

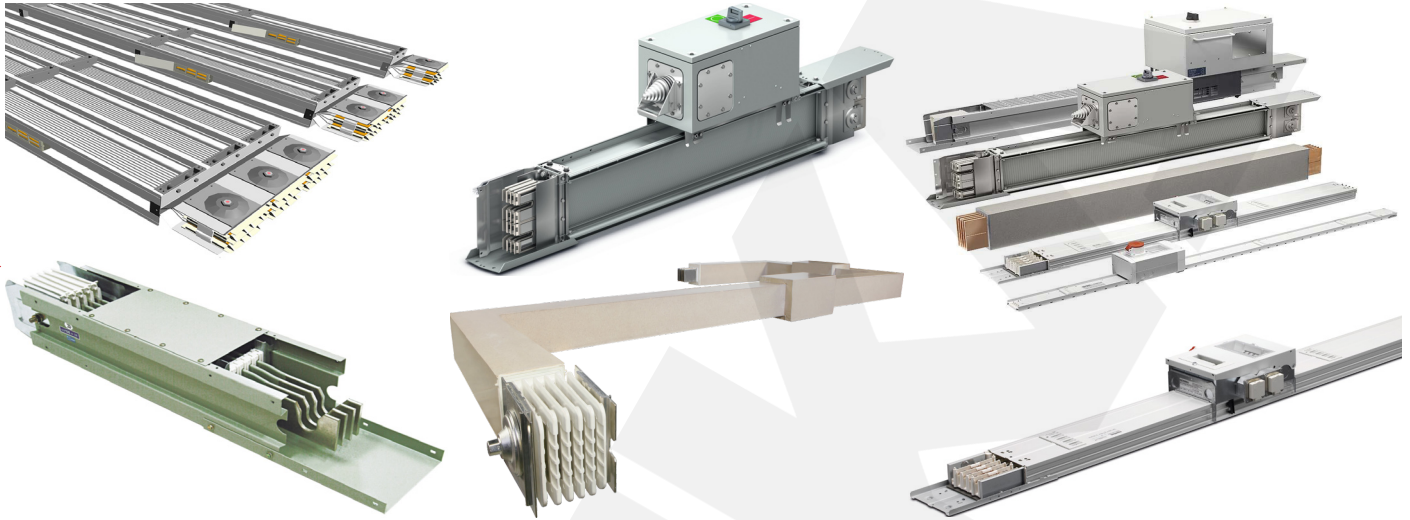


**BUSBAR ENERGY  
TRANSMISSION &  
DISTRIBUTION SYSTEMS**

**- BUSBAR POWER DISTRIBUTION SYSTEMS**

- *MEDIUM VOLTAGE BUSBAR SYSTEMS (12kV & 24kV & 36kV)*
- *BUSBAR ENERGY DISTRIBUTION SYSTEM for POWER APPLICATIONS*
  - *Plug-in Busbar Systems*
  - *Bolt-on Busbar Systems*
- *CAST RESIN BUSBAR TRUNKING SYSTEMS*
- *BUSBAR TRUNKING SYSTEMS for MEDIUM-SIZED BUILDINGS & INDUSTRIAL FACILITIES*
- *LOW VOLTAGE BUSBAR TRUNKING SYSTEMS*
- *LIGHTING BUSBAR TRUNKING SYSTEMS*
- *TROLLEY BUSBAR SYSTEMS*
- *UNDERFLOOR BUSBAR TRUNKING SYSTEMS*
- *BUSBAR SYSTEMS CONNECTION MODULES*

## BUSBAR POWER DISTRIBUTION SYSTEMS



### GENERAL INFORMATION

### APPLICATION

Busbar Systems are applications in prefabricated structures that transfer the power to the system in electrical power distribution, in the form of current at standard or non-standard intervals. Busbars are transmitted in the busbar system due to electric current.

**Low Voltage Busbar Systems (1kV):** LV Busbar Systems are made of aluminum material to prevent corrosion and grounding faults from being affected by corrosion even after years.

**Medium Voltage Busbar Systems (36kV):** MV Busbar Systems are made of the same material as low voltage busbar systems as well.

All isolation equipment is produced from non-flammable. Non-flammable (V0) materials do not contain halogen gas. Busbar systems' lengths are produced according to international standards.

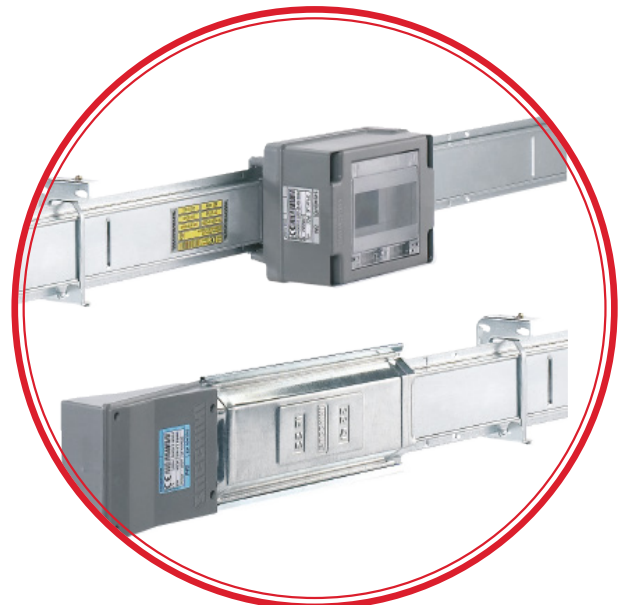
### STRUCTURE

- Copper or Aluminium Conductors
- 1.5mm thick galvanized sheet or 2.5mm thick extruded aluminium body thickness
- Conductors are tin plated at joints or full length for better conductivity
- Silver coating option at additional points
- It can be designed to any MCCB brand out there.
- 4 or 5 conductor system options are available.
- Seismic conditions suitability tests have been carried out.

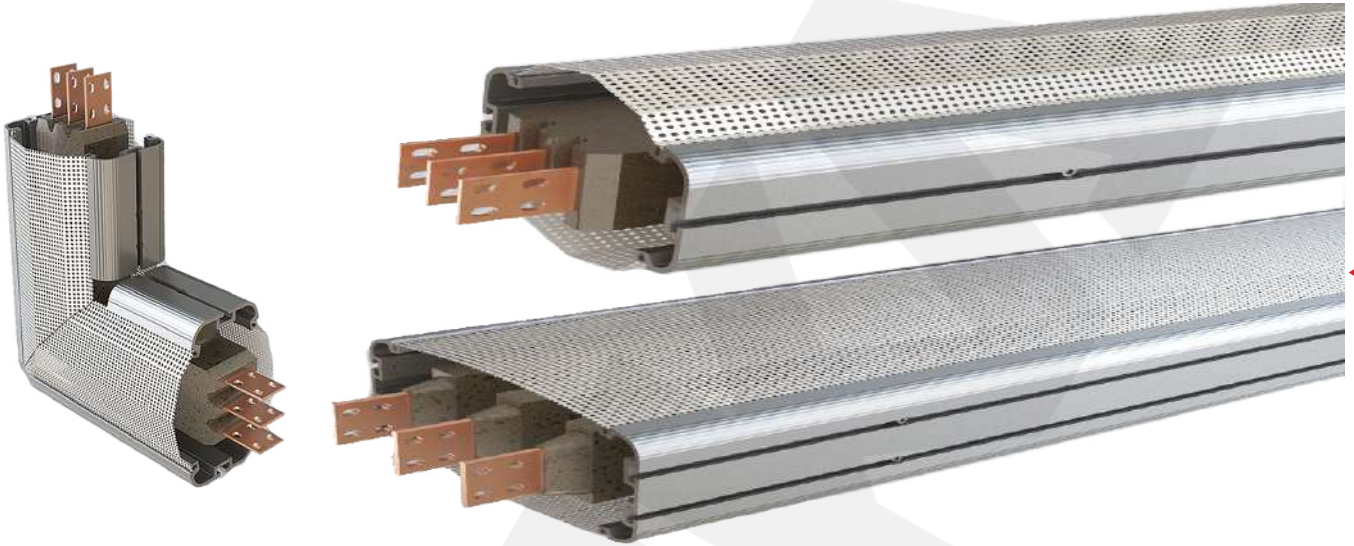
- Shopping Malls, Hotels, Schools, Business Centers
- Factories
- Transformer Centers
- Lighting Systems
- Distribution Systems
- Transmission Systems

### ADVANTAGES

- Long Lasting
- Modern Appearance with Less Space
- Flexibility
- Economic
- Better Resistance
- Quicker and Safer Installation



## MEDIUM VOLTAGE BUSBAR SYSTEMS



### TECHNICAL DATA

#### Current Ratings (A) :

12kV Aluminium conductor series from 1500A up to 3000A

12kV Copper conductor series from 950A up to 2750A

24kV Copper conductor series from 1800A up to 5700A

#### Structure:

- Aluminium Enclosure
- Metal enclosure on L1, L2, L3 3 conductive cast resin guard

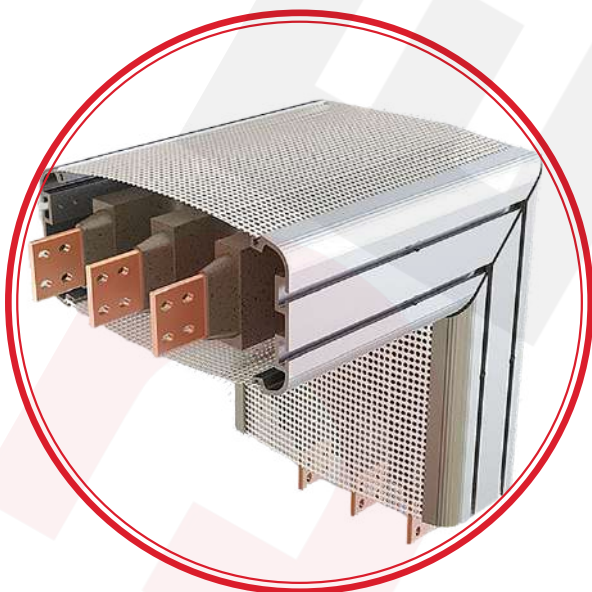
Protection Standard: IP68

### APPLICATION

- Outdoors
- Industrial buildings
- Petrochemical Industry
- Areas with flood risk
- Oil and natural gas Industry
- Power Generation Industry
- Data centers

### ADVANTAGES

- Products tested in accordance with the international standards
- Outdoor IP 68 level protection
- Corrosion-resistant
- Chemical-resistant
- Pest-resistant
- Usable in tropical environments
- High mechanical strength
- Without stack effect
- Highly resistant to short circuit
- Ensures less voltage drop in comparison with cabled systems
- UV-resistant
- No requirement for maintenance
- High short circuit resistance due to compact structure
- Special design to occupy minimum space based on the running amperage rank



## BUSBAR ENERGY DISTRIBUTION SYSTEM for POWER APPLICATIONS



### TECHNICAL DATA

#### Current Ratings (A) :

Aluminium conductor series from 400A up to 6300A

Copper conductor series from 550A up to 6300A

Number of Conductors: 4, 4.5 or 5

#### Structure:

- Aluminium Enclosure
- Clean earth option

Protection Standard: IP55 Protection Class (IP67 optional)

### TYPES

- Plug-in type (Standard 2 plug-in outlets on both sides of the 3m enclosure)
- Bolt-on type (outlets only at joint)
- Plug-in window number can be increased optionally
- For aluminium conductors 1000A and above, for copper conductors 1250A and above bus bar range have plug-in Windows at both sides
- Protection Degree (IP55 standard and IP67 optional)
- Requires less space in comparison to cable systems

### APPLICATION

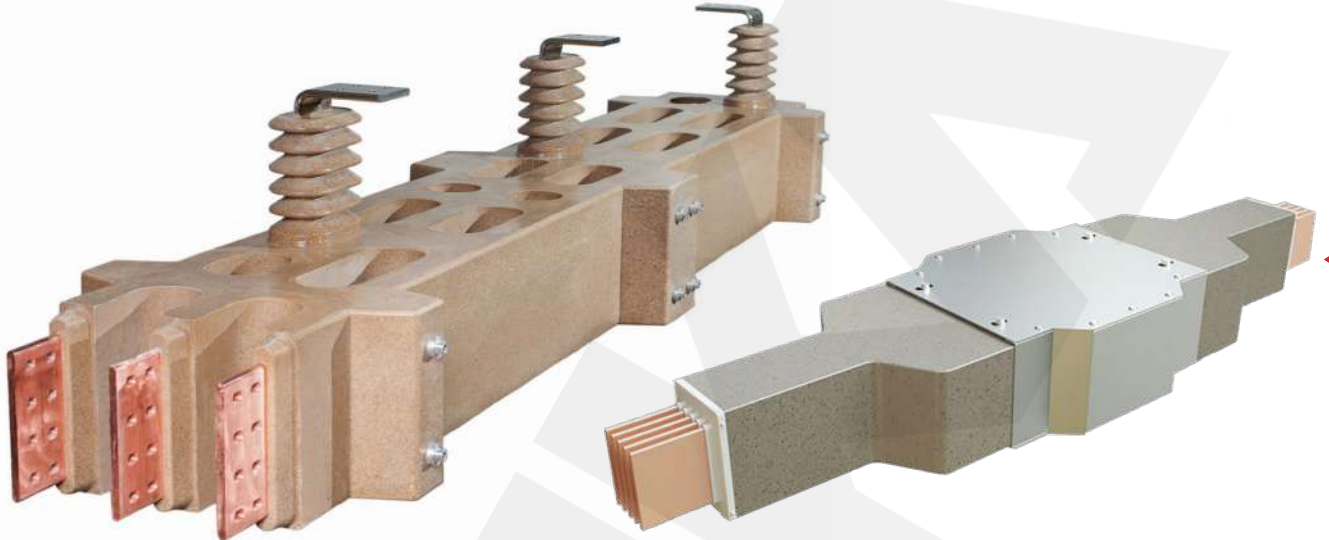
- Shopping Malls, Hotels, Schools, Business Centers
- Factories
- Transformer Centers
- Lighting Systems
- Distribution Systems
- Transmission Systems
- Data Centers and Oil&Gas Factories

### ADVANTAGES

- High short circuit resistance due to compact construction
- Less voltage drop in comparison to cable systems
- Special alloy metal enclosure provides higher mechanical strength and causes less electromagnetic interference.
- Better cooling capability
- High resistance to fire
- Seismic resistance
- Protection Degree (IP55 standard and IP67 optional)
- Requires less space in comparison to cable systems



## CAST RESIN BUSBAR TRUNKING SYSTEMS



### TECHNICAL DATA

#### Current Ratings (A) :

Aluminium conductor series from 630A up to 5000A

Copper conductor series from 800A up to 6300A

Number of Conductors: 3, 4, 4.5, 5 or 6

#### Structure:

- 3 Hours of fire barrier resistance (Accordance with ISO 834)
- Clean earth option
- Exterior environment IP 68 protection class
- Corrosion-resistant
- Chemical-resistant
- Pest-resistant
- Usable in tropical environments
- Has high mechanical strength
- Without stack effect
- Highly resistant to short circuit
- Fire-resistant
- Current continuity under fire conditions

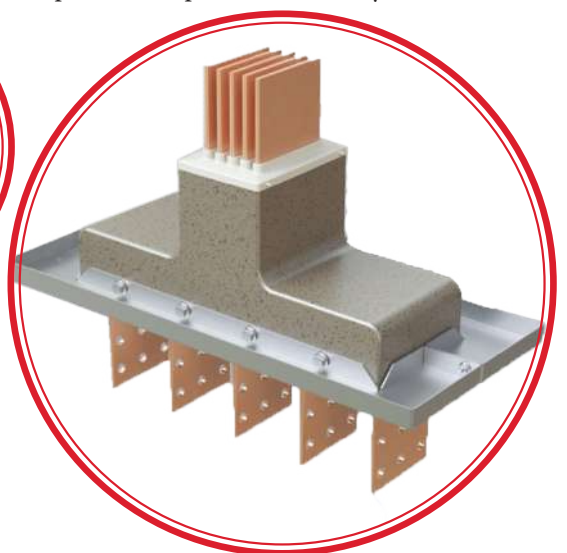
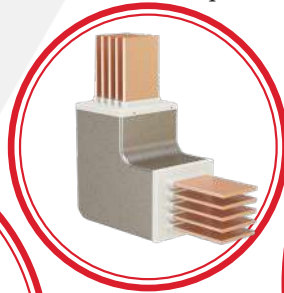
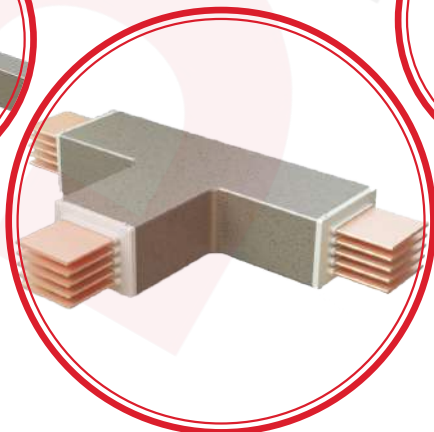
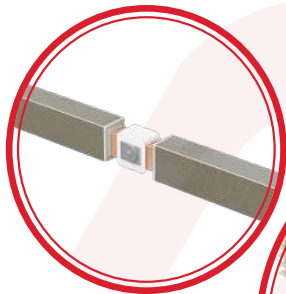
Product Standard: IEC 60068-3-3, IEC 60068-2-57

### APPLICATION

- Galleries between Transformer and Panel
- Oil and Gas Plants
- Cement Plants
- Power Plants
- Harbours and Shipyards
- Food Premises
- Tunnels and Underpasses

### ADVANTAGES

- High short circuit resistance due to compact construction
- Less voltage drop in comparison to cable systems
- Special alloy metal enclosure provides higher mechanical strength and causes less electromagnetic interference.
- Better cooling capability
- High resistance to fire
- Seismic resistance
- Protection Degree (IP55 standard and IP67 optional)
- Requires less space in comparison to cable systems



## BUSBAR TRUNKING SYSTEMS for MEDIUM-SIZED BUILDINGS & INDUSTRIAL FACILITIES



### TECHNICAL DATA

#### Current Ratings (A) :

Aluminium conductor series from 160A up to 800A

Copper conductor series from 250A up to 6300A

Number of Conductors: 4, 4.5 or 5

#### Structure:

- Tin plated aluminium or copper conductors
- Plug-in tap off outlets at every 50 cm on both sides
- Clean earth option

Protection Standard: IP55 Protection Class

### TAP-OFF BOXES

- Three phase tap off boxes with DIN mounted MCB up to 40A or 80A (empty or fuse included)
- Tap off boxes with SYK switch fuse up to 160A, 250A and 400A (excluding fuses)
- Tap off boxes with MCCB (moulded case circuit breaker) with current ratings up to 160A, 250A and 400A
- Special design data center tap off boxes

### APPLICATION

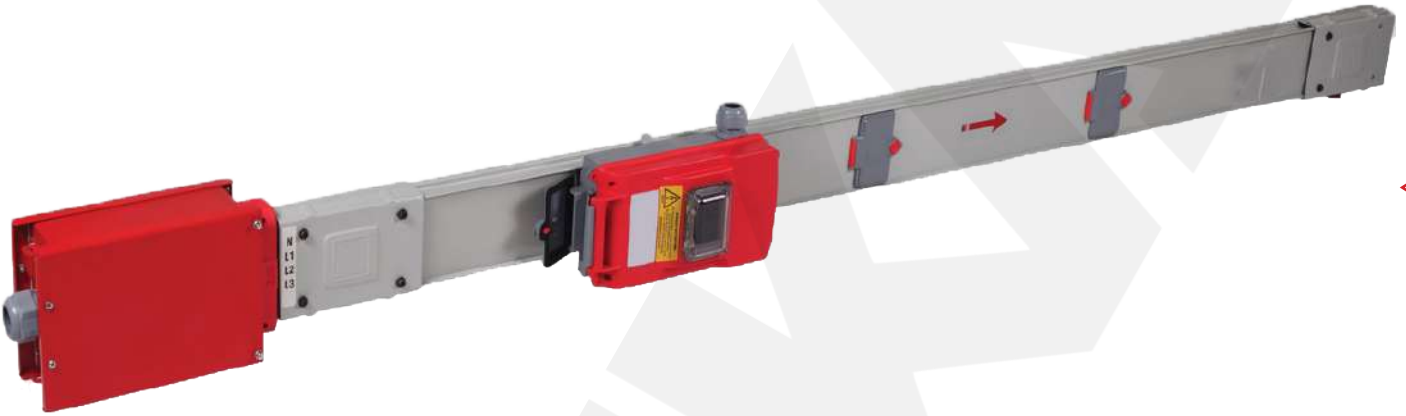
- Production areas in factories
- Textile facilities
- Furniture facilities
- Shopping malls
- Exhibition centres
- High-rise buildings
- Hotels
- Hospitals
- Data Centres

### ADVANTAGES

- Fast, Flexible Engineering
- Fast and Easy Mounting
- Lower Installed Cost
- Flexible Power Supply
- Modern Appearance
- Lower Cost



## LOW VOLTAGE BUSBAR TRUNKING SYSTEMS



### TECHNICAL DATA

#### Current Ratings (A):

Aluminium conductor series from 100A up to 225A

Copper conductor series from 100A up to 225A

Number of Conductors: 4 or 5

#### Structure:

- Conductors are fully tin plated
- Plug-in tap off outlets at every 50 cm on both sides
- Steel enclosure
- Clean Earth option

Product Standard: IP55 Protection Class

### TAP-OFF BOXES

- Three phase tap-off boxes with DIN mounted fuse holders (10x38 mm) up to 16A, 40A or 80A (empty or fuse included)
- Three phase output boxes with 63A D02 plug fuse (empty or fuse included)
- Tap off boxes with MCB (miniature circuit breaker) rated up to 16A (empty or including the circuit breaker)
- 80A special Design Data Centre Tap-off boxes

### APPLICATION

- Small enterprises
- Local production areas in factories
- Workshops
- Textile facilities
- Automotive facilities
- Automotive sub-industries
- Small-sized industrial facilities

### ADVANTAGES

- Vertical, horizontal and dilatation modules are solved with a single module. Horizontal or vertical rotations can be transferred at the desired angle. In addition, it can be used in the building passages thanks to its ability to stretch in all directions.
- Busbar is offered as a standard with its two-letter stay and receiving current from 10 points.
- When the busbar IP covers are open or when the covers are open in the exit off position (system is IP class 2X), its security is ensured in a way that does not allow finger contact.



## LIGHTING BUSBAR TRUNKING SYSTEMS



### TECHNICAL DATA

#### Current Ratings (A) :

Copper conductor series from 25A up to 40A

Number of Conductors: 2, 3, 4 or 5

#### Structure:

- Different conductor configurations up to (5+5) double-side 10 conductors in a single body
- Double-sided 8 outlet windows (4+4) on 1 length Bus-bar of standard 3 meters length
- Flame resistant halogen-free full-length insulation on tin-plated copper conductors
- Easy-to-mount attachment structure with silver-plated spring contacts
- Outlet plugs with lock-mechanism in different colours to indicate phases
- Clean Earth option
- RAL 7038 electrostatic oven-dried painted on galvanized sheet steel body structure can produce upon request.

Product Standard: IP55 Protection Class

### APPLICATION

- Offices
- Business Centres
- Banks
- Schools
- Conference Halls





## TROLLEY BUSBAR TRUNKING SYSTEM



### TECHNICAL DATA

**From 35A up to 250A:**

**Structure:**

- Multi-conductor body and movable busbar with copper conductor) With the standard PVC body, many current combinations and different usage types can be created. Standard 4 lines ( Optional 5 lines, Optional 7 lines
- 3 phases + ground + 3 lines for data
- Standard 7 lines (2 conductors in parallel for each phase ground)

**From 90A up to 1000A:**

**Structure:**

- It is a single body "Crane Busbar" system suitable for interior and exterior surfaces. It is copper, aluminum or galvanized sheet conductor.
- URC-C busbar current capacity with copper (Cu) conductors: 250A, 400A
- URC-A busbar current capacity with aluminum (Al) conductors: 500A, 800A, 1000A
- URC-S busbar current capacity with galvanized sheet conductor: 90A, 120A, 140A

### CURRENT COLLECTOR

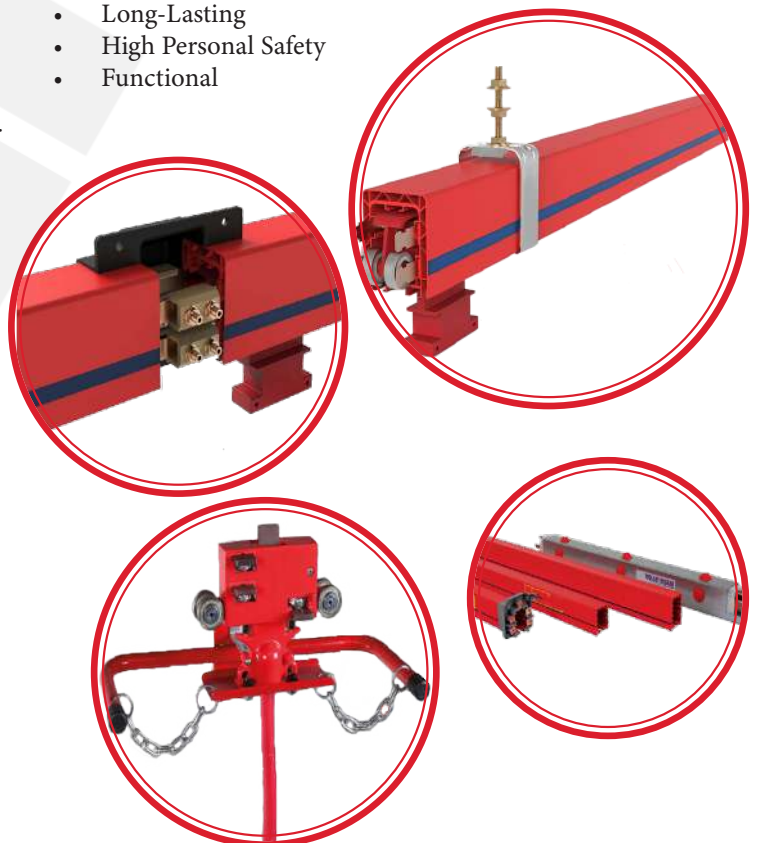
- The current collector moves along the busbar. Current pick-up brushes that wear out over time in the system can be easily replaced. By placing the pulling arm on the machine to be fed, the console set to which the current receiver is connected is fixed to the pulling arm and moves along with the machine along the conductor.

### APPLICATION

- Offices
- Business Centres
- Banks
- Schools
- Conference Halls

### ADVANTAGES

- Reliability
- Long-Lasting
- High Personal Safety
- Functional



## UNDERFLOOR BUSBAR TRUNKING SYSTEMS



### TECHNICAL DATA

#### Current Ratings (A) :

From 63A up to 80A

Number of Conductors: 2, 3, 4 or 5

#### Structure:

- 1200 – 2400 – 3000mm optional straight lengths
- Plug-in outlets every 300mm or 600mm option
- Halogen Free plastics up to 960°C Fire rating
- Keyed Tap-off Plugs
- The springed contacts of busbar are silver plated
- On the conductor, full length isolation that provides the security of life and property against danger below which could come from outside
- Earthing continuity and installation at joint point are provided by using single bolt
- Each busbar length is complete with integral floor fixing brackets
- IP covers hinged on plug-in windows
- Clean Earth option
- Single Phase (for UPS and mains) 2 separate circuit possibilities for 2 separate busbars or for the same plug (mains, UPS)
- Addressable current reception units in different colours for the mains and UPS

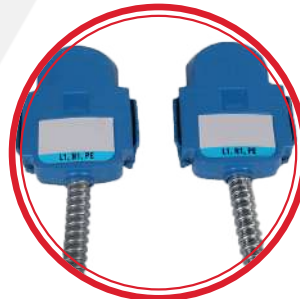
Protection Standard: IP55 Protection Class

### APPLICATION

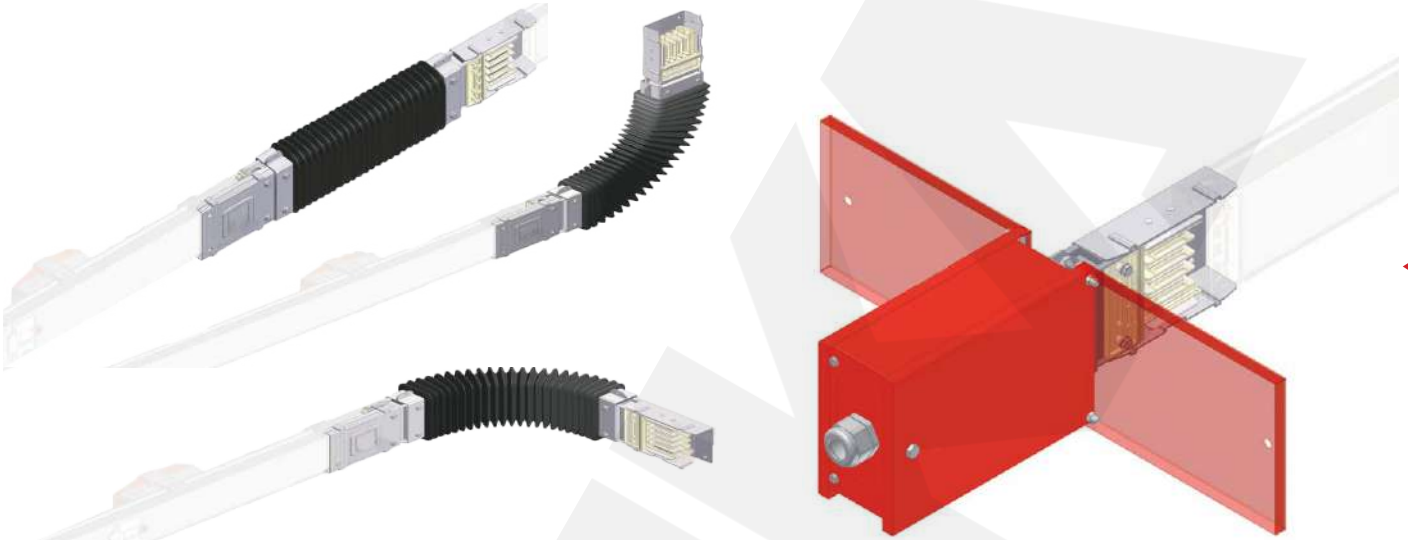
- Banks
- Business Centres
- New Generation Offices
- Hotels
- Hospitals
- Cinemas and theatres
- Conference Centres
- Educational Building
- Tourist Facilities etc
- In all kinds of buildings and alike equipped with raised floor application

### TAP-OFF UNITS

- 13A, 16A, 32A tap off plugs (with MCB or empty)
- For 32A used tap off box



## BUSBAR SYSTEMS CONNECTION MODULES



### DESCRIPTION

Busbar systems are prepared for straight distribution line up to 160A. Special connection modules are produced depending on the physical shape and needs of the area used at 160A and above.

### TYPES

- Rotation Modules
- Expansion (dilation) modules
- Reduction and T connection modules
- Standard modules
- Panel and Transformer connection modules
- Flexible connection elements
- Feeder Box

