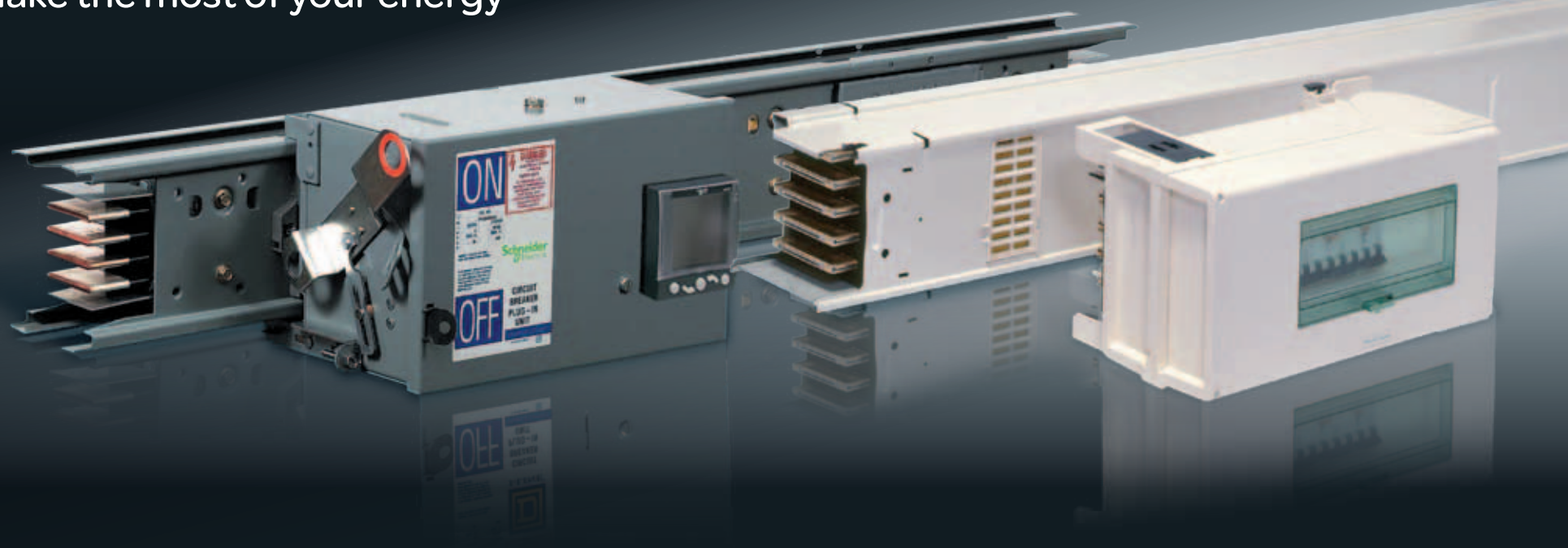
Schneider Electric Busway
from 20A to 6300A

Make the most of your energy



25 Design Verifications
KEMA KEUR
Intertek
Intertek
Intertek
Zone 4 Seismic Compliance
Made by Schneider Electric
99.9% Cu
Bimetal Technology

Schneider Electric

Schneider Electric Busway, make the most of your energy!

Being a global specialist in energy management, Schneider Electric provides you the highest energy efficient, safest and most reliable busway system for the power distribution.

Contents

Schneider Electric Busway

make the most of your energy!

Being a global specialist in energy management, Schneider Electric provides you the **highest energy efficient, safest and most reliable** busway system for power distribution.

- More than 70000 kilometers busway installed worldwide
- Full type tested as per IEC61439-6:2012 for each and every rating
- KEMA-KURE, ASTA-Diamond, UL compliance
- Seismic zone 4 compliance
- Complete package solution
- Mylar® insulation by DuPont
- 99.9% copper purity
- Bimetal technology
- Steel/Aluminium housing
- Continuous earth
- Made by Schneider Electric

70,000 KM installed worldwide

25 Design Verifications

KEMA KEUR

ASTA Intertek

Intertek

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Bimetal Technology

Steel Alum housing

70,000 KM Installed worldwide | Design Verifications | KEMA-KEUR Certification | ASTA Diamond Certification | Seismic compliance | Complete solution | Made by Schneider Electric | Mylar® insulation by DuPont | Highest purity | Bimetal Technology | Steel/Alum housing | Earth continuity

70,000
KM installed

70,000 Kilometers busway installed worldwide

With over 50 years of experience, more than 70,000 kilometers of Schneider busway has been installed around the world; Schneider busway is now on the second round of world tour!

Global Presence

Schneider Electric Presence in 100 countries

Schneider Electric is present at more than 100 countries, providing you strong local support and quick response!

Made by Schneider Electric

Made by Schneider Electric

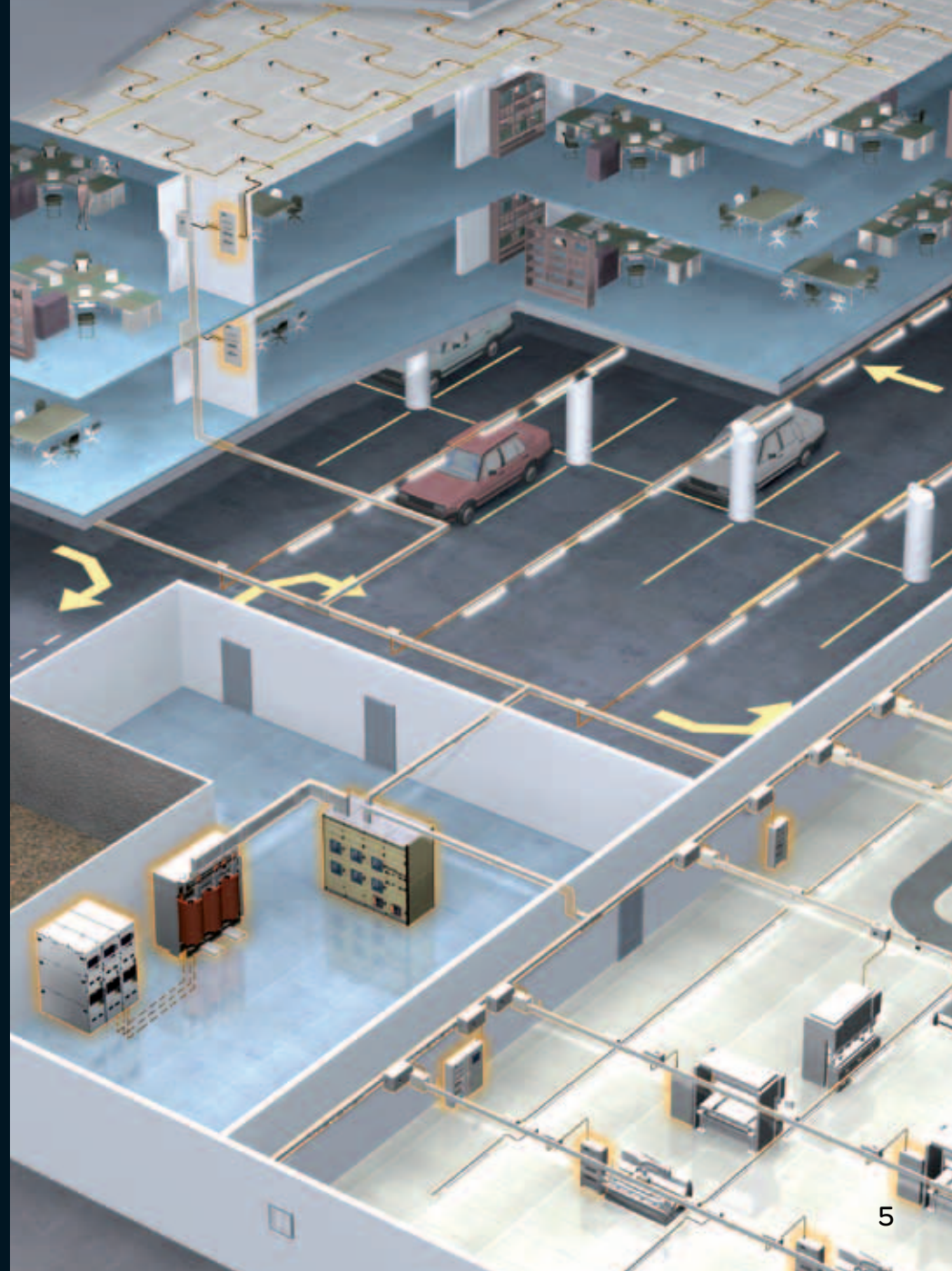
Schneider Electric stands behind our products whether they are made in Europe, America or Asia Pacific, and the product design and quality meet the exact same standards in all Schneider Electric facilities.

ISO 9001 ISO 14001 OHSAS 18001 RoHS

Integrated and complete solutions

Schneider Electric offers complete and integrated solutions across multiple market segments. Schneider busway is part of the comprehensive offering of low and medium voltage electrical distribution system. (transformer, switchboard, busway, ect)

The result is an optimized and fully coordinated electrical installation with higher performance through full electrical, mechanical and communication compatibility.



The safe and reliable
Schneider Electric Busway
is always with you

25 Full type tests,reliable





According to IEC standard 61439-6:2012, there are 25 type tests for busway system.
The 25 Design Verifications includes the following:

Strength of material and parts (10.2)
- Resistance to corrosion (10.2.2)
- Properties of insulating materials (10.2.3)
- Thermal stability (10.2.3.1)
- Resistance to abnormal heat and fire due to internal electric effects (10.2.3.2)
- Resistance to ultra-violet (UV) radiation (10.2.4)
- Lifting (10.2.5)
- Mechanical impact (10.2.6)
- Marking (10.2.7)
- Ability to withstand mechanical loads (10.2.101)
- Thermal cycling test (10.2.102)
- Degree of protection of enclosures (10.3)
- Clearances (10.4)
- Creepage distances(10.4)

Protection against electric shock and integrity of protective ciruits(10.5)
- Effective continuity between the exposed conductive parts of the BTS and the protective circuit(10.5.2)
- Short-circuit withstand strength of the protective-circuit(10.5.3)
- Incorporation of switching devices and components(10.6)
- Internal electrical circuits and connection(10.7)
- Terminal for external conductors(10.8)

Dielectric properties(10.9)
- Power-frequency withstand voltage(10.9.2)
- Impulse withstand voltage(10.9.3)
- Temperature-rise limits(10.10)
- Short-circuit withstand strength(10.11)
- Electromagnetic compatibility(EMC)(10.12)
- Mechanical operation(10.13)
- Resistance to flame propagation(10.101)
- Fire resistance in building penetration(10.102)

quality

Safety Certification

KEMA-KEUR

ASTA Diamond

Schneider Electric busway performed full type test for all ratings according to IEC61439-6:2012 and obtained KEMA-KEUR and ASTA Diamond certification.

	KEMA-KERU / ASTA Diamond	KEMA / ASTA
Test	full type test	as specified by manufacturer
Time	continuous surveillance	one time test
Object	production line, identical to the original tested sample	one sample
Standard	latest standard	as specified by manufacturer

Zone 4 Seismic compliance, Reliable system

Why Seismic compliance important for busway?

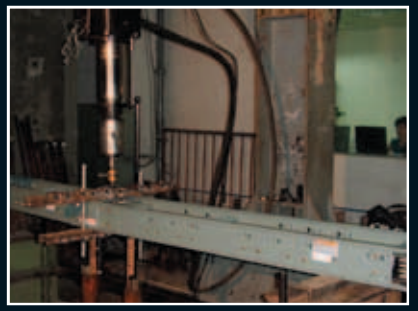
There are more and more earthquakes all over the world, and people deserve to have higher requirement for the safety of building as well as electrical system in the case of an earthquake. The seismic compliance can guarantee that busway can work properly and safely and maintain its integrity even in the event of an earthquake.

Schneider Electric Busway certified Zone 4 Seismic compliance

Schneider Busway is certified for UBC Zone 4 seismic conditions - the maximum seismic risk zone. The seismic test was performed in EERTC (Earthquake Engineering Research & Test Center) which is a member of Asian Pacific Network of Centers for Earthquake engineering Research (ANCER), and the test was done with actual physical product, not a computer simulation analysis.

test shaking table

shaking driver

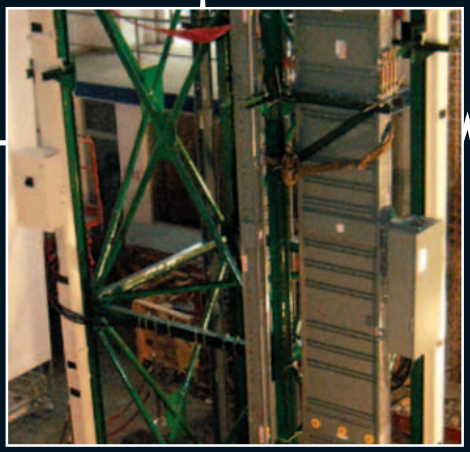


single and Repeated bending test

horizontal dynamic test

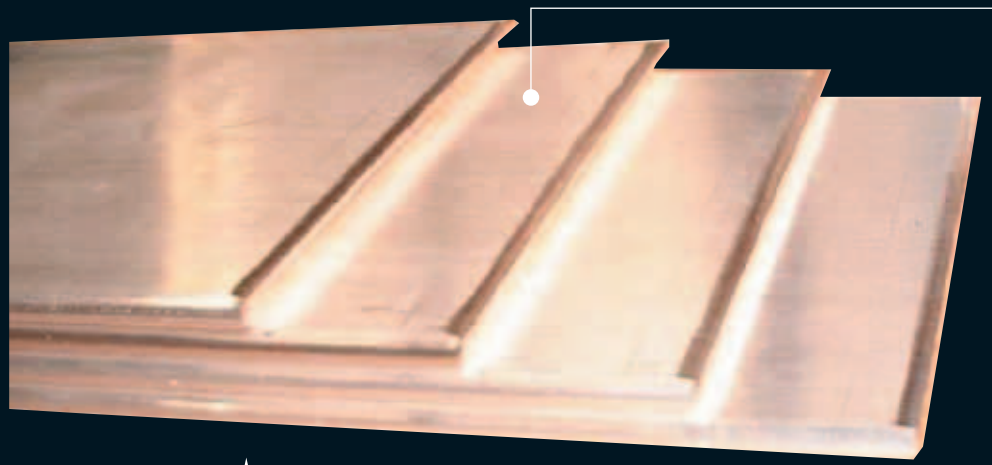
The tests at the lab include mechanical tests and dynamic tests. The dynamic tests are done with simulations of different kinds of waveforms of those biggest earthquakes - ***KOBE, EL Centro, OJIYA***.

twisting tests



vertical dynamic test

Energy Efficiency



99.9% Cu

Highest copper purity

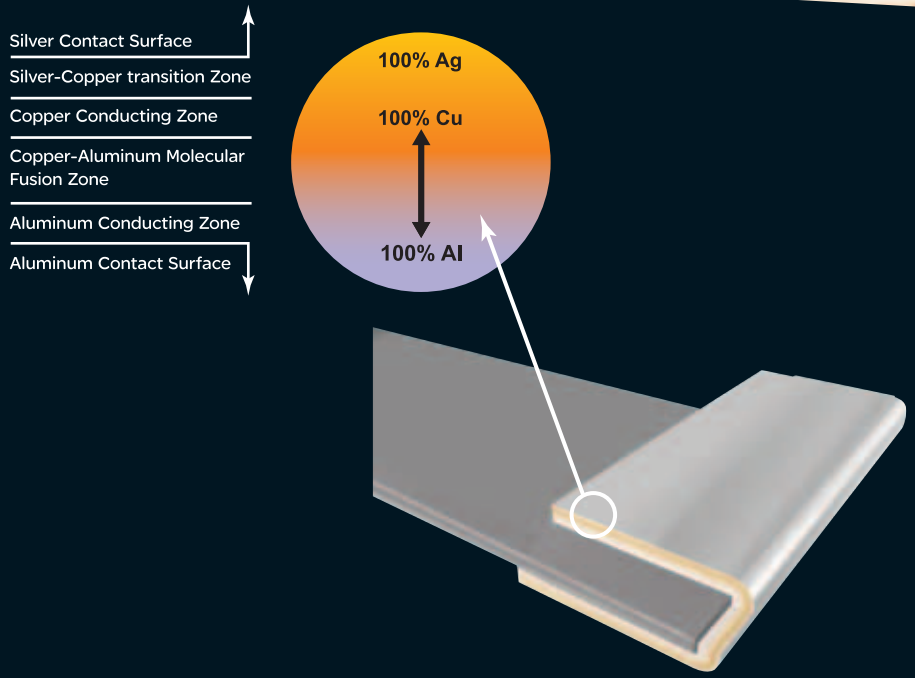
- Only copper of 99.9% purity used, with silver plating at all lengths, minimize surface oxygenation, assure low surface contact resistance and low voltage drop.
- Large cross section ensures minimum heat rise and voltage drop.

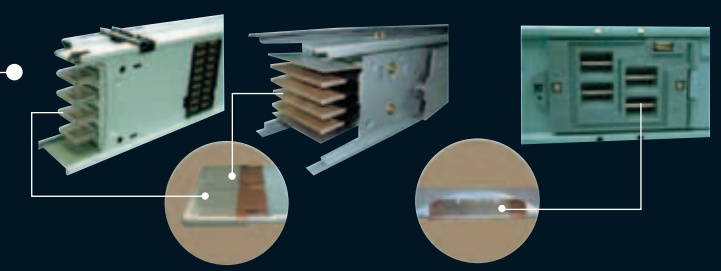
Laminated Bimetal (Copper contact)

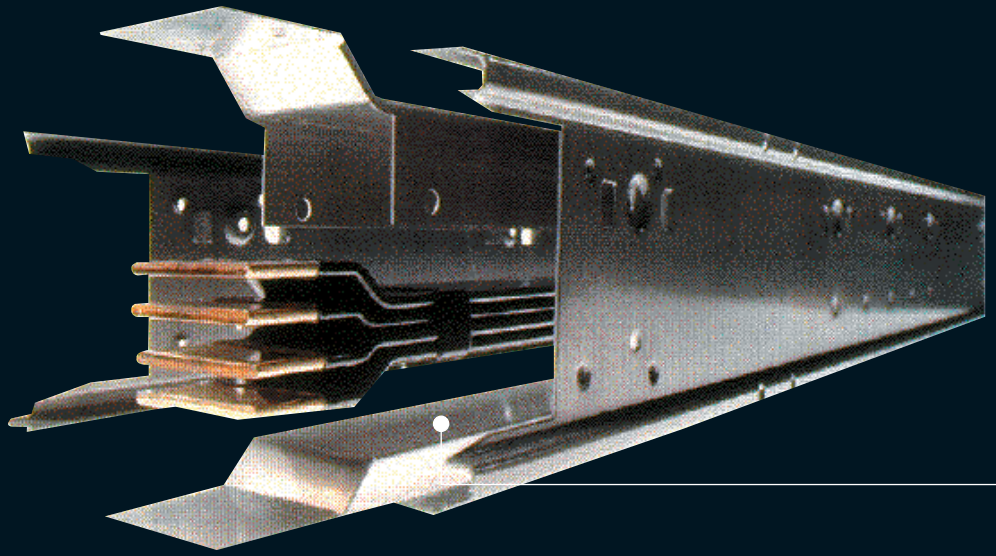
The weakest link of busway power transportation is the electrical connection part (joint-pak and plug-in opening), where have high temperature rise and concentrated power consumption.

With unique Molecular Fusion technology, Schneider'Copper Contact Busway' breakthrough the bottleneck of electrical connection. It incorporates the advantage of low contact resistance of copper and the lightness of aluminum, brings excellent power distribution performance.

All contact surface are silver-plated copper, ensure high energy efficiency and stable power quality.







Continuous earth

'One Piece Earth Bus' design

- Ensure the earth continuity from joint to joint, maintain the continuity even if joint cover is removed.
- Eliminate possible malfunction caused by bolting connection.
- The two ground bus bars completely encircle the phase conductor and provide a very effective high level ground path for ground faults.
- Academic study indicates that this ground bus system offers the lowest earth fault loop impedance.
- ensure an effective connection, protecting people and equipment from electrical shock.
- Both integral and internal earth are optional.

Effective cross sectional area

- The effective cross sectional area of full length remains the same.
- Eliminate possible malfunction caused by bolting connection between phase bars.

Maximum contact (non-welded design)

- plug-in jaw of a plug-in unit contact with busbar itself, not through a welded stab.
- This non-welded design eliminates the danger of imperfect welding and sudden reduction of conductor cross section and ensures a safe and effective power transportation.

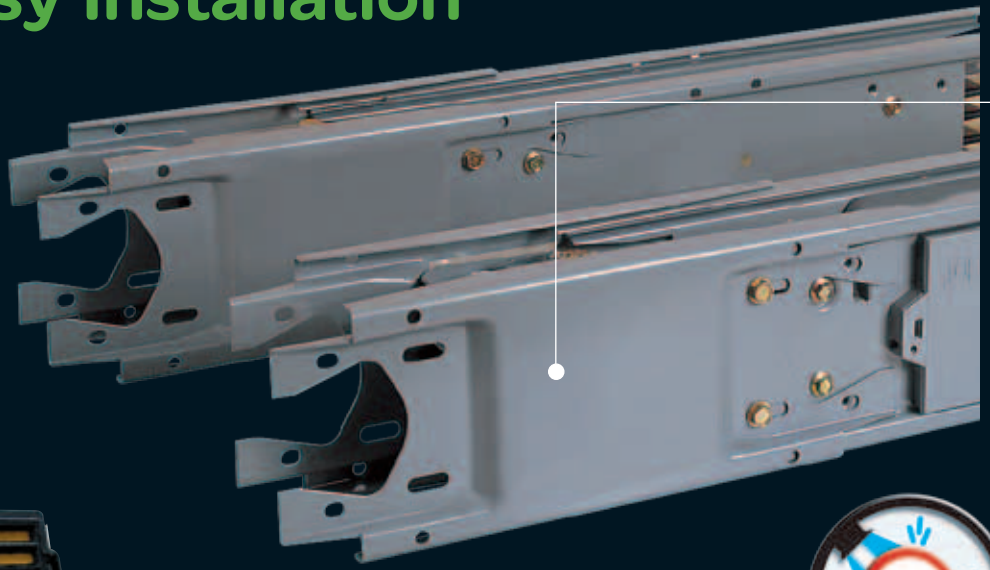
Free of Orientation

- Universal installation, no need of derating, regardless of orientation.
- Excellent compact design, ensure the good heat dissipation.

Mylar® insulation by DuPont

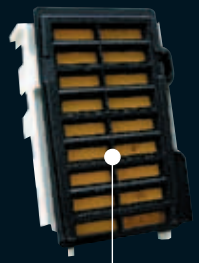
- Two layers surrounding each busbar, 4 layers between phases.
- Class B, 130C, excellent dielectric performance.
- Over 40 years of application record without failure.
- Class F is optional upon request.
- Halogen free, no toxic emission, safe in event of fire.

Easy Installation



Steel housing

- Stronger, more durable and rigid enclosure, higher mechanical strength.
- Plug-in units can be loaded on either side of the busway without causing the busway to twist.
- Galvanized steel, better anti-corrosion.
- No deformation, cracking on enclosure during transportation, handling and installation.

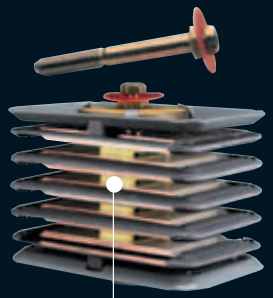


Finger proof

Shutter design, maximum protect for human from direct contact with live part.

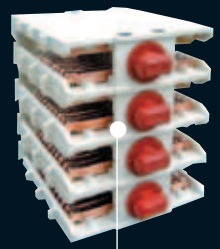
High degree of protection

- Against dust and water: IP 40 - IP66
- Against mechanical impact: IK10



Easy installation

- Single bolt connection makes busway installation faster.
- Belleville washer provides equal pressure across the complete joint contact area to assure proper electrical contact.
- Double, Silver plated surface contact ensure a good current continuity.
- Adjustable range: ±6mm.



Slide Contact

- The system is made up of springs and an area of sliding contacts that allow conductor movement (maximum 21mm) while maintaining outstanding electrical contact.
- Each Joint can absorb expansion, no need for expansion unit.
- Sliver plated contact, lower contact resistance and voltage drop.
- Easily tighten by rotating the red button 90 deg.

Intelligent plug-in unit

Safe protection

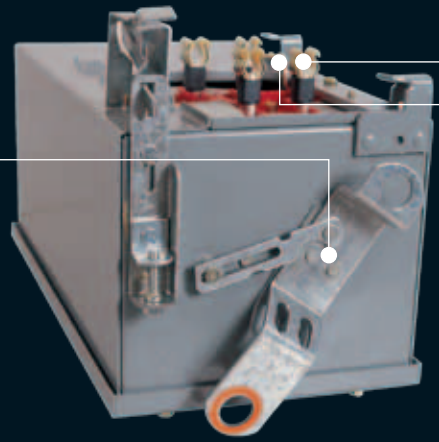
- All plug-in units equip with Schneider original circuit breaker only, fully compatible with busway system.
- Schneider circuit breaker can provide complete overload, short circuit and earthing malfunction protection.
- Transparent shield inside the PIU can prevent a direct contact with live part.

Accurate measurement and easy communication

- Schneider plug-in unit can measure and display all kinds of electrical data accurately.
- With communication module, the data of plug-in unit can be accessed through network, making power management easier for you.

Triple interlock

- Plug-in unit can not be switched ON until it is installed in the right position.
- When the unit is switched ON, the door can not be opened and removed from the busway.
- When the door is opened, the unit can not be switched ON.



Spring jaw design

- The spring jaw is composed of different metal - copper and steel.
- The spring design ensures the plug-in jaw always has firm and tight contact with the busbar regardless of hundreds of times of operation and temperature fluctuation.

Earthing protection

Earthing path is established at first and broken off at last as to protect human against electrical shock.

Worldwide major project reference:Asia Pacific&Middle East


International Finance Center


Bitexco Financial Tower


D1 Tower


Central Plaza Rama 9

Buildings

Office Building
- International Finance Center (Hong Kong)
- Julfar Tower at RAK (UAE)
- D1 Tower (UAE)
- Bitexco Financial Tower (Vietnam)
- Republic Plaza (Singapore)
- Qatar Tower (Qatar)
- Monem Business District (Bangladesh)
- HH4 Twin Tower (Vietnam)
- Arabilla Project (Kuwait)
- Zahran Business Center (Saudi Arabia)
- Central Market (UAE)
- Etihad Towers (UAE)
- Julfar Tower (UAE)

Shopping Center
- Carrefour Supermarket (Worldwide)
- Central Plaza Rama 9 (Thailand)
- Al Nagfa Mall (UAE)
- Queensgate Shopping Mall (New Zealand)
- Tesco (China)
- Sahara Ganj Mall (India)
- Siam Paragon (Thailand)
- Las Vegas Sands (Macau)

Exhibition Center
- World Expo (China)
- Abu Dhabi National Exhibition Center (UAE)
- Convention & Exhibition Centre (Hong Kong)
- Guangzhou International Convention & Exhibition Center (China)


National Stadium


Central Bank of Kuwait


The first Affiliated Hospital


Regatta

Stadium
- F1 Race Course (India)
- Zayed Sports City (UAE)
- National Stadium (China)
- 16th Asian Games Stadium (China)

Bank
- Central Bank of Kuwait (Kuwait)
- Credit Suisse (Thailand)
- Bank of China Tower (Hong Kong)
- Islamabad Stock Exchange (Pakistan)
- Cairo Bank (Egypt)

Hospital
- East Riyadh Hospital (Saudi Arabia)
- King Fahd Hospital (Egypt)
- Jaber Hospital(Kuwait)
- Alchemist Hospital (India)
- The First Affiliated Hospital, Guangzhou(China)

Hotel
- Sofitel Hotel (Pakistan)
- Movenpick Tower Hotel (Saudi Arabia)
- Hotel Development at Al Muraqqabat (UAE)
- Libya hotel (Korea)
- Hotel Park Plaza (India)

Residential
- Kingdom of Sheba (UAE)
- City Garden (UAE)
- Regatta (Indonesia)
- Cybergate 2 (Philippines)
- Farm House (Thailand)
- Golden West Lake (Vietnam)

Wind Farm

Cairo Airport

Guangzhou Metro

MHI Ro-Ro Ship

Energy & Infrastructure

Energy Power

- Three Gorges Power Station (China)
- Wind Farm (China)
- Qatar Petrol GTC (Qatar)
- Assuit Aswan Gas Pipeline (Egypt)
- Exxon Mobil Chemical Plant (Malaysia)
- Ceylon Petroleum Corporation-II (Sri Lanka)

Airport

- Beijing Capital New International Airport (China)
- TG Project (Thailand)
- Tan Son Nhat Airport (Vietnam)
- India Ahmedabad Airport (India)
- Cairo Airport (Egypt)
- Dubai Airport (UAE)
- Jebel Ali Airport (UAE)

Metro

- Guangzhou Metro (China)
- Bangalore Metro (India)
- Singapore Metro (Singapore)
- Dubai Metro (UAE)
- Metro Abdibina (Indonesia)
- Delhi Metro (India)

Marine

- MHI Ro-Ro Ship (Japan)

Data Center

Hyundai E&C

General Motors

Hitachi Semiconductor

Data Center & Networks

- Fujitsu FIP (Japan)
- Dongbu Data Center (Korea)
- Saudi Telecom Company (Saudi Arabia)
- SM E-COM Project (Philippines)
- Data Center Faasri Project (Indonesia)
- IBM, Pune (India)
- HP Data Center (Australia)

Industry

Automotive

- General Motors (Worldwide)
- Ford Motors (Thailand)
- Toyota Motors (Australia)
- Hyundai E&C(Korea)

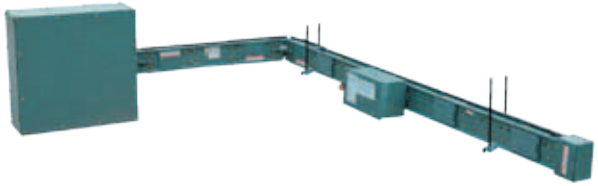
Electronic

- Hitachi Semiconductor Manufacturing (China)
- TSMC (Taiwan)
- AUO (Taiwan)
- Seagate Factory (Singapore)
- Intel Plant (Malaysia)
- Canon Hi-Tech (Thailand)
- Infineon Plant (Malaysia)
- Bharti Airtel (India)

Light Industry

- EPETCO Glass Factory (Saudi Arabia)
- P&G Detergent Factory (China)
- 3M Tuas Factory & Warehouse (Singapore)
- Foster Beer Factory (Vietnam)
- Hindoostan Mills (India)

High power busway (630A-6300A)
I-LINE II Copper Busway



General Info (I-LINE II)												
Ampere Rating:	630	800	1000	1250	1350	1600	2000	2500	3200	4000	5000	6300
IP Rating:	IP41-IP66											
System:	3L+N+PE/3L+PE											
Operation Voltage:	1000V											
Insulation Voltage:	1000V											
Frequency:	50/60Hz											
Standard Length:	10 feet											
Max/Min length:	10 feet/16 inch											
Finish:	ANSI49											
Tap-off Intervals:	610mm/1219mm											
Neutral Capacity:	100% as phase bar											
Earth bar:	50% Capacity, Integral/Internal											
Tap-off unit Ampere Rating:	16A-1600A											

Components (I-LINE II)

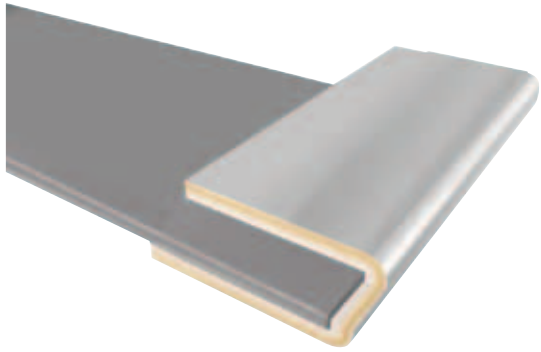
Run sections

Plug-in units

Elbow Fittings

High power busway (800A-5000A)
I-LINE II Copper Contact Busway

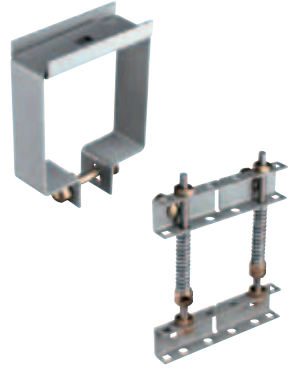
General Info (I-LINE II)										
Ampere Rating:	800	1000	1250	1350	1600	2000	2500	3200	4000	5000
IP Rating:	IP41-IP66									
System:	3L+N+PE/3L+PE									
Operation Voltage:	1000V									
Insulation Voltage:	1000V									
Frequency:	50/60Hz									
Standard Length:	10 feet									
Max/Min length:	10 feet/16 inch									
Finish:	ANSI49									
Tap-off Intervals:	610mm/1219mm									
Neutral Capacity:	100% as phase bar									
Earth bar:	50% Capacity, Integral/Internal									
Tap-off unit Ampere Rating:	16A-1600A									



Components (I-LINE II)

Connection fittings

Fixing supports



Medium power busway (100A-800A)
Canalis Copper Busway

General Info (Canalis KSC)							
Ampere Rating:	100	160	250	400	500	630	800
IP Rating:	IP40-IP54						
System:	3L+N+PE						
Operation Voltage:	690V						
Insulation Voltage:	690V						
Frequency:	50/60Hz						
Standard Length:	1.5/2/3 meter						
Max/Min length:	3meter/0.375 meter						
Finish:	white RAL 9001						
Tap-off Intervals:	500/1000 mm on each face						
Neutral Capacity:	100% as phase bar						
Earth bar:	50% Capacity,Integral/Internal						
Tap-off unit Ampere Rating:	25A-400A						

Components(Canalis KS)

Run components

Feed units and end covers

Medium power busway (100A-800A)
Canalis Copper Contact Busway

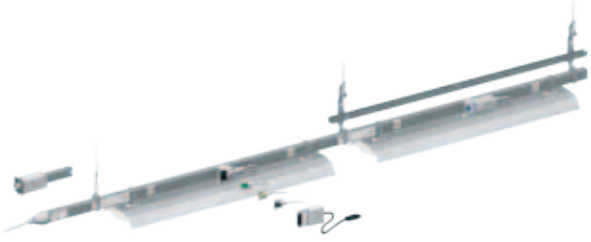
General Info(Canalis KSA)							
Ampere Rating:	100	160	250	400	500	630	800
IP Rating:	IP40-IP54						
System:	3L+N+PE						
Operation Voltage:	690V						
Insulation Voltage:	690V						
Frequency:	50/60Hz						
Standard Length:	1.5/2/3 meter						
Max/Min length:	3meter/0.375 meter						
Finish:	white RAL 9001						
Tap-off Intervals:	500/1000 mm on each face						
Neutral Capacity:	100% as phase bar						
Earth bar:	50% Capacity, Integral/Internal						
Tap-off unit Ampere Rating:	25A-400A						

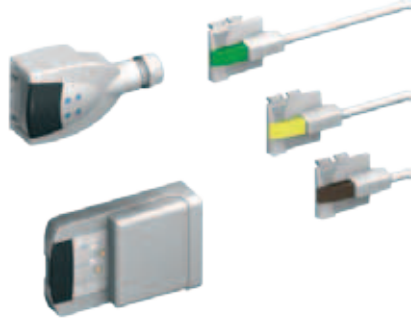
Components(Canalis KS)

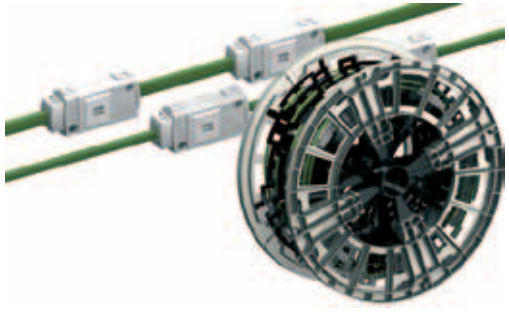
Fixing system

Tap-off units

Lighting busway (20A/250A-40A)
Canalis KDP/KBA/KBB







General Info (KBA/KBB)	
Ampere Rating:	25/40A
Number of circuits:	1 or 2
IP Rating:	IP55
Operation Voltage:	230-400V
Insulation Voltage:	690V
Frequency:	50/60Hz
Standard Length:	2/3 meter
Finish:	Galvanized steel
Tap-off Intervals:	500/1000 /1500mm
Tap-off unit Ampere Rating:	10A/16A
Maximum distance between fixing points:	3/5 meter

General Info (KDP)	
Ampere Rating:	20A
Number of circuits:	1
IP Rating:	IP55
Operation Voltage:	230-400V
Insulation Voltage:	690V
Frequency:	50/60Hz
Standard Length:	24/192 meters per roll
Tap-off Intervals:	1200/1350/1500/2400/2700/3000mm
Tap-off unit Ampere Rating:	10A/16A
Maximum distance between fixing points:	0.7 meter

Note

About Schneider Electric

As a global specialist in energy management with operations in more than 100 countries, Schneider Electric offers integrated solutions across multiple market segments, including leadership positions in energy and infrastructure, industrial processes, building automation, and data centers/networks, as well as a broad presence in residential applications. Focused on making energy safe, reliable, efficient, productive and green, the company's 150000 plus employees achieved sales of 24 billion euros in 2013, through an active commitment to help individuals and organizations "Make the most of their energy."

www.schneider electric.com

Make the most of your Energy℠

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SBG-M-14-V02