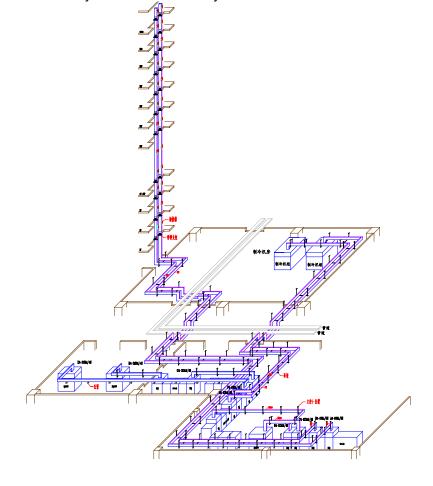


# **Overview of Huapeng Bus Bar**

Huapeng busbar is applied in various power distribution industries ... ...

Huapeng products are built on suitable for firm foundations of the construction industry. The name of "Huapeng" is considered a synonym "leading product innovation" in the industry. Features and advantages of Huapeng busbar make them ideal for all types of industrial equipment and facilities.

Huapeng product is developed to ensure that all areas within the scope of the transmission and distribution to achieve safe and effective distribution. Carrier range from 100A to 6300A (meet IEC standard). You can not only feel high efficiency and save trouble installation of its innovative design and advanced products, but also experience from thoughtful, flexible production systems. The installation of Huapeng busbar is one of the most convenient systems in the industry.





## (Comprehensive and clear design three-dimensional program plans of busbar)

Huapeng busbar use less auxiliary equipment and is more convenient than other bus systems, cables and piping when installation. The overall shape of the aluminum shell to form an overall effect of grounding, single-bolt connector design is efficient and safe, and the wire connectors in the feed socket box provide a reasonable curved space. it is the largest in the same industry.

Huapeng busbar superior insulation configuration is the industry's leading soldiers. In addition to traditional PTFE insulated (never aging), as well as self-adhesive polyester film of silicone rubber insulation and advanced overall insulation (insulated seamless whole.) Huapeng Busway has a flexible feeding system; the entire system can be flexibly designed feed port. The feed box can be exchanged freely in the socket in the third generation and fourth generation of busbar systems.

# A wide range application of transmission and distribution solutions Choose the right solutions for your special requirements... ...

When you need a plant for industrial, commercial and residential, shopping malls or high-tech environment with low-cost, high-efficiency power transmission and distribution solutions, you will need to balance performance and price in order to achieve efficient throughout your facility distribution, Huapeng is your best choice.

Huapeng can provide you with the industry's most complete and most modern busbar product line. Wide and complete variety of products allows you to use the optimized transmission solution to meet your special requirements at the site.

Comprehensive range of innovative solutions include the world's most extensive coverage, most technologically advanced busway products for the automotive industry, industrial and commercial enterprises, airport terminals and commercial and residential, office high-rise buildings to use.

Huapeng can provide different types of busbar system for you to choose, so you can choose the busbar systems and solutions on different occasions to suit your needs.

Perfect sales system, so you can easily obtain our company's busway products and accessories. Good sales service network, so you are very easy to install and use. Our product line follows the national and international standards, and designed specifically for your final design to meet your requirements.

### **SCC Series Compact Busway**

In recent years, busbar is moving to variety, high performance, high-quality, intelligent direction. Huapeng Group Limited Company series of bus products are in the domestic front among the similar products, guiding the development of market and user needs. in 2008, Company develop and independent design, a number of patented technologies SCC series of bus make the bus company's product quality leap into a new stage.



#### 1 Product Overview

#### Case Material

Bus shell is made of aluminum-magnesium alloy profiles, the overall structure has

high bending strength and good corrosion resistance, particularly for both good

heat dissipation and grounding. Bus shell form of non-magnetic choke

Ring, can reduce heating phenomenon caused by transfer eddy-current bus between phases, significantly enhance the busbar current carrying capacity, enhanced transmission.

#### Shell structure

the unique structure of dentate cooling of the surface of bus side and cover, extend its line of perimeter, increase the product contact area with air and emanate heat of the system run-time. By the test, in the same load, the temperature can reduce 6 °C of the bus system by using of this structure. It saves a lot of precious metals of copper while sustain the safe operation of the system;

# Busway framework - shell ground

Efficiency and reduce operating costs;

Bus use good electrical conductivity properties of housing as a grounding protection conductor: when there is a major capacity in the system ground fault, short circuit current first go through> 50% of the phase section of the aluminum case as efficient transmission, than reduce the ground path and the grounding resistance so as to protect busbar system effective operation and operator safety;

#### Connector device

components formed

Bus connector device add the heat sink the same material with bus side and cover between any the two adjacent plates apart. metal materials excellent thermal performance, make the bus connector connected



good heat sink, so as to effectively reduce the temperature rise of busbar joints and improve bus joint safe operation factor;



# Bus pouring terminal

SCC-bus terminal bus adopt Huapeng Group casting bus technology. Casting bus terminal by use of epoxy materials form flexible bus terminal structure to meet the different directions terminals transfer. Secure and reliable connection assures the safe of the system terminal;

### **New Connection Boxes**

Intelligent bus plug box design: the user's remote control can be achieved,

remote transfer function applied to the system flexible horizontal or vertical installation

Field monitoring, simple operation.



#### Conductor

SCC Series busbar conductor is special rectangular copper bars. Reasonable cross-section, special width of the plane make the largest peripheral surface of the conductor, so it's good for conductivity and the contact overlap surface of the conductor. The conductor is 99.993% copper conductors and raw materials is South American T1 copper.

### Coating

Busbar conductor surface adopt tin plating ( $\delta$ 6um), the tin plating process for the conductor provides an excellent electrical conductivity, and prevent copper oxide film formed on the surface of copper conductor from lap temperature rising. We also provide silver-plated handle for your choice.

## Plug Interface

SCC-type feeder busbar system fed aopt plug interface feed type. Security rate is up to IP54 (standard IEC-529). Each set of jacks are equipped with a special opening and closing locking device (patent devices), the effectiveness is anti-fouling materials, dust



and prevent misuse fingers. The material is highly efficient ABS engineering plastics. And a steel protective cover is added.

#### 2 Technical Data

| NO. | Current | Dimension | Weight |                | Rated      | Rated   | Resistance<br>R | Reactance<br>XL | Impedance<br>RL | IP   |
|-----|---------|-----------|--------|----------------|------------|---------|-----------------|-----------------|-----------------|------|
|     |         |           | <      | time withstand | insulation | Voltage |                 |                 |                 |      |
|     |         |           | kg/m   | current KA     | voltage V  | V       |                 |                 |                 |      |
| 1   | 400     | 145×101   | 16.0   | 30             | 1000       | 660     | 0.067172        | 0.031577        | 0.08718         | IP65 |
| 2   | 630     | 145×111   | 18.5   | 30             | 1000       | 660     | 0.059932        | 0.02875         | 0.078008        | IP65 |
| 3   | 800     | 145×126   | 22.5   | 30             | 1000       | 660     | 0.049716        | 0.024782        | 0.065061        | IP65 |
| 4   | 1000    | 145×141   | 26.0   | 30             | 1000       | 660     | 0.042476        | 0.021955        | 0.055889        | IP65 |
| 5   | 1250    | 145×166   | 32.5   | 50             | 1000       | 660     | 0.029561        | 0.01774         | 0.039926        | IP65 |
| 6   | 1600    | 145×196   | 40.0   | 50             | 1000       | 660     | 0.024579        | 0.015687        | 0.033624        | IP65 |
| 7   | 2000    | 145×234   | 48.0   | 50             | 1000       | 660     | 0.01478         | 0.009882        | 0.020433        | IP65 |
| 8   | 2500    | 145×284   | 60.5   | 80             | 1000       | 660     | 0.012289        | 0.007759        | 0.016772        | IP65 |
| 9   | 3150    | 145×389.5 | 76.5   | 80             | 1000       | 660     | 0.009854        | 0.006954        | 0.013803        | IP65 |
| 10  | 4000    | 180×389.5 | 99.5   | 100            | 1000       | 660     | 0.00739         | 0.004758        | 0.010129        | IP65 |
| 11  | 5000    | 180×465.5 | 119.5  | 100            | 1000       | 660     | 0.006145        | 0.003851        | 0.008373        | IP65 |
| 12  | 6300    | 180×565.5 | 152.5  | 120            | 1000       | 660     | 0.004927        | 0.00315         | 0.006742        | IP65 |

# 3 Protect degree

Protect degree of SCC busbar system is IP65. Protection degree pass the detection and identify of national authority designated department.

# 4 Testing

before delivery, each section of SCC type busbar would be inspection strictly. Busbar systems all follow the ISO9001: 2000 guidelines for manufacturing and testing.

## 5 Standard

SCC-type busbar system meets the following criteria:

IEC 439 1.2 " International Electrical Association Standards"

GB 7251.1-2005 "Low-voltage switchgear and control equipment

Part I: Type tested and partially type tested assemblies "

GB7251.2-2006 "Low-voltage switchgear and control equipment

Part II: special requirements for busbar(busways) trunking systems"

GBJ 149-90 "Electrical device installation construction bus devices installations and acceptance standards"

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JB / T 9662-1999 "intensive insulated busbar trunking system" (dense insulation busbar) NEMABU1.1 "busbar installation, maintenance standards"

#### **6 Environmental conditions**

SCC-type busbar system meets the following conditions:

Altitude: ≤ 2000m seismic intensity: ≤ 8 level

Temperature: Maximum temperature +50 °C (average temperature not more than

+40  $^{\circ}$ C in 24 hour), maximum daily temperature 15  $^{\circ}$ C.

Humidity: daily maximum relative humidity 95%, maximum relative humidity 90%

(20 ℃).

Installation Category: III level pollution level: 3 level

## 7 Order specification

Rated voltage: ≤1000V (AC) Rated frequency: 50 (60) HZ

Protection class: IP65 Insulation Performance: B-class

Heat Level: B Class Insulation resistance: ≥ 20MΩ (line to line)

Rated short time withstand current :15-75KA busbar temperature rise: the joints ≤ 70K, shell ≤ 55K

Huapeng Group Co., Ltd. with the most sophisticated technology to provide high-SCC series of bus: reduce bus impedance and pressure drop and improve the bus system's carrying capacity, and enhance the dynamic thermal stability of the bus system to ensure the safe operation of the user system. It brings direct economic benefits to the society.

8 quality standards: GB 7251.2

Huapeng Group Co., Ltd. 2011-4-26