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The power behind competitiveness

# Delta InfraSuite Cast Resin Busway System

BL Series, 400A-6400A  
IP68

[www.deltapowersolutions.com](http://www.deltapowersolutions.com)

 **DELTA**  
Smarter. Greener. Together.

# Delta Group

## Leading expert in power management and thermal management solutions

Delta Group is the world's leading provider of power management and thermal management solutions, as well as a major source for components, visual displays, industrial automation, networking products, and renewable energy solutions. Delta Group is focused on three main businesses: power electronics, energy management, and smart green life. Delta Group has sales offices worldwide and manufacturing plants in Taiwan, China, Thailand, Japan, Mexico, India, Brazil and Europe.

As a global leader in power electronics, Delta's mission is, "To provide innovative, clean and energy-efficient solutions for a better tomorrow." Delta is committed to environmental protection and has implemented green, lead-free production and recycling and waste management programs for many years.

More information about Delta Group can be found at <http://www.deltaww.com/>

**World no. 1** in Switching Power Supplies, DC Brushless Fans and Telecom Power Systems

**163** sales offices and **39** manufacturing facilities worldwide

**5%-6%** of annual sales revenues invested in R&D with over **7,000** engineers in **64** R&D centers worldwide

Awarded **7,100+** patents and received **47** internationally recognized design awards including iF, Reddot, and the Taiwan Excellence awards.

## No. 1 Supplier of Merchant Power Supplies

According to the IHS report, Delta Electronics remained the largest supplier of merchant power supplies with an estimated market share of 15.5% in 2016 of a global market value that was estimated to be \$21,869 M.

### The Total Merchant Power Supply Market 2016 \$M Revenue

| Ranking | Company Name       | Market Share |
|---------|--------------------|--------------|
| 1       | Delta Electronics  | 15.5%        |
| 2       | Axxxxxn            | 7.5%         |
| 3       | Lxxxxxx Technology | 4.5 %        |

Source : AC-DC & DC-DC Merchant Power Supplies, IHS, 2017

# Global Footprint

|               | Asia-Pacific (China) | Americas | EMEA | Total |
|---------------|----------------------|----------|------|-------|
| Sales Offices | 104 (61)             | 20       | 39   | 163   |
| Plant Sites   | 32 (19)              | 4        | 3    | 39    |
| R&D Centers   | 43 (23)              | 7        | 12   | 64    |

- Sales Offices
- Plant Sites
- R&D Centers



## Awards

Delta Electronics outperformed 37 leading global companies in the Electronic Equipment, Instrument, and Component sector of the 2017 Dow Jones Sustainability Indexes (DJSI), and was selected for the DJSI World Index for the seventh consecutive year.



2007 - 2008  
Forbes Asia's  
Fabulous 50



2009  
Frost & Sullivan Green  
Excellence Award for  
Corporate Leadership



2014  
CPLI Climate Performance  
Leadership Index, CPLI

MEMBER OF  
**Dow Jones  
Sustainability Indexes**  
In Collaboration with RobecoSAM

2011 - 2015  
Dow Jones  
Sustainability Indexes

More information about Delta Group can be found at <http://www.deltaww.com/>





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# Delta Cast Resin Busway System

## A Flexible, Safe, and Reliable Low Voltage Power Distribution Solution

The Busway BL Series from Delta are made from epoxy using vacuum casting. Superior to traditional cables or sandwich type busway solutions, Delta's Busways significantly improve the protection ratings, safety and reliability of products, are ideal for use in harsh environmental conditions, and can be extensively applied to a range of industries. Thanks to the outstanding electrical and mechanical properties of resin, these busways have reduced dimensions, a simplified structure, extended service life, and improved reusability. More importantly, Delta's Busways provide excellent energy-savings to help our customers enjoy substantial savings on their electricity bills.

### Customer Value

- Flexible modular design allows easy disassembly, reconstruction, and expansion as well as high re-usability
- Excellent safety, as well as waterproof, dustproof, fireproof, shock-proof, and corrosion-proof
- Certified according to market-specific or customer-specific needs, such as by the IEC, CNS, GB, and others
- Highly compact



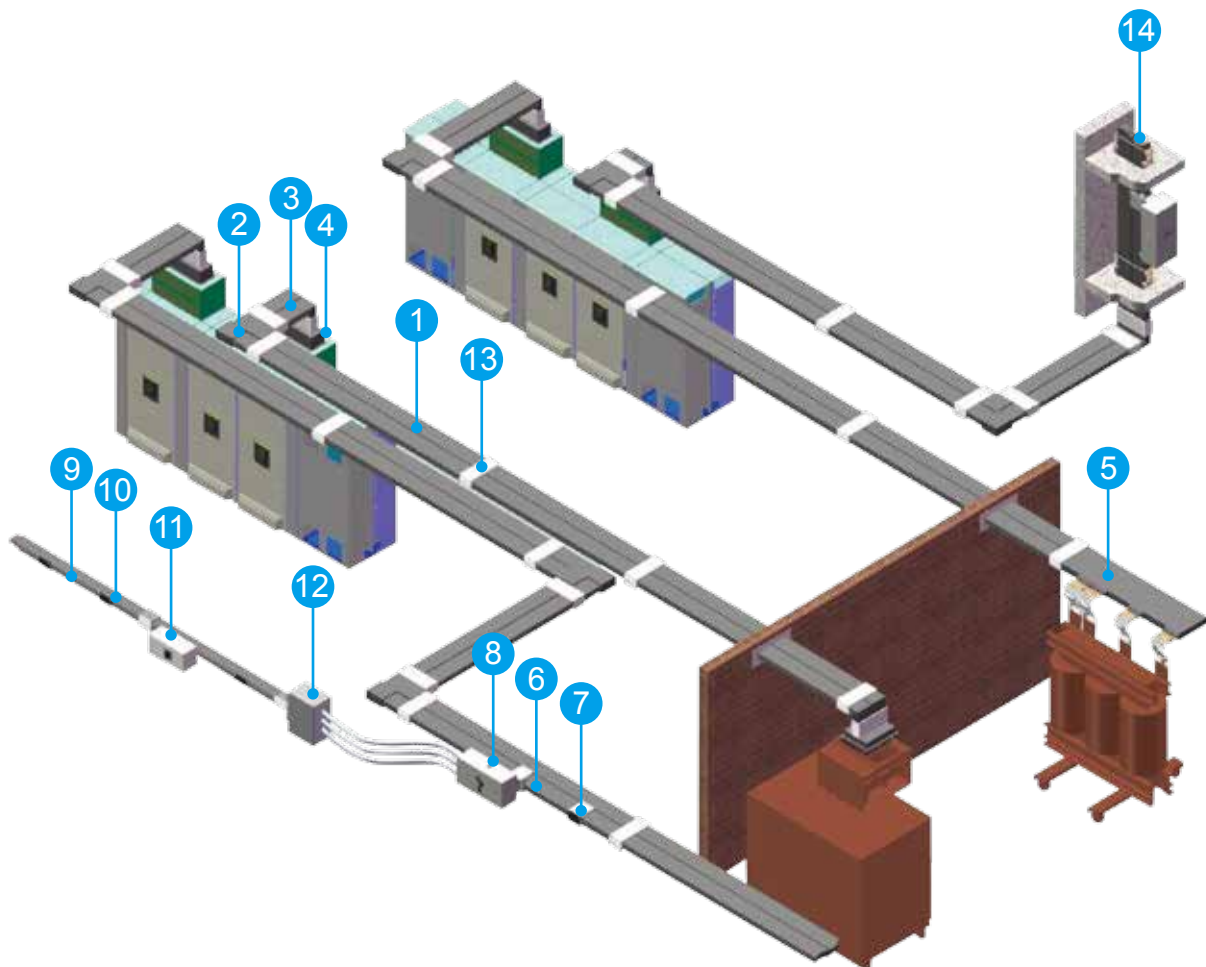
### Delta's Busways vs. Traditional Cable

Delta's Busways excel over traditional cables in terms of safety, electrical properties, reliability, and scalability, making them the best choice for companies looking at optimum TCO.

|                                      | Cast Resin Busway system                                                                      | Normal Cable                                                                                                                                                |
|--------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| System flexibility                   | Easily detaching joints, replaceable, re-usable and highly adaptable to system design changes | Need re-wiring in case of system changes                                                                                                                    |
| Installation and configuration       | Quick installation and configuration                                                          | Wiring over premises, costly and time-consuming                                                                                                             |
| Space use efficiency                 | Only 30% of traditional cable wiring, effective in saving installation space                  | Ducts in addition to wiring, bulky                                                                                                                          |
| Appearance                           | Easy to identify and manage at a glance                                                       | Messy power wiring, complicated looks                                                                                                                       |
| Fire resistance                      | High, IEC60331                                                                                | None                                                                                                                                                        |
| IP Rating                            | IP68                                                                                          | Not specified in the general technical data                                                                                                                 |
| Resistance to chemical and corrosion | Excellent                                                                                     | Poor                                                                                                                                                        |
| Instantaneous short-circuit strength | High                                                                                          | Low                                                                                                                                                         |
| Overload capacity (+25% 2hr)         | High                                                                                          | Low in heat resistance (up to about 60°C), thus being dangerous when overloaded, leading to accelerated insulating materials aging and reduced service life |
| Insulation rating                    | High, resin insulation Class F (155°C).                                                       | Low                                                                                                                                                         |

# System Architecture

- 1 Feeder section
- 2 Flatwise elbow
- 3 Edgewise elbow
- 4 Flange end
- 5 Flange end/FST
- 6 Plug-in section (bolt-on type)
- 7 Plug-in slot (bolt-on type)
- 8 Plug-in unit (bolt-on type)
- 9 Plug-in section (plug-in type)
- 10 Plug-in slot (plug-in type)
- 11 Plug-in unit
- 12 Cable box/End feed box
- 13 Joint
- 14 Spring hanger

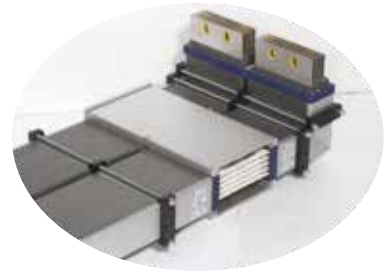


# Features and Advantages

Safe, reliable, innovative, energy-saving

## Key Specifications and Functions

- Copper 600A ~ 6400A,  
Aluminum 400A ~ 5000A
- Rated voltage up to 1000V.
- Operating ambient temperature -20°C ~50°C, daily average up to 35°C  
Altitude up to 2,000 meters.
- Model 3P3W or 3P4W, 50%G or 100%G.
- IP68 at busway feeder section, IP54 at plug-in section
- Modular design, easy disassembling and reassembling, and highly expandable
- Integrated cast resin block, with detachable bridge-type joints .
- Easy installation, effective foolproof design to prevent installation errors
- Design and Standards IEC60439-2, IEC61439, IEC60529, IEC60331, IEC60332  
JIS C8364, JIS A1304, JIS H3140  
GB7251.1,GB7251.2, ANSI/UL857,NEMA BU-1



## Innovative Energy-saving Materials

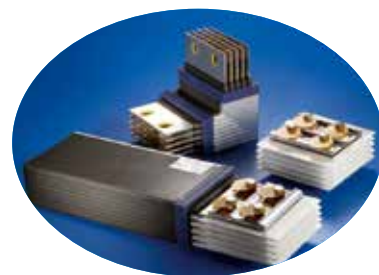
Normal busways have high power-consuming resistors in conductors, leading to expensive electricity bills. Delta's Busway uses state-of-the-art technology to not only cut electricity costs, but also effectively reduce electromagnetic interference, preventing damage to precision equipment.

- **CoAlly Technology:** Conductors are set to the optimum low-resistance state to reduce energy consumption as well as carbon footprints, while contributing to environmental protection and low power costs.
- **SiShield Technology:** With a low-impedance electrolytic copper plate, the conductor has optimum low resistance, effectively reducing loss and voltage drops. In addition, the internally coated composite significantly mitigates electromagnetic interference to protect precision equipment.



## Flexible and Cost-saving

- Delta's Cast Resin Busway system is only 60% of the size of traditional sandwich busways, and 30% of the size of traditional electrical cable wiring.
- The busway joint is constructed as moving connecting modules, easy to assemble, disassemble, expand, and reuse when changing layout.
- The plug-in unit works with MCCB from major manufacturers allowing live line operations at anytime to change loads without cutting off power and saving both time and money.
- Maintenance-free throughout its service life, reducing OPEX.





# Safety

## Waterproof, Dustproof

Delta's Cast Resin Busway system implements an integrated, formed design, with the conductors fully sealed in an epoxy composite during casting. Thanks to the outstanding binding and sealing properties of epoxy materials, the cast busways are highly waterproof.

Ideal for demanding weather conditions and rugged operating environments, such as:

- Outdoors, pipe, AC plant rooms, and other spaces where condensate tends to form
- Locations with many fire-fighting hoses, water piping and chemical ducts
- Resistant to salt corrosion, high humidity environment



**Fire resistance: IEC60332**  
**IEC60331 750°C 3hrs**  
**CNS12514 840°C 30mins**

Delta's busways are certified as fire resistance with industrial IEC standard, and conform to the latest fire control regulations. In case of fire, the busways can ensure a continuous emergency power supply to prevent injuries and/or facility damage, and would play an important role in electrical safety.



## Shock-proof: 0.8g

Shock-proof rating  $>0.4g$  = Magnitude 7.

Shock-proof tests have been performed with simulated real-life building construction, including steel structures, horizontal busways, vertical busways, busway elbows, plug-in units, hangers, spring hangers and more, to ensure all components are resistant to shock.



## Explosion-proof: Exm II CNS3376/IEC60079

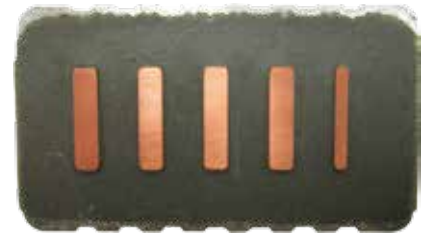
Ideal for use in a demanding environments with a risk of explosion, such as compressed natural gas filling stations, oil refineries, offshore platforms, wind farms, tunnels, mines, and others

## Impact-proof: IK10

# Busways

## Conductor Materials

Copper and aluminum conductors are available. Copper conductors have electric conductivity of higher than 99.9%, while aluminum conductors have electric conductivity of higher than 56%. For optimum electric conductivity and contact reliability, both the copper and aluminum conductors are plated entirely with tin.



## Resin Materials

For the best possible electrical, mechanical, waterproof, fireproof and self-extinguishing properties, the resin materials and their whole set of formulas are sourced from the most experienced and renowned manufacturers. The insulation rating is Class F, with a temperature limit up to 155°C. The resin is made with a high proportion of inorganic materials, such as natural sands transformed and cured into ceramic materials, thus possessing excellent insulating capabilities, high mechanical strength and outstanding fireproof properties.



## Busway Structure

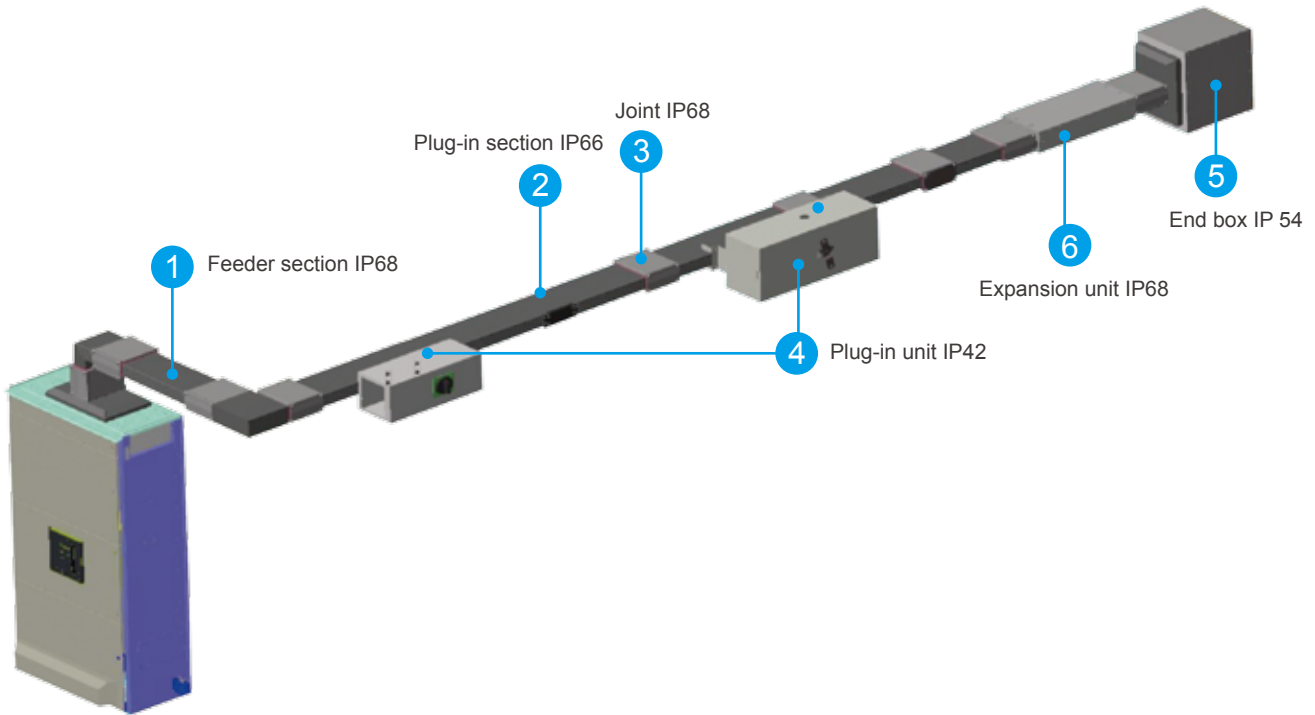
Delta's Cast Resin Busways feature an integrated, formed design, with the conductors fully sealed in an epoxy composite during casting, with highlights that include:

- Waterproof
- Epoxy made with a high proportion of inorganic materials such as natural sand that possess excellent insulating capability, high mechanical strength and excellent fireproof properties
- Plug-in unit works with MCCB from major manufacturers allowing live line operations anytime to change loads, without cutting off power to save both time and money
- Maintenance-free throughout its service life, saving on operating costs



# Busway IP rating

Conforming to IEC60529, CNS14165 standards, higher rating is available under demand.



# Ingress Protection rating

IP X X

| Code Digit | 1 <sup>st</sup> Code Digit                                                                                                                                                                 | 2 <sup>nd</sup> Code Digit                                                                                                                       |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
|            | Protected against contact with dangerous parts and foreign objects                                                                                                                         | Protected against water                                                                                                                          |
| 0          | No particular protection                                                                                                                                                                   | No particular protection                                                                                                                         |
| 1          | I. Protecting back of the hand from getting in contact with dangerous parts<br>II. Protecting against solid objects greater than 50mm in diameter                                          | Protecting against vertically falling water drops                                                                                                |
| 2          | I. Protected against finger contact with dangerous parts<br>II. Protecting against solid objects greater than 12.5mm in diameter                                                           | Protecting against vertically falling water drops when enclosure is tilted up to 15°                                                             |
| 3          | I. Protecting against test stick greater than 2.5mm in diameter from getting in contact with dangerous parts<br>II. Preventing contact with foreign objects greater than 2.5mm in diameter | Protecting against water sprayed at an angle of up to 60° degrees on either side of the enclosure                                                |
| 4          | I. Protecting against test stick greater than 1.0mm in diameter from getting in contact with dangerous parts<br>II. Protecting against solid objects greater than 1.0mm in diameter        | Protecting against water splashed against enclosure from any direction                                                                           |
| 5          | Dust protected, dust not allowed to interfere with safety of the product                                                                                                                   | Protecting against water splashed against enclosure from any direction for continuous 3 minutes                                                  |
| 6          | Dustproof, no ingress of dust                                                                                                                                                              | Protecting against water injected against enclosure from any direction for continuous 3 minutes                                                  |
| 7          |                                                                                                                                                                                            | Protecting against water when enclosure is immersed in water with the lowest point of the enclosure 1 m below the water surface , for 30 minutes |
| 8          |                                                                                                                                                                                            | Protecting against water when enclosure is immersed in water with depth and duration expected to be greater than requirements for Class 7        |

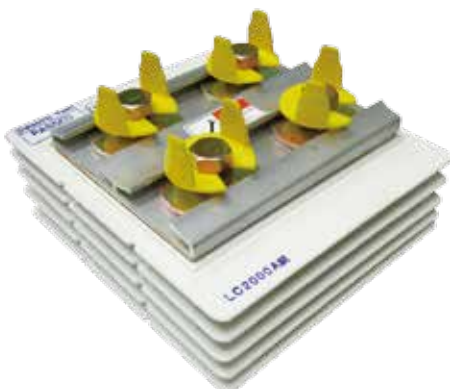
# Joint



- Connection between busways is achieved by linking conductors of two busways with a movable joint. With the easily detachable joint design, replacing busways when changing power system design or adding loops, can be done in a short time, minimizing downtime.



- With the double-bolt design, stress distribution over the copper plate contact surfaces at the joint is more extensive and uniform, ensuring more reliable binding for the two busways. This promises reliability even after long-term stress fluctuation due to thermal expansion.



- The busway uses a 4-piece movable packing at the joint. After the screws at the joint are screwed to the end with a required torque, and the indication tag falls, the cap is forced onto the busways following the sealing and screwing process. The solid silicone packing wrapping the busway joint and the cap will seal any seam to ensure IP68 waterproof reliability at the joint.
- The joint is designed with foolproof functions that only allow fixed-torque screws to be set when busways are correctly positioned. Not until the fixed-torque screws are screwed to the end and have the head falling, can the sealing plate be installed. This ensures every installation step of the busway joint is done properly.

# Plug-in unit

- With this plug-in unit design, when users want to add equipment or adjust power load, what they need to do is to get parts meeting the specifications of the desired plug-in unit specifications and mount the plug-in unit to the proper and closest busway slot to guide out power, without cutting off the busway. This allows for quick and easy installation, and in turn great flexibility and convenience.
- Plug-in unit is provided in two versions, both allowing live line plug/unplug operations:
  - Plug-in type capacity: Up to 630A, with conductive clip design, suitable for light load systems.
  - Bolt-on type capacity: Up to 2000A, with a bolt bridge design, suitable for heavy load systems.  
Bolt packing ensures great reliability.
- The plug-in section busway has a standard length of 4.2m, with up to 5 reserved input ports. The number and location of input ports may be customized to customers' needs, thereby saving costs and preventing unnecessary waste.
- The plug-in units are able to be customized with MCCB from any leading manufacturer and is highly adaptable to customers' practical needs.
- The plug-in unit may be equipped with a monitoring module, allowing power information to be read on board or otherwise displayed, or transmitted to the monitoring system through RS485.



Plug-in unit with monitoring module



Conductive clip design  
(Plug-in Type)



Bolt bridge design  
(Bolt-on Type)

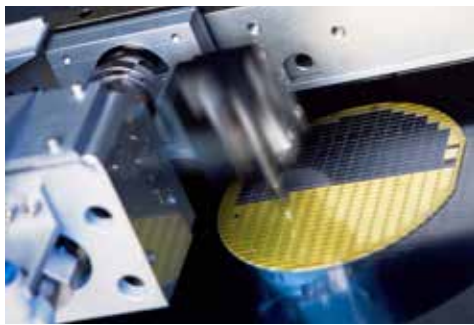


# Applications

With the rapid growth of global IT industry, factories are built to increasingly large scales. This adds to the demand for quality power supply, safe power transfer and efficient systems, as well as greater expandability. As busway development has reached higher levels of reliability, safety and flexibility due to fast delivery and flexible engineering changes, busways are now used extensively in a variety of industries.

In addition to power transmission/distribution, Delta's Busways also feature high protection ratings and are ideal for harsh environmental conditions and mission critical applications required high reliability and safety.

|                                  | Emergency, outdoor applications | Petro-chemistry, marine, oil & gas | Critical equipment, datacenters | Electronics, semiconductor, wafer fabrication | Water treatment | Wind farms |
|----------------------------------|---------------------------------|------------------------------------|---------------------------------|-----------------------------------------------|-----------------|------------|
| Waterproof, dustproof IP68       | ●                               | ●                                  | ●                               | ●                                             | ●               | ●          |
| Fireproof and burning-proof      | ●                               | ●                                  |                                 |                                               | ●               | ●          |
| Explosion-proof                  | ●                               | ●                                  | ●                               | ●                                             | ●               | ●          |
| Resistance to chemical corrosion | ●                               | ●                                  | ●                               | ●                                             | ●               | ●          |
| Shock-proof                      |                                 | ●                                  |                                 | ●                                             | ●               | ●          |

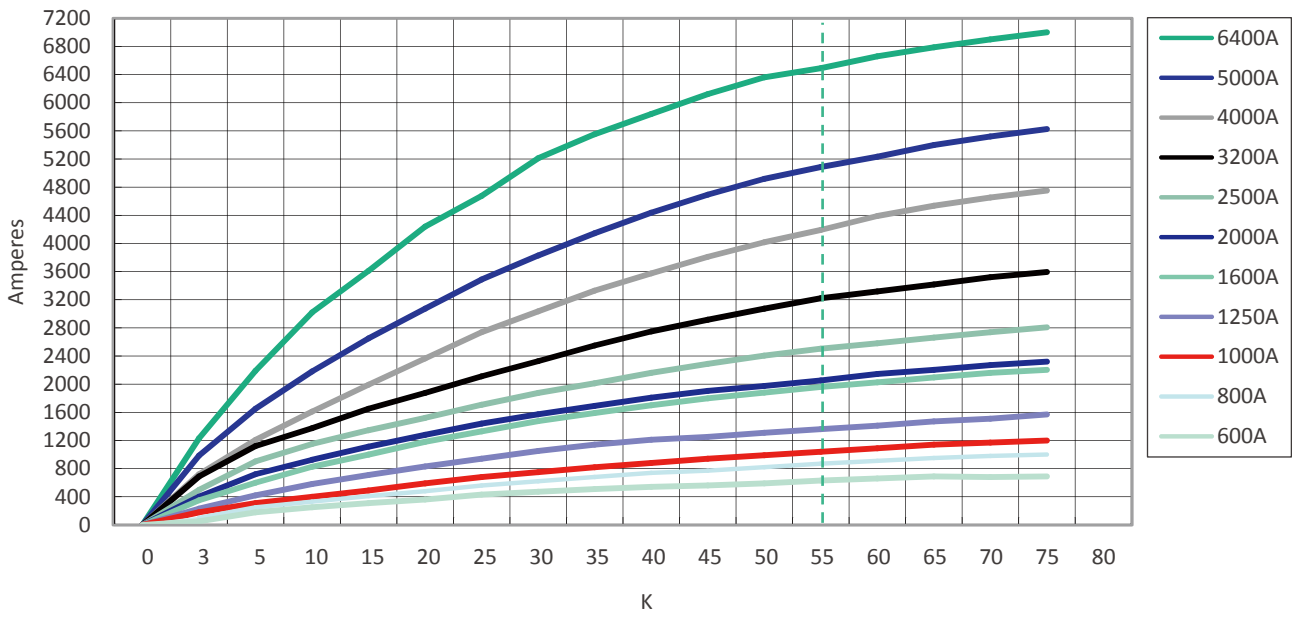


# Technical Specifications

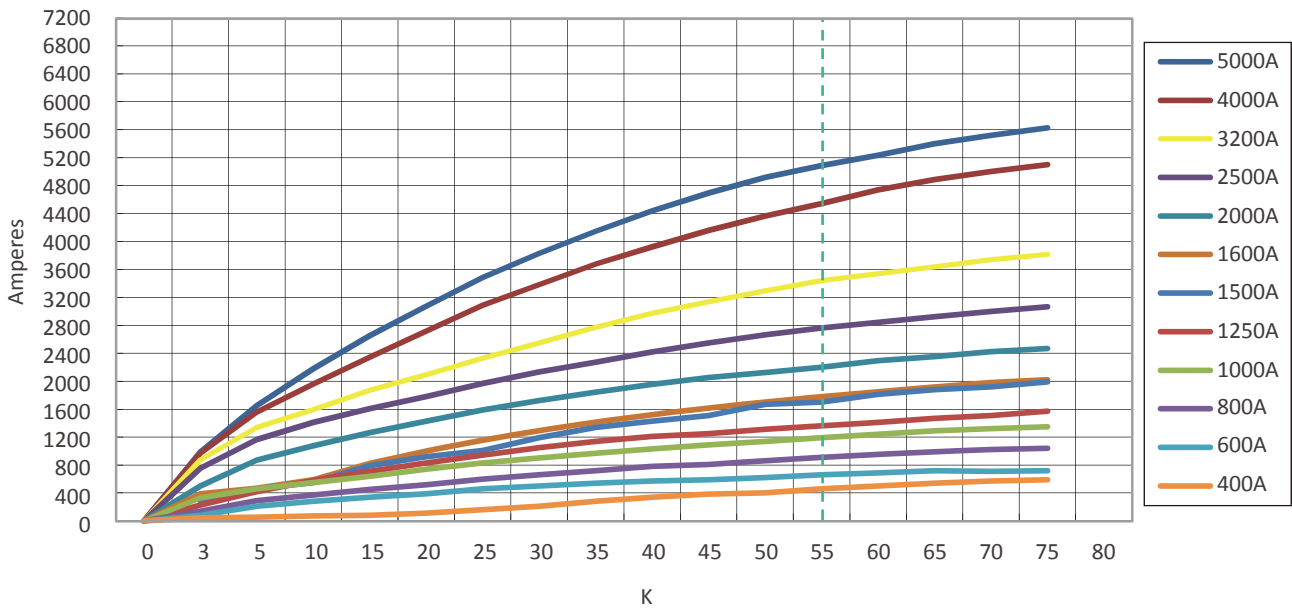
| Busway Ratings            | 400A                                                                                                                       | 600A  | 800A  | 1000A | 1250A | 1500A | 1600A | 2000A | 2500A | 3200A | 4000A | 5000A | 6400A |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>Models</b>             |                                                                                                                            |       |       |       |       |       |       |       |       |       |       |       |       |
| Copper                    |                                                                                                                            | BLC06 | BLC08 | BLC10 | BLC12 |       | BLC16 | BLC20 | BLC25 | BLC32 | BLC40 | BLC50 | BLC64 |
| Aluminum                  | BLA04                                                                                                                      | BLA06 | BLA08 | BLA10 | BLA12 | BLA15 | BLA16 | BLA20 | BLA25 | BLA32 | BLA40 | BLA50 |       |
| Rated voltage             | V                                                                                                                          | 1000  | 1000  | 1000  | 1000  | 1000  | 1000  | 1000  | 1000  | 1000  | 1000  | 1000  | 1000  |
| Rated current             | A                                                                                                                          | 400   | 600   | 800   | 1000  | 1250  | 1500  | 1600  | 2000  | 2500  | 3200  | 4000  | 5000  |
| Frequency                 | Hz                                                                                                                         | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 |
| Conductor                 | Copper purity: 99.9% conductivity: 99.9%IACS<br>Aluminum purity: 98.0% conductivity: 56.0%IACS                             |       |       |       |       |       |       |       |       |       |       |       |       |
| Conductor plating         | Tin plating                                                                                                                |       |       |       |       |       |       |       |       |       |       |       |       |
| Insulation material       | Epoxy Cast resin                                                                                                           |       |       |       |       |       |       |       |       |       |       |       |       |
| Insulation class          | F class 155°C                                                                                                              |       |       |       |       |       |       |       |       |       |       |       |       |
| Fire resistance           | IEC60331 750°C 3hrs; IEC60332<br>CNS12514 840°C 30mins(Special made-C)                                                     |       |       |       |       |       |       |       |       |       |       |       |       |
| Ingress protection rating | IP68                                                                                                                       |       |       |       |       |       |       |       |       |       |       |       |       |
| Earthquake test           | 0.8g [magnitude >7]                                                                                                        |       |       |       |       |       |       |       |       |       |       |       |       |
| Explosive-symbol          | ExmII                                                                                                                      |       |       |       |       |       |       |       |       |       |       |       |       |
| Mechanical Impact         | IK10                                                                                                                       |       |       |       |       |       |       |       |       |       |       |       |       |
| Color                     | RAL7043                                                                                                                    |       |       |       |       |       |       |       |       |       |       |       |       |
| <b>Plug-in unit</b>       |                                                                                                                            |       |       |       |       |       |       |       |       |       |       |       |       |
| Type                      | Plug-in type/Bolt-on type                                                                                                  |       |       |       |       |       |       |       |       |       |       |       |       |
| Pole                      | 1P/2P/3P/4P                                                                                                                |       |       |       |       |       |       |       |       |       |       |       |       |
| Max.rating                | Plug-in type 630A<br>Bolt-on type 2000A                                                                                    |       |       |       |       |       |       |       |       |       |       |       |       |
| MCCB brands               | Mitsubishi, Fuji, GE, Schneider (MG), or Customer specified                                                                |       |       |       |       |       |       |       |       |       |       |       |       |
| Protection rating         | IP42/IP54 (Option) IP42                                                                                                    |       |       |       |       |       |       |       |       |       |       |       |       |
| Panel coating             | Powder coated paint                                                                                                        |       |       |       |       |       |       |       |       |       |       |       |       |
| Coating thickness         | Indoor 40µm/outdoor 50µm                                                                                                   |       |       |       |       |       |       |       |       |       |       |       |       |
| Color                     | RAL7047/RAL7043                                                                                                            |       |       |       |       |       |       |       |       |       |       |       |       |
| <b>General</b>            |                                                                                                                            |       |       |       |       |       |       |       |       |       |       |       |       |
| Standards                 | IEC60439-2,IEC61439,IEC60529,IEC60331,IEC60332<br>JIS C8364,JIS A1304,JIS H3140<br>GB7251.1,GB7251.2, ANSI/UL857,NEMA BU-1 |       |       |       |       |       |       |       |       |       |       |       |       |
| Ambient temperature       | -20°C/+50°C avg.35°C                                                                                                       |       |       |       |       |       |       |       |       |       |       |       |       |
| Altitude                  | ≤ 2,000m                                                                                                                   |       |       |       |       |       |       |       |       |       |       |       |       |

# Temperature rise

## Temperature rise graph (Copper)



## Temperature rise graph (Aluminum)



# Short-circuit strength

## Copper

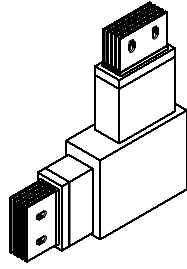
| Rating [A] | RMS Symmetrical (kA) |       |       |
|------------|----------------------|-------|-------|
|            | 6 cycles             | 1 sec | 3 sec |
| 600        | 140                  | 65    | 38    |
| 800        | 140                  | 65    | 38    |
| 1000       | 140                  | 65    | 38    |
| 1250       | 140                  | 65    | 38    |
| 1600       | 175                  | 80    | 46    |
| 2000       | 175                  | 80    | 46    |
| 2500       | 220                  | 100   | 58    |
| 3200       | 280                  | 130   | 75    |
| 4000       | 410                  | 175   | 101   |
| 5000       | 410                  | 200   | 115   |
| 6400       | 410                  | 200   | 115   |

## Aluminum

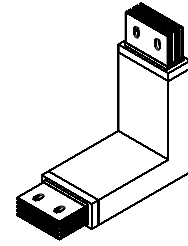
| Rating [A] | RMS Symmetrical (kA) |       |       |
|------------|----------------------|-------|-------|
|            | 6 cycles             | 1 sec | 3 sec |
| 400        | 105                  | 50    | 29    |
| 600        | 105                  | 50    | 29    |
| 800        | 105                  | 50    | 29    |
| 1000       | 140                  | 65    | 38    |
| 1250       | 140                  | 65    | 38    |
| 1500       | 140                  | 65    | 38    |
| 1600       | 140                  | 65    | 38    |
| 2000       | 175                  | 80    | 46    |
| 2500       | 175                  | 80    | 46    |
| 3200       | 220                  | 100   | 58    |
| 4000       | 280                  | 130   | 75    |
| 5000       | 410                  | 175   | 101   |

# Busway elements

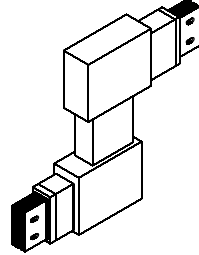
LH-type elbow  
Flatwise elbow



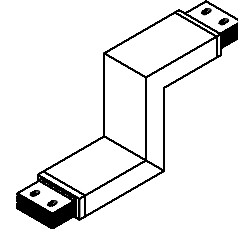
LV-type elbow  
Edgewise elbow



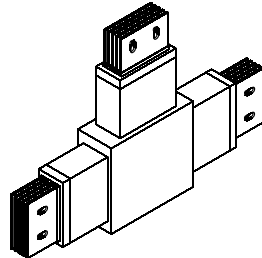
NH-type elbow  
Flatwise offset



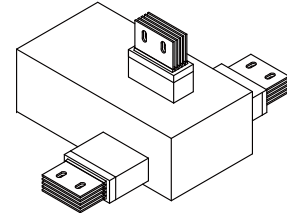
NV-type elbow  
Edgewise offset



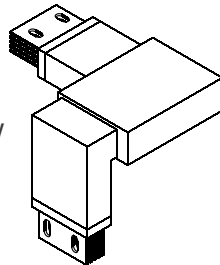
TH-type elbow  
Flatwise Tee



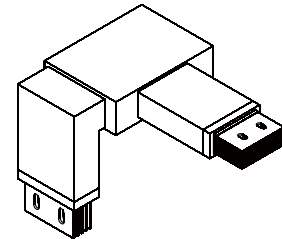
TV-type elbow  
Edgewise Tee



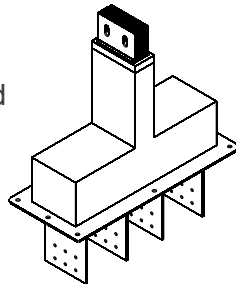
CH-type elbow  
Flat to edge elbow



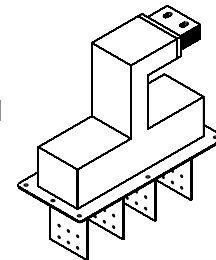
CV-type elbow  
Edge to flat elbow



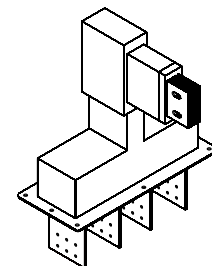
FS type flange end  
Flange end



FV-type flange end  
Flange end/  
edgewise elbow



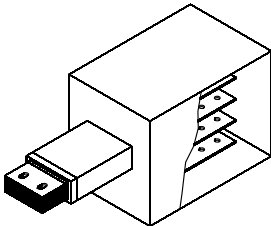
FH-type flange end  
Flange end/  
flatwise elbow



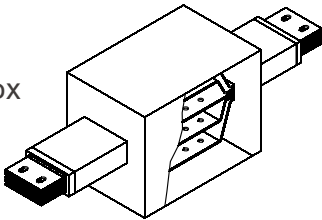


# Busway elements

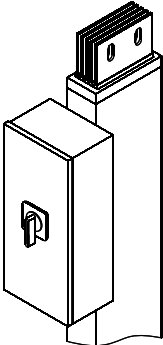
End tap box



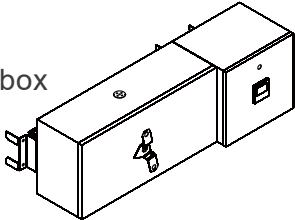
Center tap box



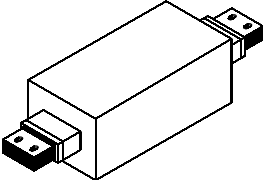
Plug-in unit



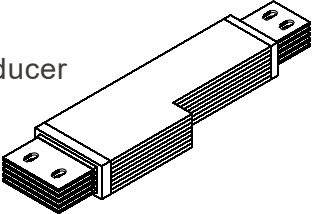
Plug-in unit / Power meter box



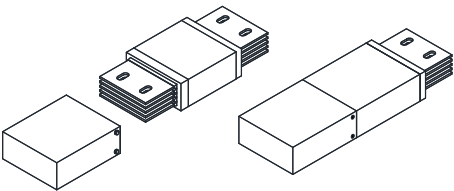
Expansion fitting



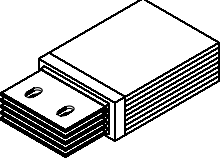
Unfused reducer



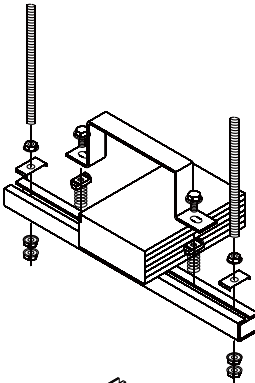
End cover



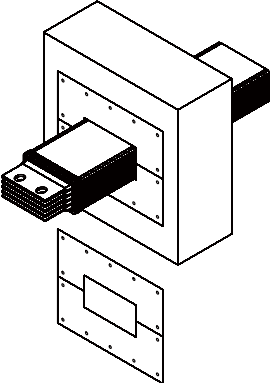
Feeder end



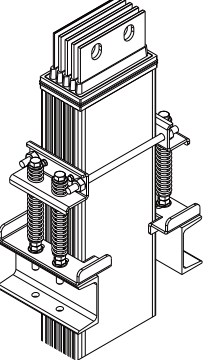
Ceiling trapeze



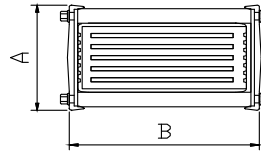
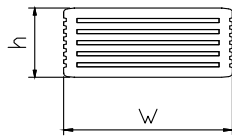
Wall/Floor flange



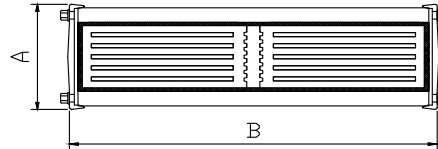
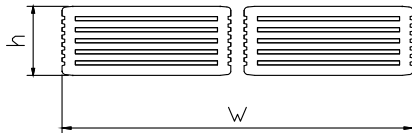
Spring hanger



# Properties



► Figure 1



► Figure 2

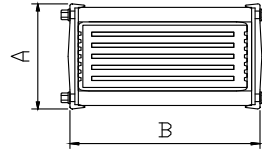
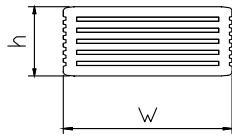
## Copper

| Busway Ratings                                              |                 | 600A   | 800A   | 1000A   | 1250A   | 1600A   | 2000A   | 2500A   | 3200A   | 4000A   | 5000A   | 6400A   |
|-------------------------------------------------------------|-----------------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Models                                                      |                 | BLC06  | BLC08  | BLC10   | BLC12   | BLC16   | BLC20   | BLC25   | BLC32   | BLC40   | BLC50   | BLC64   |
| Rated voltage                                               | V               | 1000   | 1000   | 1000    | 1000    | 1000    | 1000    | 1000    | 1000    | 1000    | 1000    | 1000    |
| Rated current                                               | A               | 600    | 800    | 1000    | 1250    | 1600    | 2000    | 2500    | 3200    | 4000    | 5000    | 6400    |
| Frequency                                                   | Hz              | 50/60  | 50/60  | 50/60   | 50/60   | 50/60   | 50/60   | 50/60   | 50/60   | 50/60   | 50/60   | 50/60   |
| <b>Impedance values</b>                                     |                 |        |        |         |         |         |         |         |         |         |         |         |
| For busway operating at 50Hz frequency and 85°C temperature |                 |        |        |         |         |         |         |         |         |         |         |         |
| Resistance $R_{20}$                                         | $\mu\Omega/m$   | 106.3  | 68.7   | 50.2    | 34.7    | 23.0    | 17.9    | 15.1    | 11.6    | 9.0     | 7.6     | 6.1     |
| Resistance $R_{85}$                                         | $\mu\Omega/m$   | 133.5  | 86.2   | 63.0    | 43.5    | 28.9    | 22.5    | 18.9    | 14.5    | 11.3    | 9.5     | 7.7     |
| Reactance $X_{50}$                                          | $\mu\Omega/m$   | 112.3  | 79.9   | 57.3    | 42.3    | 28.0    | 22.1    | 17.7    | 13.4    | 10.0    | 8.8     | 6.3     |
| Impedance $Z_{50}$                                          | $\mu\Omega/m$   | 174.5  | 117.5  | 85.2    | 60.7    | 40.2    | 31.5    | 25.9    | 19.7    | 15.1    | 12.9    | 9.9     |
| For busway operating at 60Hz frequency and 85°C temperature |                 |        |        |         |         |         |         |         |         |         |         |         |
| Resistance $R_{20}$                                         | $\mu\Omega/m$   | 106.3  | 68.7   | 50.2    | 34.7    | 23.0    | 17.9    | 15.1    | 11.6    | 9.0     | 7.6     | 6.1     |
| Resistance $R_{85}$                                         | $\mu\Omega/m$   | 133.5  | 86.2   | 63.0    | 43.5    | 28.9    | 22.5    | 18.9    | 14.5    | 11.3    | 9.5     | 7.7     |
| Reactance $X_{60}$                                          | $\mu\Omega/m$   | 134.8  | 95.9   | 68.8    | 50.8    | 33.6    | 26.5    | 21.2    | 16.1    | 12.0    | 10.6    | 7.6     |
| Impedance $Z_{60}$                                          | $\mu\Omega/m$   | 189.7  | 128.9  | 93.3    | 66.9    | 44.3    | 34.8    | 28.4    | 21.7    | 16.5    | 14.2    | 10.8    |
| <b>Conductor cross-section</b>                              |                 |        |        |         |         |         |         |         |         |         |         |         |
| L1,L2,L3                                                    | mm <sup>2</sup> | 145    | 232    | 307.4   | 464     | 696     | 928     | 1160    | 1392    | 1856    | 2320    | 2784    |
| N(100%)                                                     | mm <sup>2</sup> | 145    | 232    | 307.4   | 464     | 696     | 928     | 1160    | 1392    | 1856    | 2320    | 2784    |
| G(Internal)                                                 | mm <sup>2</sup> | 72.5   | 116    | 153.7   | 232     | 348     | 464     | 580     | 696     | 928     | 1160    | 1392    |
| <b>Busway Dimension</b>                                     |                 |        |        |         |         |         |         |         |         |         |         |         |
| h x w                                                       | mm              | 100x55 | 100x70 | 100x83  | 100x110 | 100x150 | 100x190 | 100x230 | 100x270 | 100x395 | 100x475 | 100x555 |
| Joint A x B                                                 | mm              | 152x93 | 152x93 | 152x106 | 152x133 | 152x173 | 152x213 | 152x253 | 152x293 | 152x418 | 152x498 | 152x578 |
| Figure                                                      |                 | 1      | 1      | 1       | 1       | 1       | 1       | 1       | 1       | 2       | 2       | 2       |

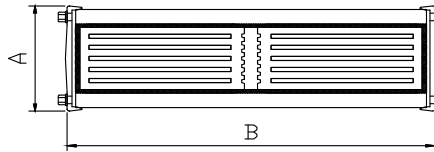
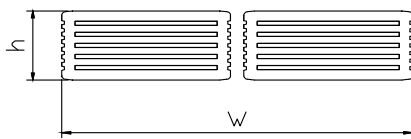
Voltage drop  $\Delta U = \sqrt{3} \times I (R_{85} \cos\phi + X_{50/60} \sin\phi)$  (V/m)

I : loading current  $\cos\phi$  : power factor  $\sin\phi = (1 - \cos^2\phi)^{1/2}$

# Properties



► Figure 1



► Figure 2

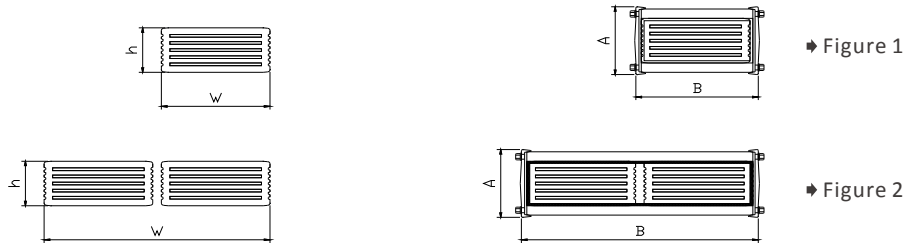
## Aluminum

| Busway Ratings                                              |                 | 400A   | 600A    | 800A    | 1000A   | 1250A   | 1500A   | 1600A   | 2000A   | 2500A   | 3200A   | 4000A   | 5000A   |
|-------------------------------------------------------------|-----------------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Models                                                      |                 | BLA04  | BLA06   | BLA08   | BLA10   | BLA12   | BLA15   | BLA16   | BLA20   | BLA25   | BLA32   | BLA40   | BLA50   |
| Rated voltage                                               | V               | 1000   | 1000    | 1000    | 1000    | 1000    | 1000    | 1000    | 1000    | 1000    | 1000    | 1000    | 1000    |
| Rated current                                               | A               | 400    | 600     | 800     | 1000    | 1250    | 1500    | 1600    | 2000    | 2500    | 3200    | 4000    | 5000    |
| Frequency                                                   | Hz              | 50/60  | 50/60   | 50/60   | 50/60   | 50/60   | 50/60   | 50/60   | 50/60   | 50/60   | 50/60   | 50/60   | 50/60   |
| <b>Impedance values</b>                                     |                 |        |         |         |         |         |         |         |         |         |         |         |         |
| For busway operating at 50Hz frequency and 85°C temperature |                 |        |         |         |         |         |         |         |         |         |         |         |         |
| Resistance $R_{20}$                                         | $\mu\Omega/m$   | 110.2  | 84.8    | 55.1    | 47.0    | 39.3    | 29.8    | 24.8    | 21.8    | 15.7    | 13.6    | 10.9    | 9.3     |
| Resistance $R_{85}$                                         | $\mu\Omega/m$   | 138.2  | 106.3   | 69.1    | 58.9    | 49.3    | 37.4    | 31.1    | 27.4    | 19.7    | 17.1    | 13.7    | 11.6    |
| Reactance $X_{50}$                                          | $\mu\Omega/m$   | 128.0  | 76.5    | 56.9    | 49.8    | 38.6    | 28.9    | 22.3    | 17.4    | 12.9    | 10.0    | 8.3     | 5.1     |
| Impedance $Z_{50}$                                          | $\mu\Omega/m$   | 188.4  | 131.0   | 89.5    | 77.1    | 62.6    | 47.3    | 38.3    | 32.5    | 23.5    | 19.8    | 16.0    | 13.0    |
| For busway operating at 60Hz frequency and 85°C temperature |                 |        |         |         |         |         |         |         |         |         |         |         |         |
| Resistance $R_{20}$                                         | $\mu\Omega/m$   | 110.2  | 84.8    | 55.1    | 47.0    | 39.3    | 29.8    | 24.8    | 21.8    | 15.7    | 13.6    | 10.9    | 9.3     |
| Resistance $R_{85}$                                         | $\mu\Omega/m$   | 138.2  | 106.3   | 69.1    | 58.9    | 49.3    | 37.4    | 31.1    | 27.4    | 19.7    | 17.1    | 13.7    | 11.6    |
| Reactance $X_{60}$                                          | $\mu\Omega/m$   | 153.6  | 91.8    | 68.3    | 59.8    | 46.3    | 34.7    | 26.8    | 20.9    | 15.5    | 12.0    | 9.9     | 7.0     |
| Impedance $Z_{60}$                                          | $\mu\Omega/m$   | 206.6  | 140.5   | 97.2    | 83.9    | 67.6    | 51.0    | 41.1    | 34.5    | 25.1    | 20.9    | 16.9    | 13.5    |
| <b>Conductor cross-section</b>                              |                 |        |         |         |         |         |         |         |         |         |         |         |         |
| L1,L2,L3                                                    | mm <sup>2</sup> | 232    | 307.4   | 464     | 580     | 696     | 928     | 1160    | 1392    | 1392    | 2320    | 2784    | 2784    |
| N(100%)                                                     | mm <sup>2</sup> | 232    | 307.4   | 464     | 580     | 696     | 928     | 1160    | 1392    | 1392    | 2320    | 2784    | 2784    |
| G(Internal)                                                 | mm <sup>2</sup> | 116    | 153.7   | 232     | 290     | 348     | 464     | 580     | 696     | 696     | 1160    | 1392    | 1392    |
| <b>Busway Dimension</b>                                     |                 |        |         |         |         |         |         |         |         |         |         |         |         |
| h x w                                                       | mm              | 100x70 | 100x83  | 100x110 | 100x130 | 100x150 | 100x190 | 100x230 | 100x270 | 100x270 | 100x475 | 100x555 | 100x555 |
| Joint A x B                                                 | mm              | 152x93 | 152x106 | 152x133 | 152x153 | 152x173 | 152x213 | 152x253 | 152x293 | 152x293 | 152x498 | 152x578 | 152x578 |
| Figure                                                      |                 | 1      | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 2       | 2       | 2       |

Voltage drop  $\Delta U = \sqrt{3} \times I \times (R_{85} \cos\phi + X_{50/60} \sin\phi)$  (V/m)

I : loading current  $\cos\phi$  : power factor  $\sin\phi = (1 - \cos^2\phi)^{1/2}$

# Dimensions and Weight



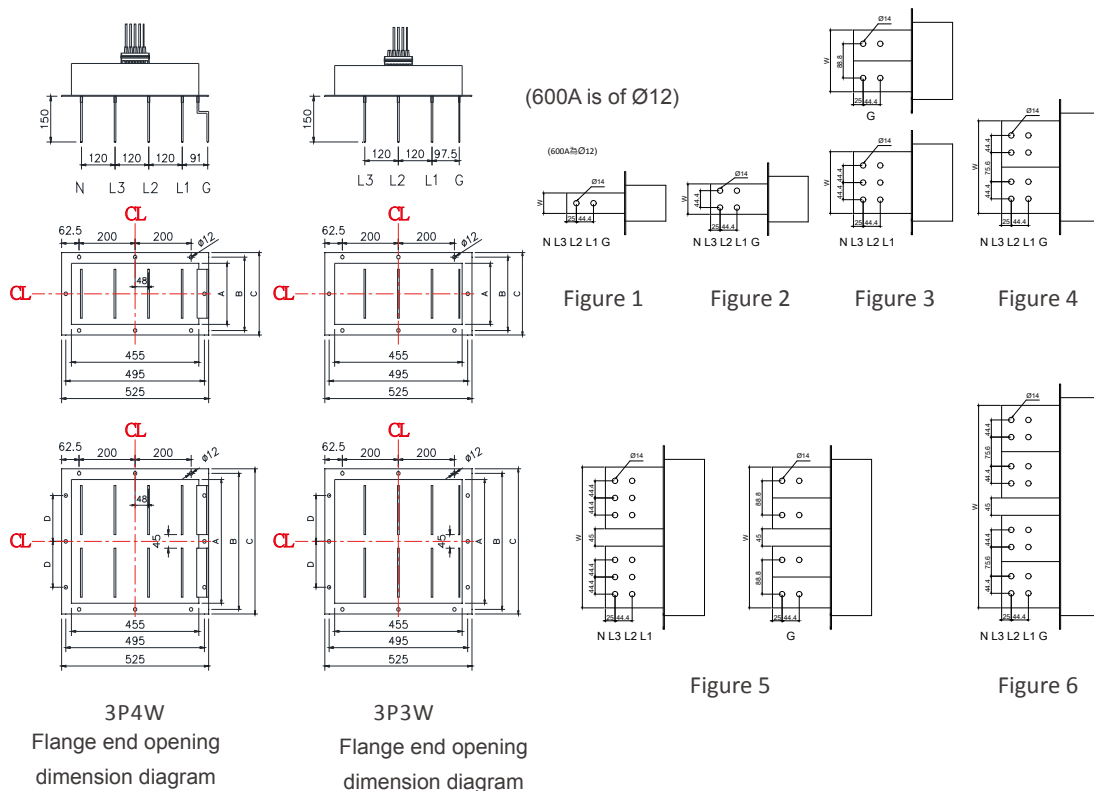
## Copper

| Busway Ratings     |      | 600A   | 800A   | 1000A   | 1250A   | 1600A   | 2000A   | 2500A   | 3200A   | 4000A   | 5000A   | 6400A   |
|--------------------|------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Models             |      | BLC06  | BLC08  | BLC10   | BLC12   | BLC16   | BLC20   | BLC25   | BLC32   | BLC40   | BLC50   | BLC64   |
| h x w              | mm   | 100x55 | 100x70 | 100x83  | 100x110 | 100x150 | 100x190 | 100x230 | 100x270 | 100x395 | 100x475 | 100x555 |
| Joint AxB          | mm   | 152x93 | 152x93 | 152x106 | 152x133 | 152x173 | 152x213 | 152x253 | 152x293 | 152x418 | 152x498 | 152x578 |
| Weight 3P3W 50% G  | Kg/m | 13.9   | 18.9   | 23.3    | 32.4    | 45.8    | 59.3    | 72.7    | 86.1    | 118.6   | 145.4   | 172.2   |
| Weight 3P3W 100% G | Kg/m | 14.5   | 19.7   | 24.5    | 34.1    | 48.3    | 62.6    | 76.8    | 91.1    | 125.2   | 153.6   | 182.2   |
| Weight 3P4W 50% G  | Kg/m | 15.0   | 20.6   | 25.5    | 35.7    | 50.8    | 65.9    | 81.0    | 96.0    | 131.8   | 162.0   | 192.0   |
| Weight 3P4W 100% G | Kg/m | 15.5   | 21.4   | 26.6    | 37.4    | 53.3    | 69.2    | 85.1    | 101.0   | 138.4   | 170.2   | 202.0   |
| Figure             |      | 1      | 1      | 1       | 1       | 1       | 1       | 1       | 1       | 2       | 2       | 2       |

## Aluminum

| Busway Ratings     |      | 400A   | 600A    | 800A    | 1000A   | 1250A   | 1500A   | 1600A   | 2000A   | 2500A   | 3200A   | 4000A   | 5000A   |
|--------------------|------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Models             |      | BLA04  | BLC06   | BLC08   | BLC10   | BLC12   | BLA15   | BLA16   | BLA20   | BLA25   | BLA32   | BLA40   | BLA50   |
| h x w              | mm   | 100x70 | 100x83  | 100x110 | 100x130 | 100x150 | 100x190 | 100x230 | 100x270 | 100x270 | 100x475 | 100x555 | 100x555 |
| Joint AxB          | mm   | 152x93 | 152x106 | 152x133 | 152x153 | 152x173 | 152x213 | 152x253 | 152x293 | 152x293 | 152x498 | 152x578 | 152x578 |
| Weight 3P3W 50% G  | Kg/m | 14.0   | 16.6    | 22.2    | 26.4    | 30.6    | 39.0    | 47.3    | 55.6    | 55.6    | 94.6    | 111.2   | 111.2   |
| Weight 3P3W 100% G | Kg/m | 14.1   | 16.7    | 22.5    | 26.7    | 30.9    | 39.4    | 47.8    | 56.2    | 56.2    | 95.6    | 112.4   | 112.4   |
| Weight 3P4W 50% G  | Kg/m | 14.2   | 16.9    | 22.6    | 26.9    | 31.2    | 39.8    | 48.3    | 56.8    | 56.8    | 96.6    | 113.6   | 113.6   |
| Weight 3P4W 100% G | Kg/m | 14.3   | 17.0    | 22.9    | 27.2    | 31.5    | 40.2    | 48.8    | 57.4    | 57.4    | 97.6    | 114.8   | 114.8   |
| Figure             |      | 1      | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 2       | 2       | 2       |

# Flange end



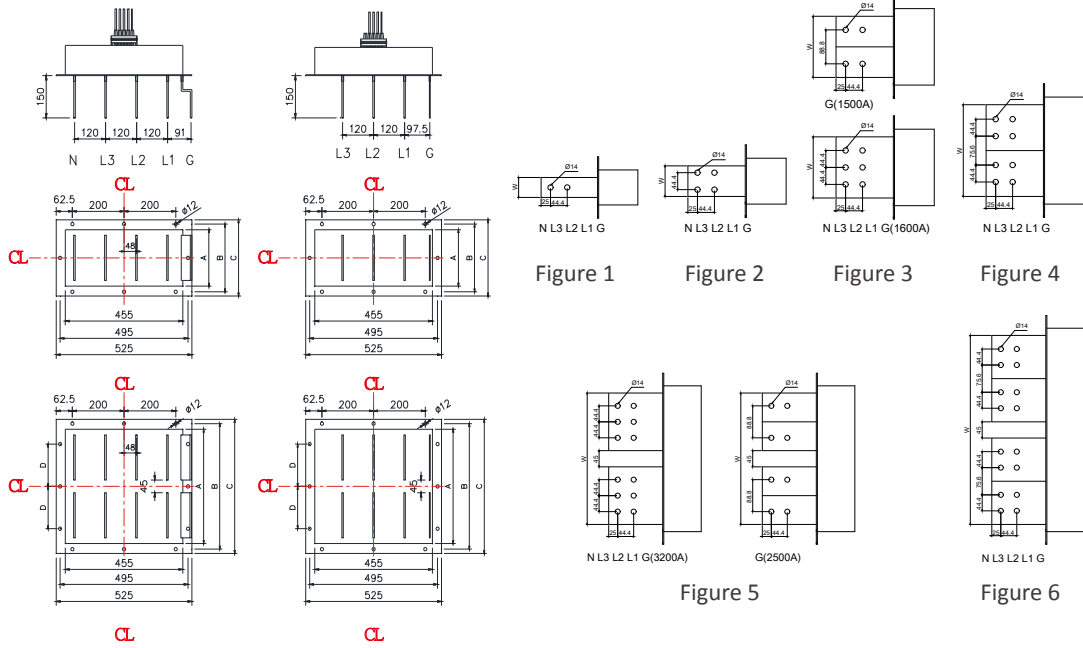
## Copper

| Busway Ratings |    | 600A | 800A | 1000A | 1250A | 1600A | 2000A | 2500A | 3200A | 4000A | 5000A | 6400A |
|----------------|----|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| A              | mm | 65   | 80   | 93    | 120   | 160   | 200   | 240   | 280   | 405   | 485   | 565   |
| B              | mm | 105  | 120  | 133   | 160   | 200   | 240   | 280   | 320   | 445   | 525   | 605   |
| C              | mm | 135  | 150  | 163   | 190   | 230   | 270   | 310   | 350   | 475   | 555   | 635   |
| D              | mm |      |      |       |       |       |       |       |       | 150   | 190   | 230   |
| W              | mm | 25   | 40   | 53    | 80    | 120   | 160   | 200   | 240   | 365   | 445   | 525   |
| Figure         |    | 1    | 1    | 1     | 2     | 2     | 3     | 3     | 4     | 5     | 5     | 6     |
| Weight         | Kg | 10   | 14   | 16    | 22    | 30    | 39    | 46    | 52    | 71    | 87    | 100   |

※ For openings of busways with outdoor-type flange end on top, additional technical diagrams are required for compiling the opening dimensions



# Flange end

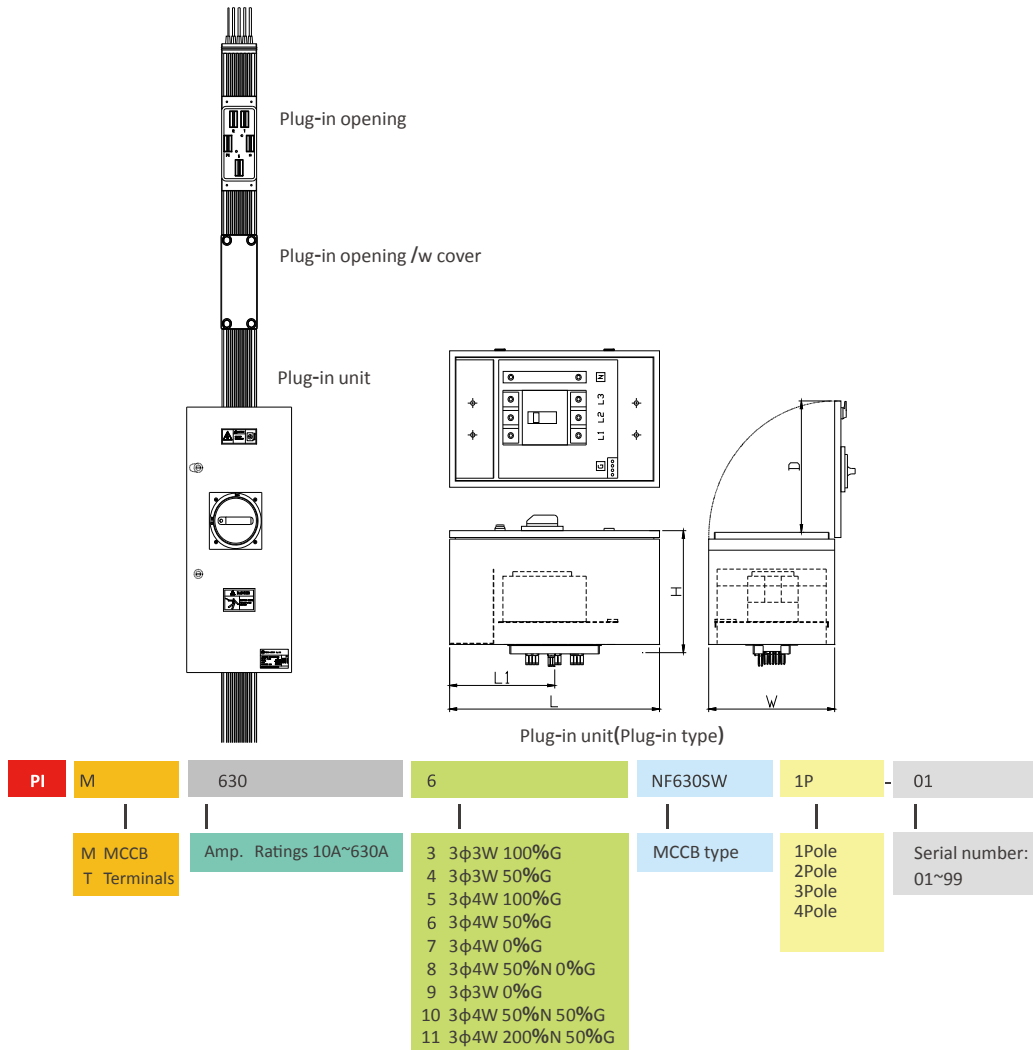


## Aluminum

| Busway Ratings |    | 400A | 600A | 800A | 1000A | 1250A | 1500A | 1600A | 2000A | 2500A | 3200A | 4000A | 5000A |
|----------------|----|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| A              | mm | 80   | 93   | 120  | 140   | 160   | 200   | 240   | 280   | 280   | 485   | 565   | 565   |
| B              | mm | 120  | 133  | 160  | 180   | 200   | 240   | 280   | 320   | 320   | 525   | 605   | 605   |
| C              | mm | 150  | 163  | 190  | 210   | 230   | 270   | 310   | 350   | 350   | 555   | 635   | 635   |
| D              | mm |      |      |      |       |       |       |       |       |       | 190   | 230   | 230   |
| W              | mm | 40   | 53   | 80   | 100   | 120   | 160   | 200   | 240   | 240   | 445   | 525   | 525   |
| Figure         |    | 1    | 1    | 2    | 2     | 2     | 3     | 3     | 4     | 4     | 5     | 6     | 6     |
| Weight         | Kg | 10   | 12   | 15   | 16    | 20    | 25    | 31    | 36    | 36    | 60    | 70    | 70    |

※ For openings of busways with outdoor-type flange end on top, additional technical diagrams are required for compiling the opening dimensions

# Plug-in Type



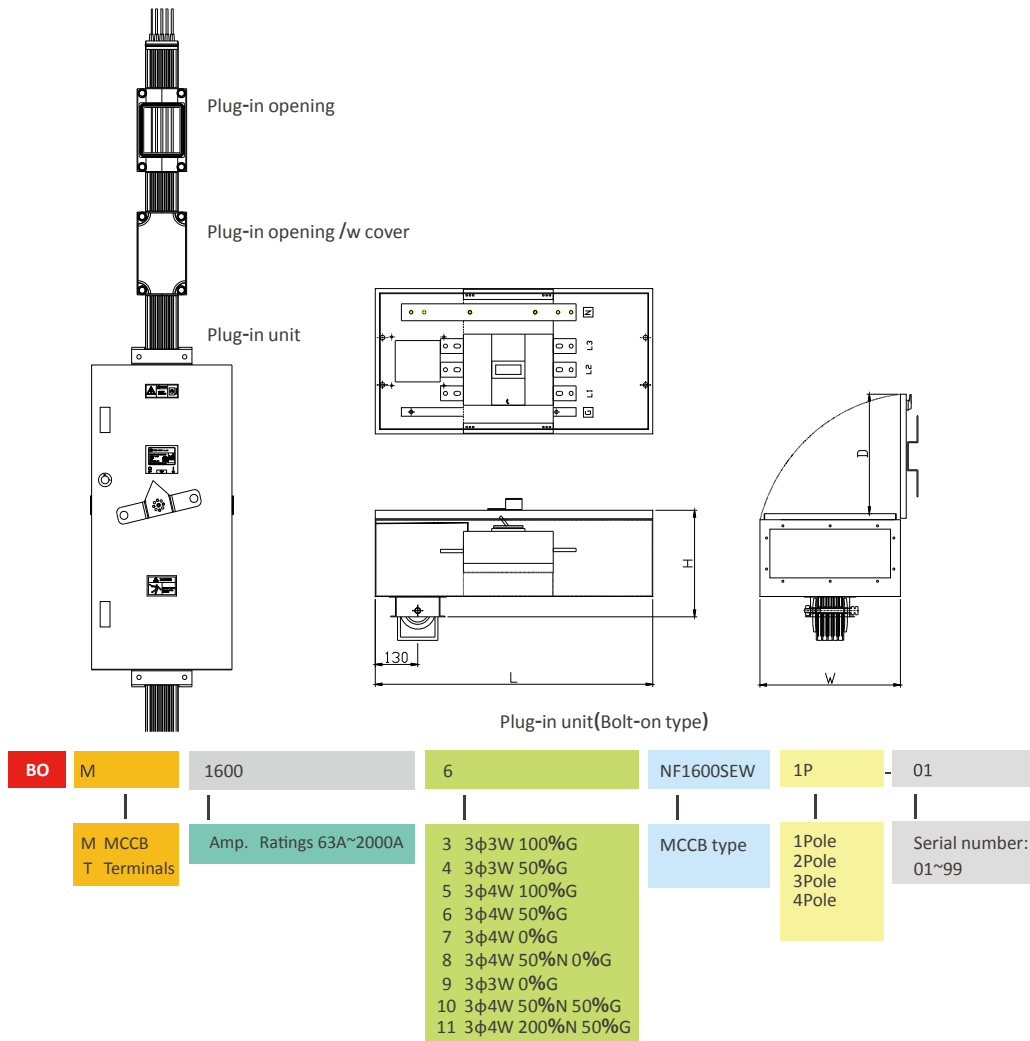
## Dimensions

| Plug-in Amp. Ratings |    | 30A  | 63A  | 100A | 225A | 250A | 400A | 630A |
|----------------------|----|------|------|------|------|------|------|------|
| L                    | mm | 500  | 500  | 500  | 500  | 500  | 700  | 850  |
| L1                   | mm | 250  | 250  | 250  | 250  | 250  | 350  | 350  |
| W                    | mm | 300  | 300  | 300  | 300  | 300  | 300  | 430  |
| H                    | mm | 275  | 275  | 275  | 275  | 275  | 305  | 335  |
| D                    | mm | 280  | 280  | 280  | 280  | 280  | 280  | 410  |
| IP Rating            |    | IP42 | IP42 | IP42 | IP42 | IP42 | IP42 | IP42 |
| Weight               | Kg | 15   | 15   | 17   | 21   | 22   | 25   | 53   |

Note: A standard plug-in unit is rated IP42. For customers needing higher protection rating, IP54 is available on demand

Single side openings may have up to 5 input/output ports, while double sided openings as customized products may have up to 10 input/output ports

# Bolt-on Type



## Dimensions

| Plug-in Amp. Ratings |    | 63A  | 100A | 225A | 250A | 400A | 630A | 800A | 1000A | 1200A | 1600A | 2000A |
|----------------------|----|------|------|------|------|------|------|------|-------|-------|-------|-------|
| L                    | mm | 500  | 500  | 500  | 500  | 700  | 850  | 850  | 1100  | 1100  | 1100  | 1300  |
| W                    | mm | 300  | 300  | 300  | 300  | 300  | 430  | 430  | 430   | 530   | 530   | 530   |
| H                    | mm | 270  | 270  | 270  | 270  | 300  | 330  | 330  | 380   | 380   | 380   | 560   |
| D                    | mm | 280  | 280  | 280  | 280  | 280  | 410  | 410  | 410   | 510   | 510   | 510   |
| IP Rating            |    | IP42 | IP42 | IP42 | IP42 | IP42 | IP42 | IP42 | IP42  | IP42  | IP42  | IP42  |
| Weight               | Kg | 17   | 19   | 23   | 24   | 27   | 55   | 58   | 65    | 70    | 80    | 80    |

Note: A standard plug-in unit is rated IP42. For customers needing higher protection rating, IP54 is available on demand

# End Cable box

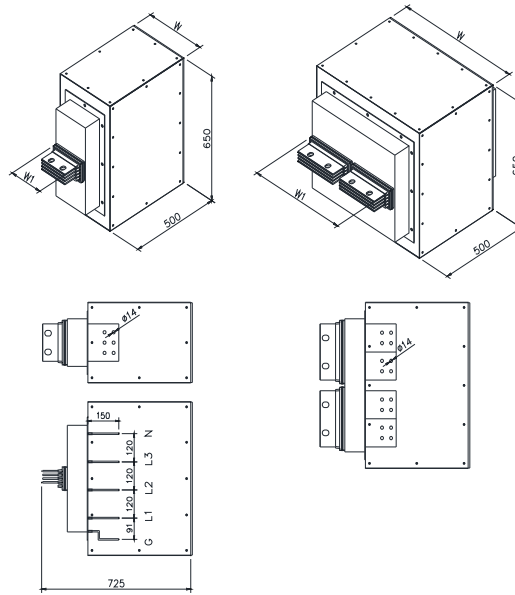


Figure 1

Figure 2

|           |              |                                                                                                                                     |                                                                                                                                                      |                |                    |
|-----------|--------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------|
| <b>BL</b> | <b>C</b>     | <b>08</b>                                                                                                                           | <b>6</b>                                                                                                                                             | <b>EB</b>      | <b>Dimension A</b> |
|           | C Cu<br>A Al | 04 400A 20 2000A<br>06 600A 25 2500A<br>08 800A 32 3200A<br>10 1000A 40 4000A<br>12 1250A 50 5000A<br>15 1500A 64 6400A<br>16 1600A | 3 3φ3W 100%G<br>4 3φ3W 50%G<br>5 3φ4W 100%G<br>6 3φ4W 50%G<br>7 3φ4W 0%G<br>8 3φ4W 50%N 0%G<br>9 3φ3W 0%G<br>10 3φ4W 50%N 50%G<br>11 3φ4W 200%N 50%G | EB End tap box | 725                |

※For outdoor junction boxes, additional technical diagrams are required for compiling the dimensions

## Copper

| Busway Ratings |    | 600A | 800A | 1000A | 1250A | 1600A | 2000A | 2500A | 3200A | 4000A | 5000A | 6400A |
|----------------|----|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| W              | mm | 205  | 220  | 233   | 260   | 300   | 340   | 380   | 420   | 545   | 625   | 705   |
| W1             | mm | 55   | 70   | 83    | 110   | 150   | 190   | 230   | 270   | 395   | 475   | 555   |
| IP Rating      |    | IP54 | IP54 | IP54  | IP54  | IP54  | IP54  | IP54  | IP54  | IP54  | IP54  | IP54  |
| Figure         |    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 2     | 2     | 2     |

## Aluminum

| Busway Ratings |    | 400A | 600A | 800A | 1000A | 1250A | 1500A | 1600A | 2000A | 2500A | 3200A | 4000A | 5000A |
|----------------|----|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| W              | mm | 220  | 233  | 260  | 280   | 300   | 340   | 380   | 420   | 420   | 625   | 705   | 705   |
| W1             | mm | 70   | 83   | 110  | 130   | 150   | 190   | 230   | 270   | 270   | 475   | 555   | 555   |
| IP Rating      |    | IP54 | IP54 | IP54 | IP54  | IP54  | IP54  | IP54  | IP54  | IP54  | IP54  | IP54  | IP54  |
| Figure         |    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 2     | 2     | 2     |

# Central Cable box

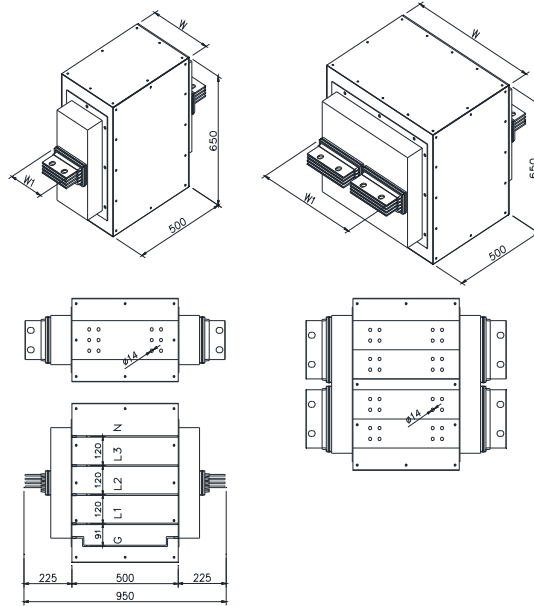


Figure 1

Figure 2

|    |              |                                                                                                                                     |                                                                                                                                                      |                   |             |
|----|--------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------|
| BL | C            | 08                                                                                                                                  | 6                                                                                                                                                    | CB                | Dimension A |
|    | C Cu<br>A Al | 04 400A 20 2000A<br>06 600A 25 2500A<br>08 800A 32 3200A<br>10 1000A 40 4000A<br>12 1250A 50 5000A<br>15 1500A 64 6400A<br>16 1600A | 3 3φ3W 100%G<br>4 3φ3W 50%G<br>5 3φ4W 100%G<br>6 3φ4W 50%G<br>7 3φ4W 0%G<br>8 3φ4W 50%N 0%G<br>9 3φ3W 0%G<br>10 3φ4W 50%N 50%G<br>11 3φ4W 200%N 50%G | CB Center tap box | 950         |

※For outdoor junction boxes, additional technical diagrams are required for compiling the dimensions

## Copper

| Busway Ratings |    | 600A | 800A | 1000A | 1250A | 1600A | 2000A | 2500A | 3200A | 4000A | 5000A | 6400A |
|----------------|----|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| W              | mm | 205  | 220  | 233   | 260   | 300   | 340   | 380   | 420   | 545   | 625   | 705   |
| W1             | mm | 55   | 70   | 83    | 110   | 150   | 190   | 230   | 270   | 395   | 475   | 555   |
| IP Rating      |    | IP54 | IP54 | IP54  | IP54  | IP54  | IP54  | IP54  | IP54  | IP54  | IP54  | IP54  |
| Figure         |    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 2     | 2     | 2     |

## Aluminum

| Busway Ratings |    | 400A | 600A | 800A | 1000A | 1250A | 1500A | 1600A | 2000A | 2500A | 3200A | 4000A | 5000A |
|----------------|----|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| W              | mm | 220  | 233  | 260  | 280   | 300   | 340   | 380   | 420   | 420   | 625   | 705   | 705   |
| W1             | mm | 70   | 83   | 110  | 130   | 150   | 190   | 230   | 270   | 270   | 475   | 555   | 555   |
| IP Rating      |    | IP54 | IP54 | IP54 | IP54  | IP54  | IP54  | IP54  | IP54  | IP54  | IP54  | IP54  | IP54  |
| Figure         |    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 2     | 2     | 2     |

# Joint expansion

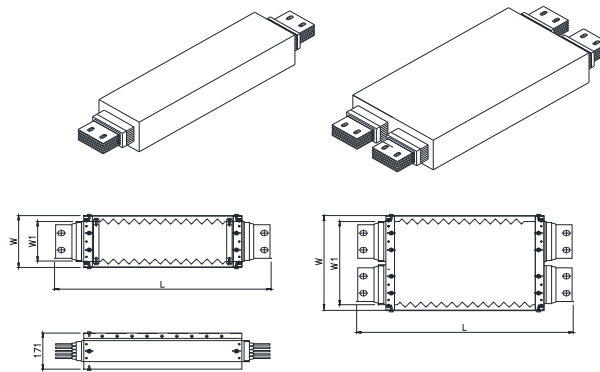


Figure 1

Figure 2

|           |              |                                                                                                                                     |                                                                                                                                                      |                      |                    |
|-----------|--------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------------|
| <b>BL</b> | <b>C</b>     | <b>08</b>                                                                                                                           | <b>6</b>                                                                                                                                             | <b>EF</b>            | <b>Dimension A</b> |
|           | C Cu<br>A Al | 04 400A 20 2000A<br>06 600A 25 2500A<br>08 800A 32 3200A<br>10 1000A 40 4000A<br>12 1250A 50 5000A<br>15 1500A 64 6400A<br>16 1600A | 3 3φ3W 100%G<br>4 3φ3W 50%G<br>5 3φ4W 100%G<br>6 3φ4W 50%G<br>7 3φ4W 0%G<br>8 3φ4W 50%N 0%G<br>9 3φ3W 0%G<br>10 3φ4W 50%N 50%G<br>11 3φ4W 200%N 50%G | EF Expansion fitting | 1200               |

Where the straight length of busways exceeds 50m, a joint expansion element is required  
 Where busways have to pass a building expansion joint, joint expansion elements are required  
 Extension range: Busway length +/-40mm moving range

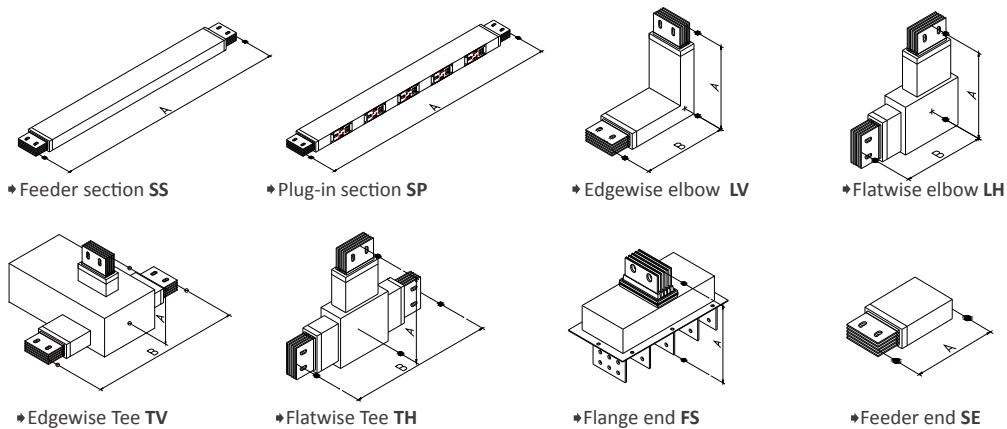
## Copper

| Busway Ratings |    | 600A | 800A | 1000A | 1250A | 1600A | 2000A | 2500A | 3200A | 4000A | 5000A | 6400A |
|----------------|----|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| W              | mm | 126  | 126  | 139   | 166   | 206   | 246   | 286   | 326   | 451   | 531   | 611   |
| W1             | mm | 55   | 70   | 83    | 110   | 150   | 190   | 230   | 270   | 395   | 475   | 555   |
| L              | mm | 1200 | 1200 | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  |
| IP Rating      |    | IP68 | IP68 | IP68  | IP68  | IP68  | IP68  | IP68  | IP68  | IP68  | IP68  | IP68  |
| Figure         |    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 2     | 2     | 2     |

## Aluminum

| Busway Ratings |    | 400A | 600A | 800A | 1000A | 1250A | 1500A | 1600A | 2000A | 2500A | 3200A | 4000A | 5000A |
|----------------|----|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| W              | mm | 126  | 139  | 166  | 186   | 206   | 246   | 286   | 326   | 326   | 531   | 611   | 611   |
| W1             | mm | 70   | 83   | 110  | 130   | 150   | 190   | 230   | 270   | 270   | 475   | 555   | 555   |
| L              | mm | 1200 | 1200 | 1200 | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  |
| IP Rating      |    | IP68 | IP68 | IP68 | IP68  | IP68  | IP68  | IP68  | IP68  | IP68  | IP68  | IP68  | IP68  |
| Figure         |    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 2     | 2     | 2     |

# Element code



|    |              |                                                                                                                                     |                                                                                                                                                      |                                                                                                                                                                                                 |                     |
|----|--------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| BL | C            | 08                                                                                                                                  | 6                                                                                                                                                    | SS                                                                                                                                                                                              | Dimension A x B x C |
|    | C Cu<br>A Al | 04 400A 20 2000A<br>06 600A 25 2500A<br>08 800A 32 3200A<br>10 1000A 40 4000A<br>12 1250A 50 5000A<br>15 1500A 64 6400A<br>16 1600A | 3 3φ3W 100%G<br>4 3φ3W 50%G<br>5 3φ4W 100%G<br>6 3φ4W 50%G<br>7 3φ4W 0%G<br>8 3φ4W 50%N 0%G<br>9 3φ3W 0%G<br>10 3φ4W 50%N 50%G<br>11 3φ4W 200%N 50%G | SS Feeder section<br>SP Plug-in section<br>LV Edgewise elbow<br>LH Flatwise elbow<br>CH Flat to Edge<br>CV Edge to Flat<br>TV Edgewise Tee<br>TH Flatwise Tee<br>FS Flange end<br>SE Feeder end |                     |

## Copper

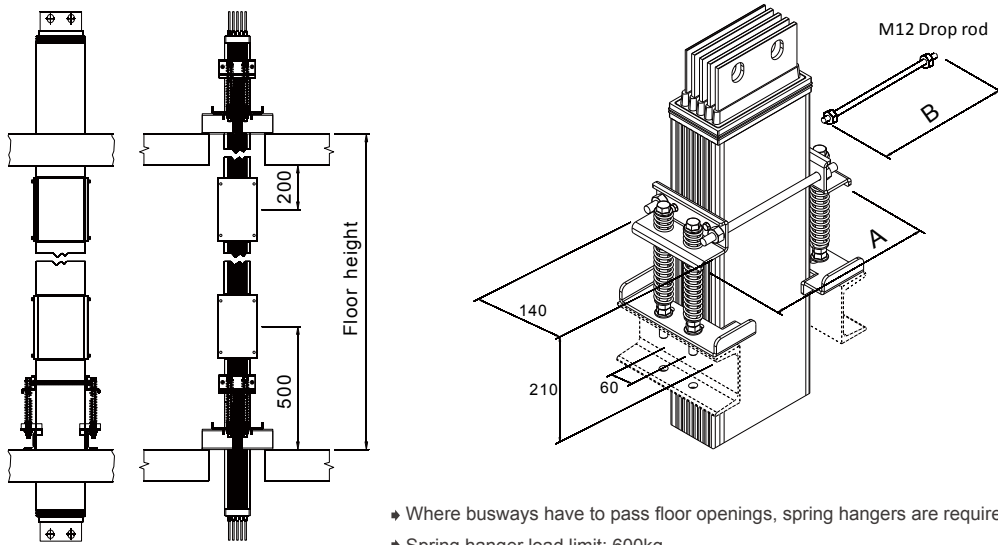
| Busway Ratings  |        | 600A    | 800A    | 1000A   | 1250A   | 1600A   | 2000A   | 2500A   | 3200A   | 4000A   | 5000A   | 6400A   |
|-----------------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Feeder section  | A      | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    |
| Plug-in section | A mm   | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    |
| Edgewise elbow  | AxB mm | 250x250 | 250x250 | 250x250 | 250x250 | 250x250 | 250x250 | 250x250 | 250x250 | 250x250 | 250x250 | 250x250 |
| Flatwise elbow  | AxB mm | 190x190 | 190x190 | 190x190 | 215x215 | 235x235 | 255x255 | 275x275 | 295x295 | 360x360 | 400x400 | 440x440 |
| Edgewise Tee    | AxB mm | 200x490 | 200x520 | 200x550 | 200x600 | 200x680 | 200x760 | 200x840 | 200x920 | 200x760 | 200x840 | 200x920 |
| Flatwise Tee    | AxB mm | 190x380 | 190x380 | 190x380 | 215x430 | 235x470 | 255x510 | 275x550 | 295x590 | 360x720 | 440x880 | 440x880 |
| Flange end      | A mm   | 380     | 380     | 380     | 380     | 380     | 380     | 380     | 380     | 380     | 380     | 380     |
| Feeder end      | A mm   | 250     | 250     | 250     | 250     | 250     | 250     | 250     | 250     | 250     | 250     | 250     |

## Aluminum

| Busway Ratings  |        | 400A    | 600A    | 800A    | 1000A   | 1250A   | 1500A   | 1600A   | 2000A   | 2500A   | 3200A   | 4000A   | 5000A   |
|-----------------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Feeder section  | A      | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    |
| Plug-in section | A mm   | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    | 4200    |
| Edgewise elbow  | AxB mm | 250x250 | 250x250 | 250x250 | 250x250 | 250x250 | 250x250 | 250x250 | 250x250 | 250x250 | 250x250 | 250x250 | 250x250 |
| Flatwise elbow  | AxB mm | 190x190 | 190x190 | 215x215 | 225x225 | 235x235 | 255x255 | 275x275 | 295x295 | 295x295 | 400x400 | 440x440 | 440x440 |
| Edgewise Tee    | AxB mm | 200x520 | 200x550 | 200x600 | 200x640 | 200x680 | 200x760 | 200x840 | 200x920 | 200x920 | 200x840 | 200x920 | 200x920 |
| Flatwise Tee    | AxB mm | 190x380 | 190x380 | 215x430 | 225x450 | 235x470 | 255x510 | 275x550 | 295x590 | 295x590 | 400x800 | 440x880 | 440x880 |
| Flange end      | A mm   | 380     | 380     | 380     | 380     | 380     | 380     | 380     | 380     | 380     | 380     | 380     | 380     |
| Feeder end      | A mm   | 250     | 250     | 250     | 250     | 250     | 250     | 250     | 250     | 250     | 250     | 250     | 250     |



# Spring hanger



- ◆ Where busways have to pass floor openings, spring hangers are required for sufficient support
- ◆ Spring hanger load limit: 600kg
- ◆ Spring hangers require no adjustment, and can evenly support busway weight in all floors and compensate displacement caused by thermal expansion

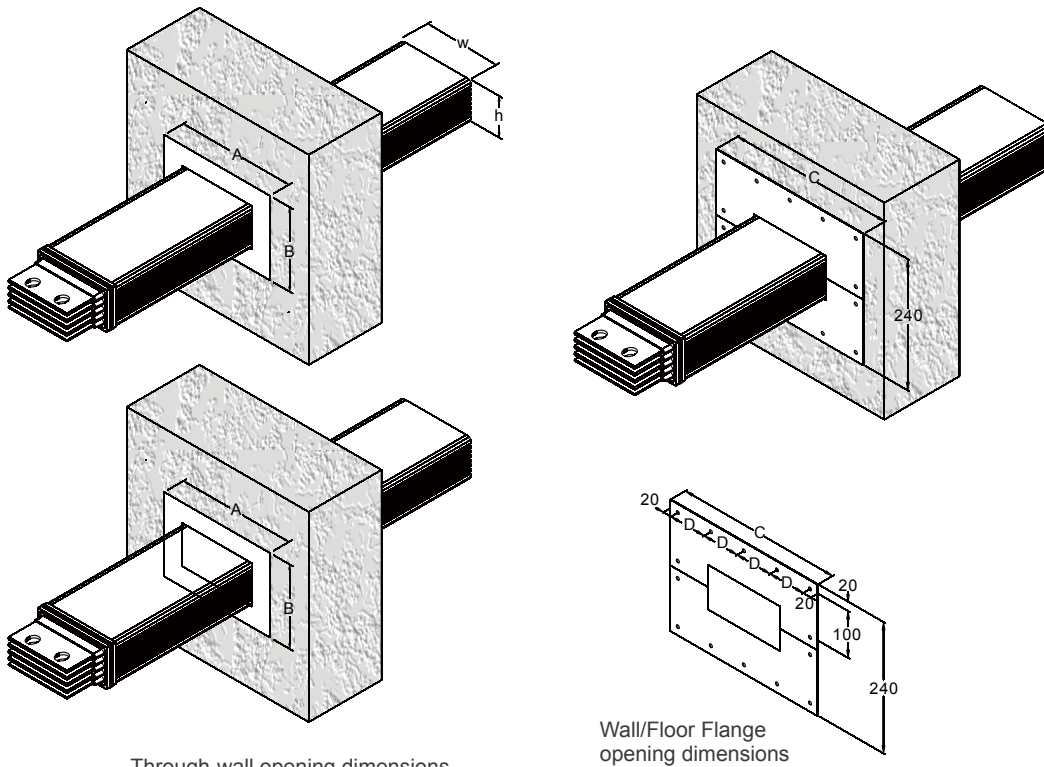
## Copper

| Busway Ratings           |    | 600A  | 800A  | 1000A | 1250A | 1600A | 2000A | 2500A | 3200A | 4000A | 5000A | 6400A |
|--------------------------|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Models                   |    | SH600 | SH600 | SH600 | SH600 | SH600 | SH600 | SH600 | SH600 | SH600 | SH600 | SH600 |
| Height 1m/weight         | kg | 15.0  | 20.6  | 25.5  | 35.7  | 50.8  | 65.9  | 81.0  | 96.0  | 131.8 | 162.0 | 192.0 |
| Height 3m/weight         | kg | 45.0  | 61.8  | 76.5  | 107.1 | 152.4 | 197.7 | 243.0 | 288.0 | 395.4 | 486.0 | 576.0 |
| Height 4m/weight         | kg | 60.0  | 82.4  | 102.0 | 142.8 | 203.2 | 263.6 | 324.0 | 384.0 | 527.2 | 648.0 | 768.0 |
| Height 5m/weight         | kg | 75.0  | 103.0 | 127.5 | 178.5 | 254.0 | 329.5 | 405.0 | 480.0 | 659.0 | 810.0 | 960.0 |
| Hanger width A           | mm | 165   | 180   | 193   | 220   | 260   | 300   | 340   | 380   | 505   | 585   | 665   |
| Drop rod dimension M12xB | mm | 105   | 120   | 140   | 160   | 200   | 240   | 280   | 320   | 450   | 530   | 610   |
| Max. tolerance of height | m  | ≤5    | ≤5    | ≤5    | ≤5    | ≤5    | ≤5    | ≤5    | ≤5    | ≤4    | ≤3    | ≤3    |

## Aluminum

| Busway Ratings           |    | 400A  | 600A  | 800A  | 1000A | 1250A | 1500A | 1600A | 2000A | 2500A | 3200A | 4000A | 5000A |
|--------------------------|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Models                   |    | SH600 | SH600 | SH600 | SH600 | SH600 | SH600 | SH600 | SH600 | SH600 | SH600 | SH600 | SH600 |
| Height 1m/weight         | kg | 20.6  | 16.9  | 22.6  | 26.9  | 31.2  | 32.1  | 48.3  | 56.8  | 56.8  | 96.6  | 113.6 | 113.6 |
| Height 3m/weight         | kg | 61.8  | 50.7  | 67.8  | 80.7  | 93.6  | 96.4  | 144.9 | 170.4 | 170.4 | 289.8 | 340.8 | 340.8 |
| Height 4m/weight         | kg | 82.4  | 67.6  | 90.4  | 107.6 | 124.8 | 128.4 | 193.2 | 227.2 | 227.2 | 386.4 | 454.4 | 454.4 |
| Height 5m/weight         | kg | 103.0 | 84.5  | 113.0 | 134.5 | 156.0 | 160.5 | 241.5 | 284.0 | 284.0 | 483.0 | 568.0 | 568.0 |
| Hanger width A           | mm | 180   | 193   | 220   | 240   | 260   | 300   | 340   | 380   | 380   | 585   | 665   | 665   |
| Drop rod dimension M12xB | mm | 120   | 140   | 160   | 180   | 200   | 240   | 280   | 320   | 320   | 530   | 610   | 610   |
| Max. tolerance of height | m  | ≤5    | ≤5    | ≤5    | ≤5    | ≤5    | ≤5    | ≤5    | ≤5    | ≤5    | ≤5    | ≤5    | ≤5    |

# Wall/Floor Flange



Through-wall opening dimensions

Wall/Floor Flange opening dimensions

## Copper

| Busway Ratings |    | 600A   | 800A   | 1000A  | 1250A   | 1600A   | 2000A   | 2500A   | 3200A   | 4000A   | 5000A   | 6400A   |
|----------------|----|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| Models         |    | WF0600 | WF0804 | WF1006 | WF1208  | WF1612  | WF2000  | WF2516  | WF3220  | WF4025  | WF5032  | WF6440  |
| h x w          | mm | 100x55 | 100x70 | 100x83 | 100x110 | 100x150 | 100x190 | 100x230 | 100x270 | 100x395 | 100x475 | 100x555 |
| A              | mm | 155    | 170    | 183    | 210     | 250     | 290     | 330     | 370     | 495     | 575     | 655     |
| B              | mm | 200    | 200    | 200    | 200     | 200     | 200     | 200     | 200     | 200     | 200     | 200     |
| C              | mm | 258    | 272    | 286    | 313     | 352     | 392     | 432     | 472     | 600     | 680     | 760     |
| D              | mm | 109    | 116    | 123    | 91      | 104     | 88      | 98      | 108     | 112     | 128     | 90      |

## Aluminum

| Busway Ratings |    | 400A   | 600A   | 800A    | 1000A   | 1250A   | 1500A   | 1600A   | 2000A   | 2500A   | 3200A   | 4000A   | 5000A   |
|----------------|----|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Models         |    | WF0804 | WF1006 | WF1208  | WF0010  | WF1612  | WF2000  | WF2516  | WF3220  | WF3220  | WF5032  | WF6440  | WF6440  |
| h x w          | mm | 100x70 | 100x83 | 100x110 | 100x130 | 100x150 | 100x190 | 100x230 | 100x270 | 100x270 | 100x475 | 100x555 | 100x555 |
| A              | mm | 170    | 183    | 210     | 230     | 250     | 290     | 330     | 370     | 370     | 575     | 655     | 655     |
| B              | mm | 200    | 200    | 200     | 200     | 200     | 200     | 200     | 200     | 200     | 200     | 200     | 200     |
| C              | mm | 272    | 286    | 313     | 334     | 352     | 392     | 432     | 472     | 472     | 680     | 760     | 760     |
| D              | mm | 116    | 123    | 91      | 98      | 104     | 88      | 98      | 108     | 108     | 128     | 90      | 90      |