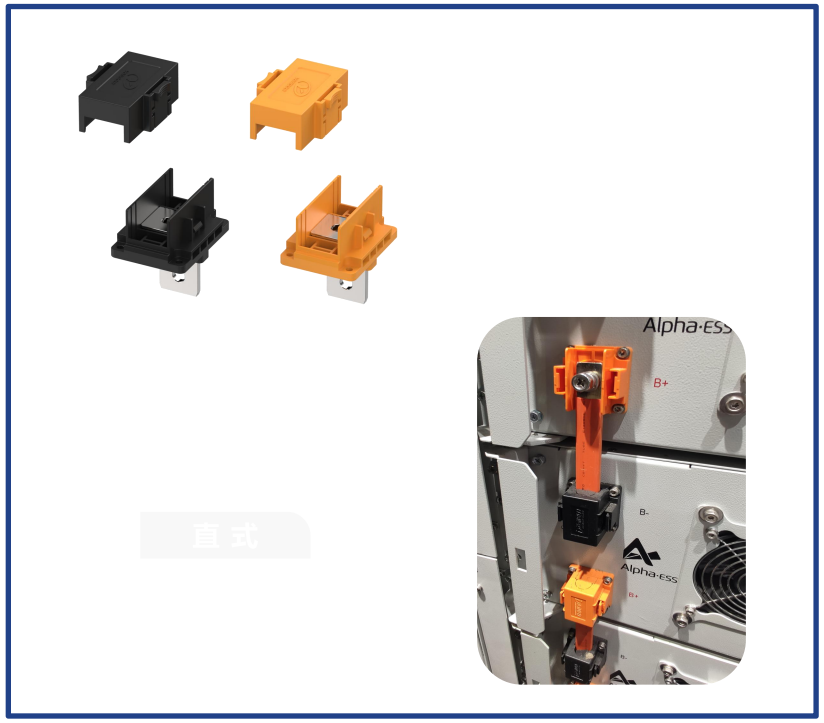


Rated Current	80-400A
Rated Voltage	AC 1500V
Dielectric Strength	6800V AC
Protection Level	IP67 & IP54
Temperature Rising	30 K
Feature	360° Mating / Rapid Unmating / Low Cost
Application	Power transmission of energy storage battery module

YONGGUI

© 2025 Yonggui. All rights reserved.

Typical Energy Storage Connector--ESC-TB



Rated Current	200-350A
Rated Voltage	AC 800 *1500V
Dielectric Strength	AC 3000--6800V AC
Protection Level	IP20
Temperature Rising	45 K
Feature	Thread Locking, Rapld to connctt to wire
Application	Power transmission of energy storage battery module

YONGGUI

© 2025 Yonggui. All rights reserved.



CONNECTION TO FUTURE