

XAP Buaway

XAP-C Series Compact Busway

Rated Current 400-6300A



EATON

Powering Business Worldwide

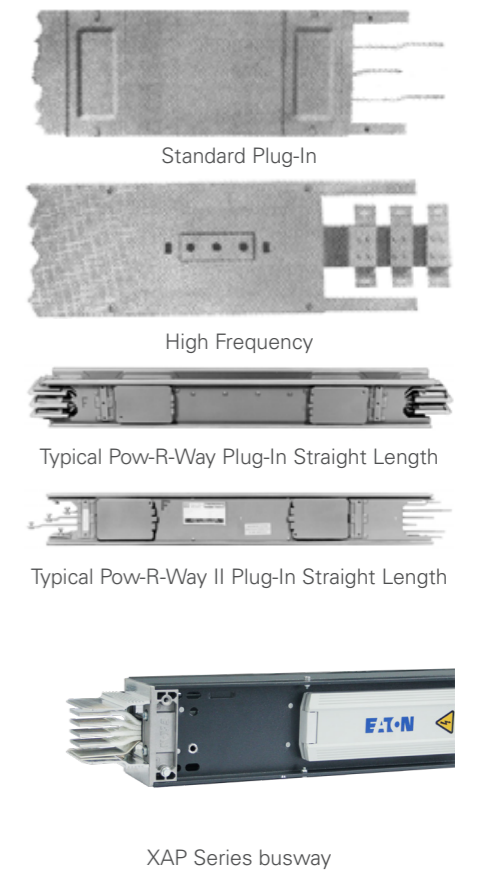
* EATON

It all began in 1911...



It was 1911 when a young entrepreneur named Joseph Eaton decided to invest in a new idea in transportation — the first gear-driven truck axle. And though we have grown considerably, both organically and by uniting some of the world's most respected names in our industry, we remain dedicated to the spirit of innovation and ideas that inspired him more than 100 years ago.

Product	1935	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000	present
Power distribution bus	[Timeline bar]														
Victory bus duct	[Timeline bar]														
Standard plug-in	[Timeline bar]														
Low impedance bus	[Timeline bar]														
Life line Unibus	[Timeline bar]														
High frequency bus	[Timeline bar]														
Cutler-Hammer BV bus	[Timeline bar]														
Current limiting bus	[Timeline bar]														
Electric utility bus	[Timeline bar]														
DC busway	[Timeline bar]														
100 ampere busway	[Timeline bar]														
Low impedance plug-in	[Timeline bar]														
Cutler-Hammer Unibus	[Timeline bar]														
H5000 feeder	[Timeline bar]														
H5000 plug-in	[Timeline bar]														
Cutler-Hammer CP2	[Timeline bar]														
Pow-R-Way	[Timeline bar]														
Pow-R-Way II	[Timeline bar]														
Cutler-Hammer CP3	[Timeline bar]														
Cutler-Hammer CP4	[Timeline bar]														
Pow-R-Way III	[Timeline bar]														





We make what matters work.

* XAP-C series Compact Busway

Adaptable busway systems for virtually any application, 400-6300A

We are a power management company made up of approximately 85,000 employees, doing business in more than 175 countries. Our energy-efficient products and services help our customers effectively manage electrical, hydraulic and mechanical power more reliably, efficiently, safely and sustainably. By giving people tools to use power more efficiently. Helping companies do business more sustainably. And by encouraging each and every employee at Eaton to think differently about our business, our communities and the positive impact we can have on the world.

Eaton's XAP series busway is the obvious choice when searching for a combination of technical performance and attractive design. Constant development of the range for over years has not only ensured economical and reliable solutions;

XAP busway has evolved into an unsurpassed range able to adapt to virtually any installation.

XAP busway is an integral part of the product offering from Eaton. Complementing Eaton's range of low voltage distribution equipment to a complete selection of fused switchgear, circuit breaker systems, motor control gear and OEM products.

XAP busway system is thoroughly tested and comply fully with IEC 61439-6 . The range extends from 400 - 6300 A. The straightforward and highly styled design makes XAP busway easy to both install and use truly the system with style!

* We make what matters work.

Today, the world runs on critical infrastructure and technology. Planes. Hospitals. Factories. Data centers. Vehicles. The electrical grid. These are things people depend on every day. And the companies behind them depend on us to help solve some of the toughest power management challenges on the planet. At Eaton, we're dedicated to improving people's lives and the environment with power management technologies that are more reliable, efficient, safe and sustainable.

EATON

Powering Business Worldwide



EATON owns state of art manufacturing system in the industry, it brings "high, precision and top" features to the products.

01

German Trumpf laser cutting and Trupunch ensures $\pm 0.1\text{mm}$ accuracy for sheet-metal parts.



02

Canadian Accurpress, German Behringer, Italian Euromac and Ameppessta sheet-metal system enables parts to achieve International high quality lever.



03

Application of Panasonic automatic welding, laser welding and automatic riveting technology highly improves production efficiency.



EATON owns independant laboratory for research and development ,which always brings customers high quality product and electricity safety.

01

Temperature rise system allows max 6300A, which ensures product performance to reach design expectation.



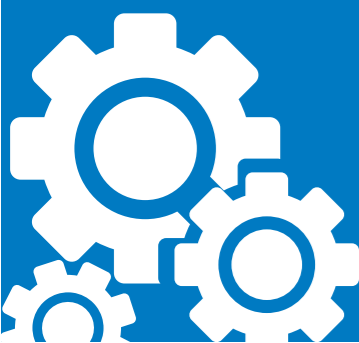
02

Application of dust simulation tank and water spray platform give product superior IP protection degree performance at the research stage.



03

Perform strict quality control on IQC,IPQC and OQC to secure product "Zero defection" upon ex-factory.

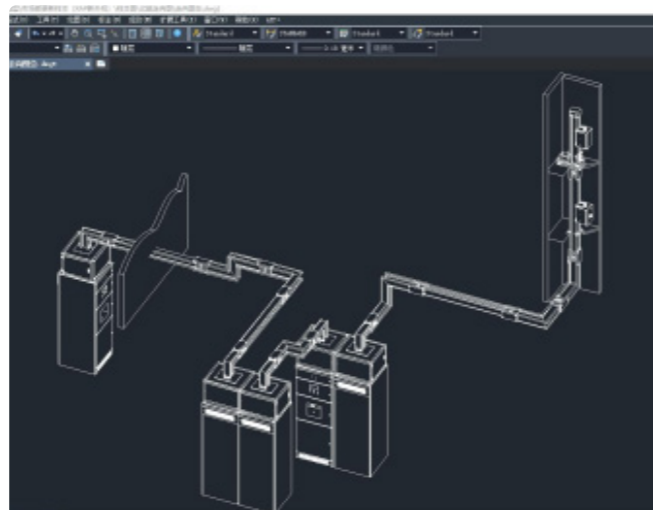




EATON always sticks to innovation research and development, pushes busway technology to safe, energy saving and intelligent direction.

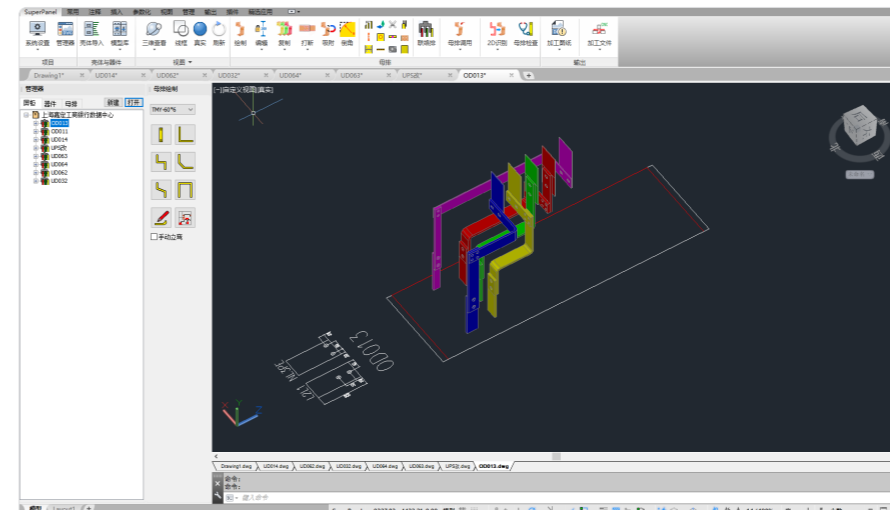
01

Advanced 3D engineering software, integrated with product features, quickly optimise the busway layout, offers first-best arrangement to the project.



02

Intelligent superpanel technology brings power to distribution system and provide customer with reliable power supply solution.



Manufacturing center sets up MES system and Intelligent factory data platform, closely butts with ERP, achieves the jump over from product manufacturing to "intelligent manufacturing".

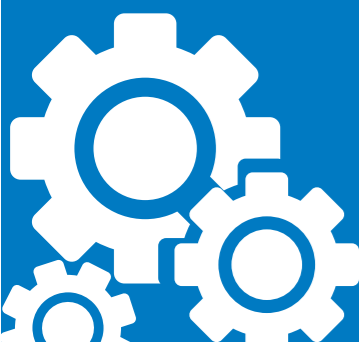
01

MES system precisely record all the process data and makes all the manufacturing data trackable.



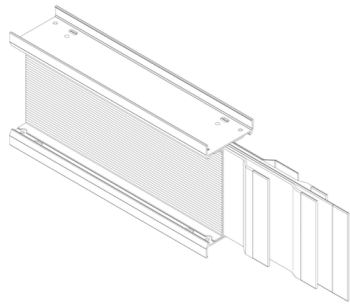
02

Intelligent factory data platform fully monitors the factory operation efficiency by statistic and analysis of all the data related with manufacturing, quality and safety.

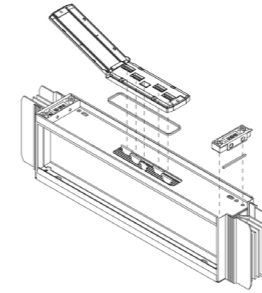


XAP-C series compact busway

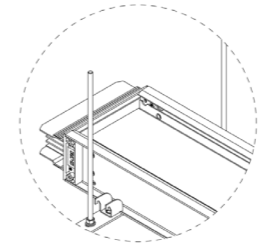
Installation accessories



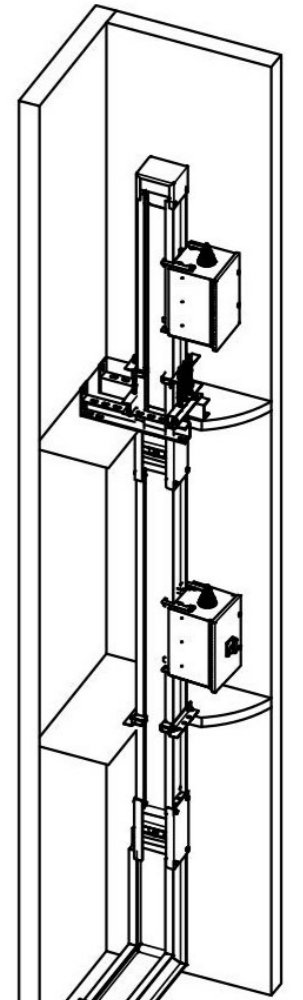
Eaton busway housing adopts lightweight ToughRail Technology®, which can withstand 20J impact without any deformation (IK10) and pass 2400h salt fog test.



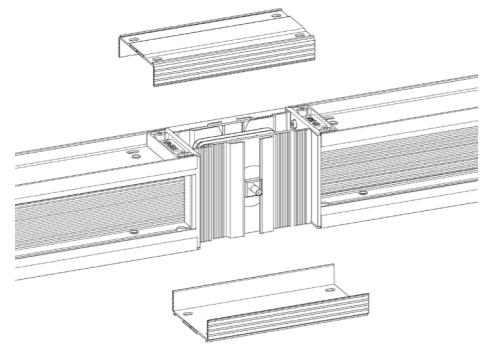
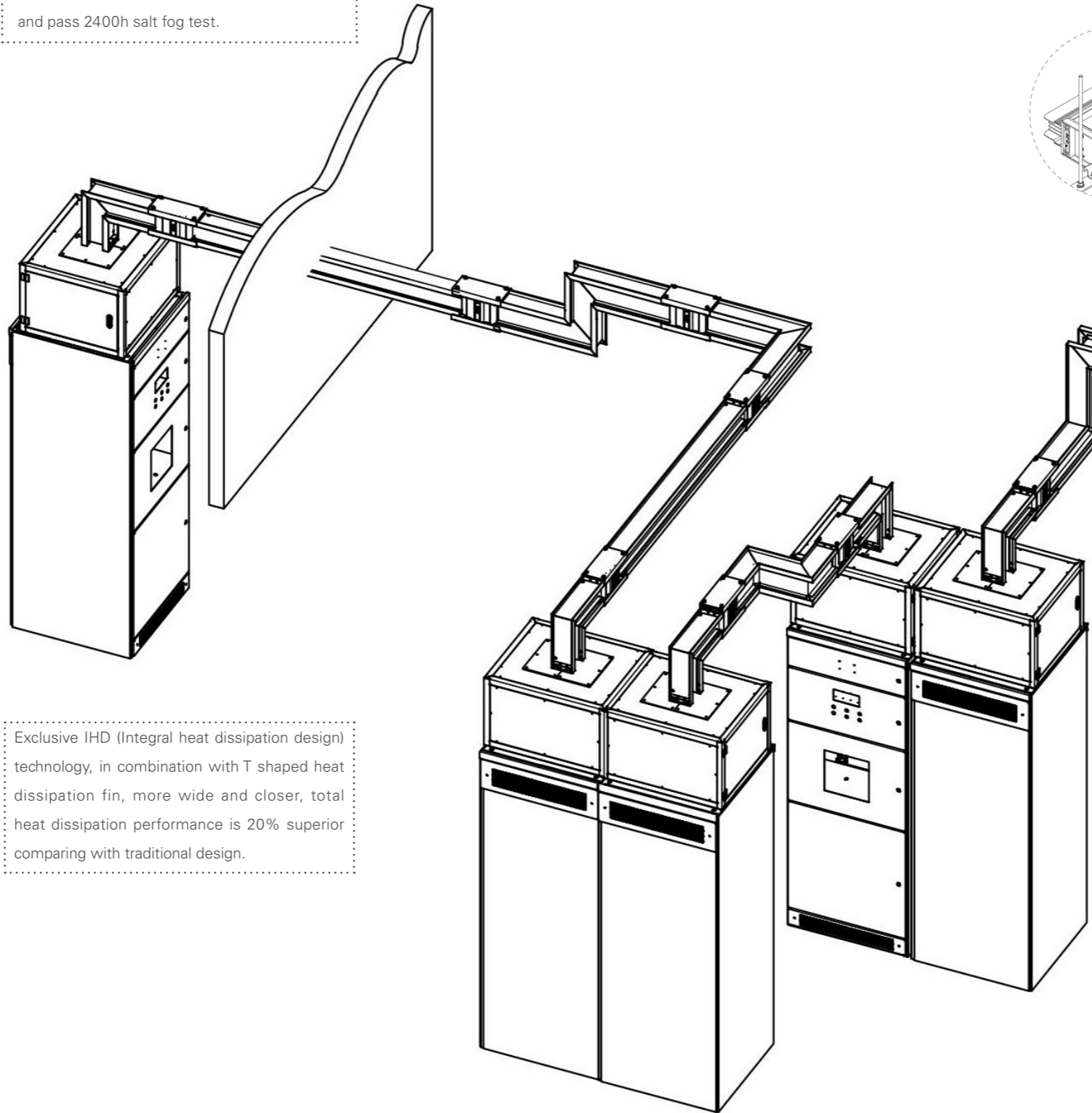
With exquisite workmanship, Eaton busway all contact sides has abandoned traditional "point to line" contact, and improves to "side to side", which greatly enhances the product IP protection degree.



Brand-new draining hole design, eliminates "cisterns effect".

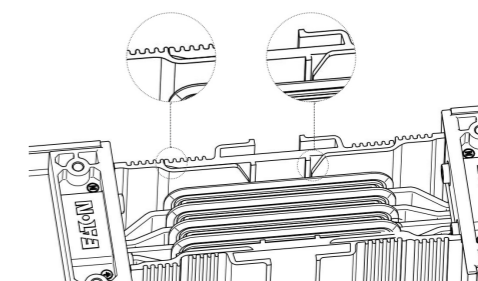


XAP-C busway is available with Intelligent monitor system and operation platform, it provides on-time data to customer and secures the electricity safety.



Exclusive IHD (Integral heat dissipation design) technology, in combination with T shaped heat dissipation fin, more wide and closer, total heat dissipation performance is 20% superior comparing with traditional design.

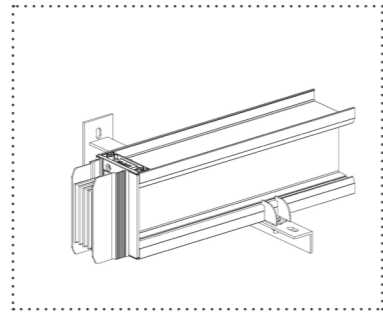
By right of Eaton "Pow-R-Bridge joint package" technology, we innovatively made orientation design to prevent "false and over connection", which fully guarantees reliable contact and stable electricity power transmission.



XAP-C series compact busway

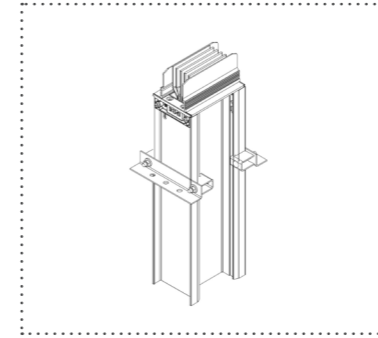
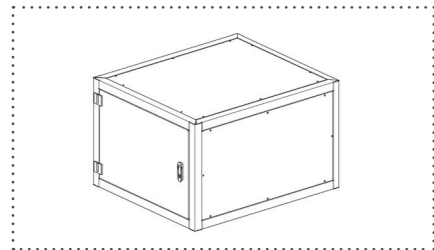
Installation accessories

Bracket arm is applicable for the installation of the busway along the wall.



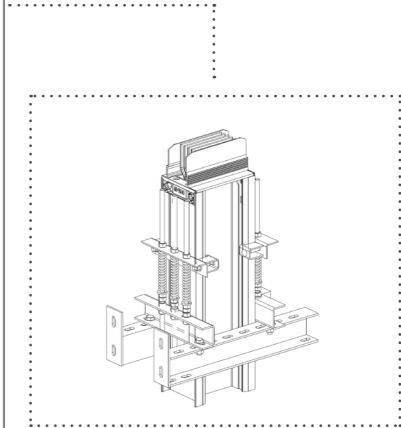
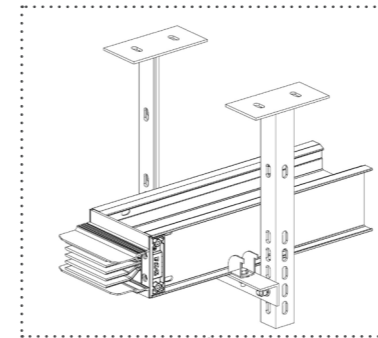
End tap box, to protect connection between busway and equipment, outline standard dimension:

L=1000mm,W=800~1000mm,H=500mm

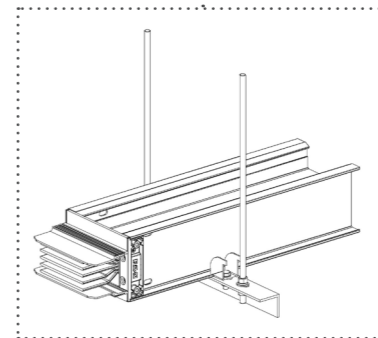


Middle fixation hanger, when the floor is 4 meters high, or equipped with plug in box, need to add fixation hanger to secure the busway installation in the vertical riser.

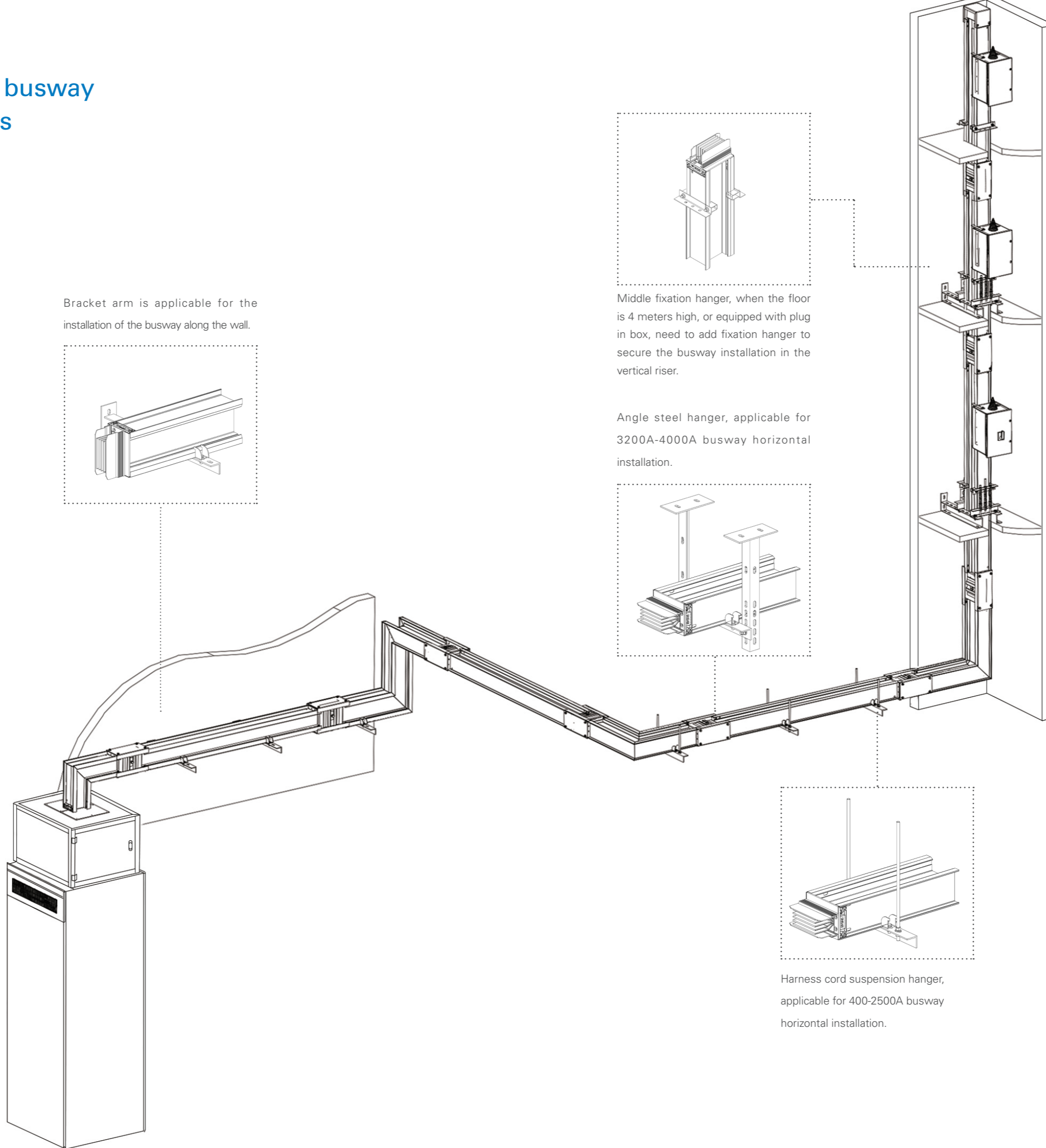
Angle steel hanger, applicable for 3200A-4000A busway horizontal installation.



Spring hanger, for the application of busway penetration on the floor.



Harness cord suspension hanger, applicable for 400-2500A busway horizontal installation.



XAP-C series compact busway

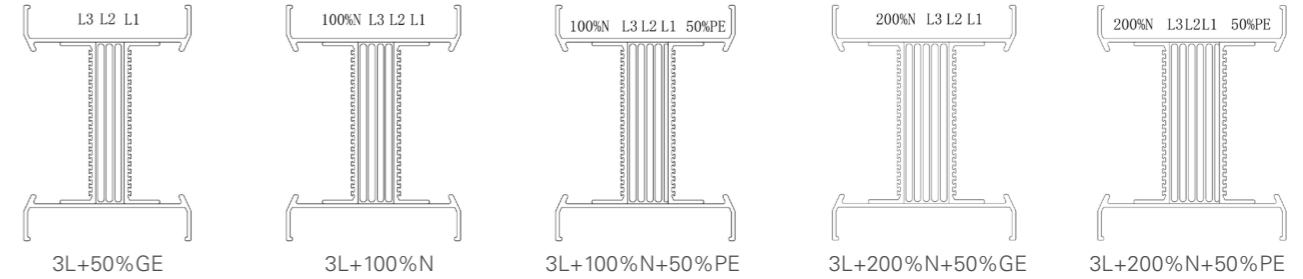
Technique data

Item	Unit	Current rating											
Rated current	A	400	630	800	1000	1250	1600	2000	2500	3200	4000	5000	6300
Standard	IEC 61439-6 2012 : LV switchgear and control gear assemblies – Part 6:Busbar trunking systems (busways)												
Thrid party certificate	CQC, KEMA-KEUR												
System	Applicable for 3P3W, 3P4W and 3P5W system												
Frequency	Hz	50/60											
Rated operation voltage U _e	V	≤ 690 V (with tap off unit) , ≤ 1000 V (without tap off unit)											
Rated insulation voltage U _i	V	≤ 1000V											
Rated impulse withstand voltage U _{imp}	KV	8 (with tap off unit) /12 (without tap off unit)											
Rated short time withstand current (I _{cw})	kA	30	30	45	65	65	80	80	100	120	120	120	140
Rated peak short circuit current (I _{pk})	kA	63	63	94.5	143	143	176	176	220	264	264	264	308
IP	IP54/IP66												
Pollution degree	III												
Ambient temperature	°C	-5 ~ 40 degree, average temperature does not exceed 35 degree within 24h											
Above sea level	m	≤ 2000											
Fire propagation features	Yes												
Housing material	Aluminum-alloy												
Housing finishing	Electric static powder spray/ Aluminum oxidation												
Conductor material	Copper												
Conductor finishing	Tin / silver plating												
Conductor resistance													
Resistance (R ₂₀)	mΩ/m	0.036	0.08	0.067	0.02	0.017	0.013	0.021	0.005	0.007	0.011	0.007	0.0055
Reactance (X)	mΩ/m	0.127	0.029	0.01	0.059	0.049	0.034	0.011	0.021	0.016	0.004	0.004	0.0048
Impedance (Z)	mΩ/m	0.132	0.085	0.068	0.062	0.052	0.036	0.024	0.022	0.017	0.012	0.009	0.007
Voltage drop													
Power factor 0.6	V/m	0.085	0.078	0.067	0.103	0.107	0.097	0.074	0.086	0.94	0.068	0.071	0.078
Power factor 0.7	V/m	0.08	0.084	0.075	0.097	0.102	0.093	0.078	0.08	0.09	0.073	0.073	0.079
Power factor 0.8	V/m	0.073	0.089	0.083	0.089	0.930	0.085	0.081	0.072	0.084	0.078	0.074	0.079
Power factor 0.9	V/m	0.061	0.092	0.090	0.076	0.079	0.073	0.082	0.059	0.074	0.081	0.073	0.077
Power factor 1.0	V/m	0.025	0.087	0.093	0.035	0.037	0.036	0.073	0.022	0.039	0.076	0.061	0.060

XAP-C series compact busway

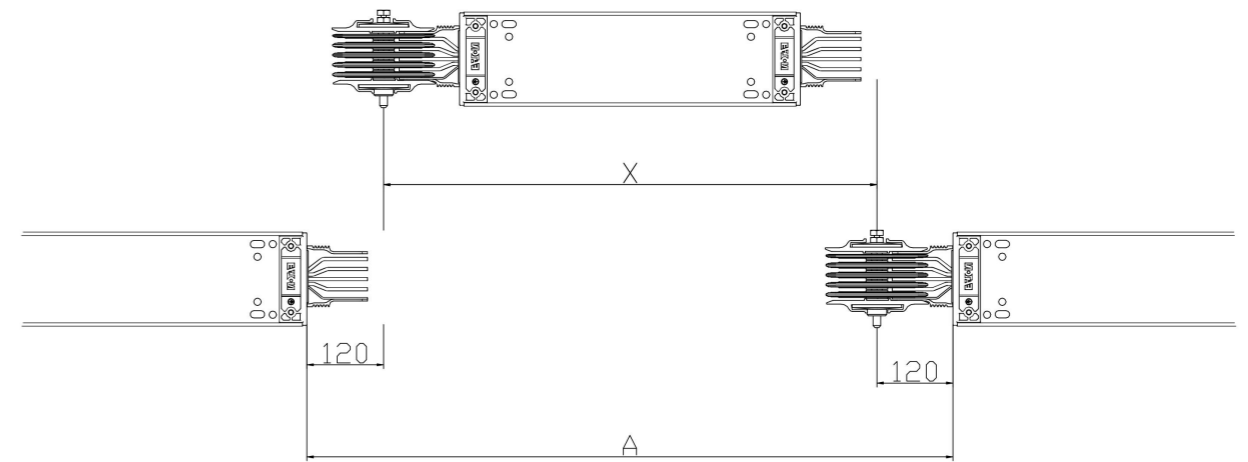
System selection

XAP-C busway is widely used in the 3P3W, 3P4W and 3P5W system.

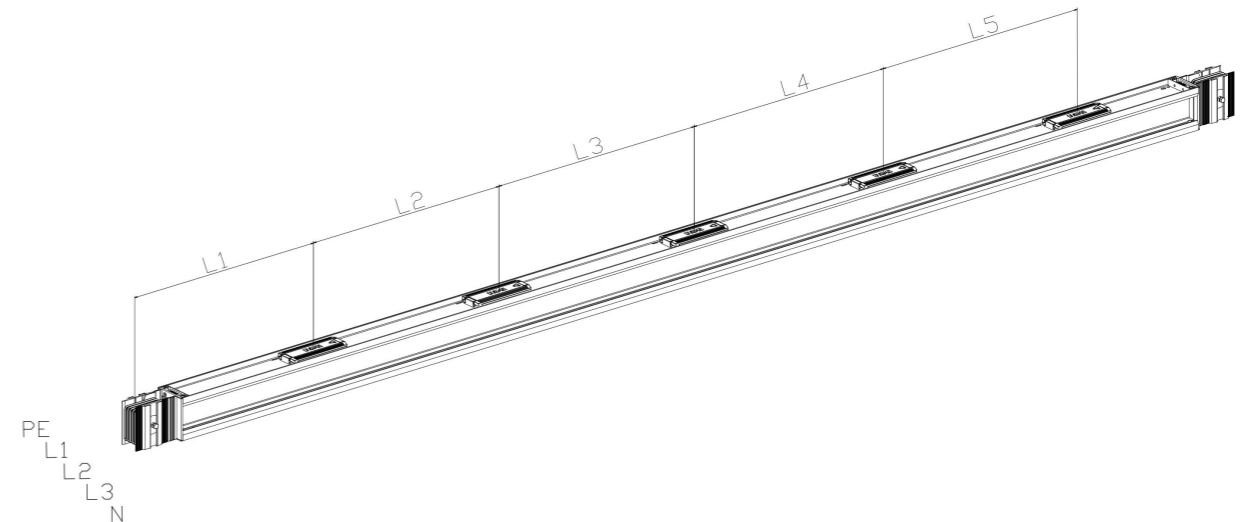


XAP-C busway length definition

Busway and functional unit length is calculated from the joint centerline, for the feeder, minimum length is 400mm, standard length is 3000mm.



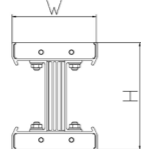
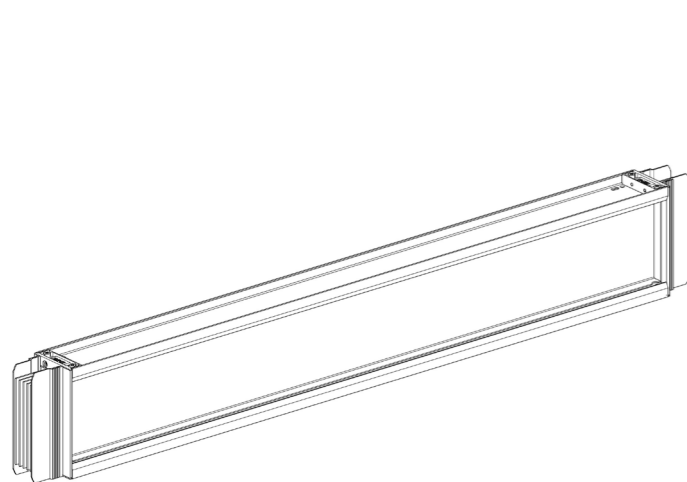
Plug in type busway, minimum length is 720mm, standard length is 3000mm, busway can be equipped with five plug in openings on each side, plug in opening dimension is marked as follows



XAP-C series compact busway

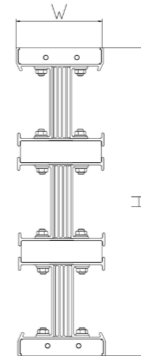
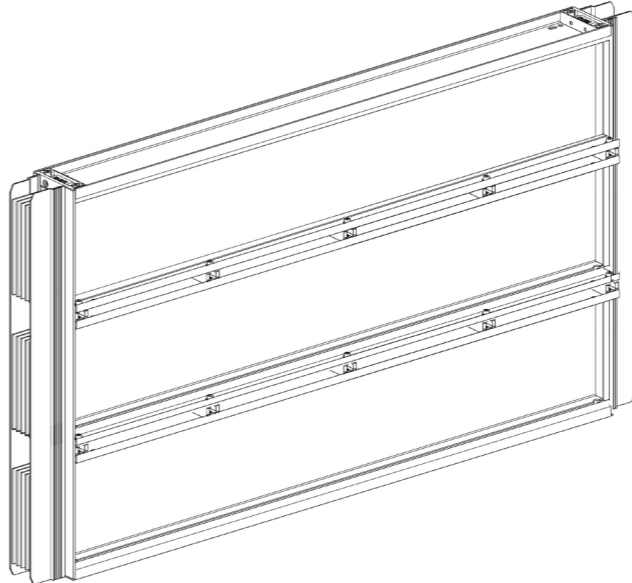
Physical data

Single deck busway



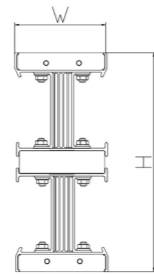
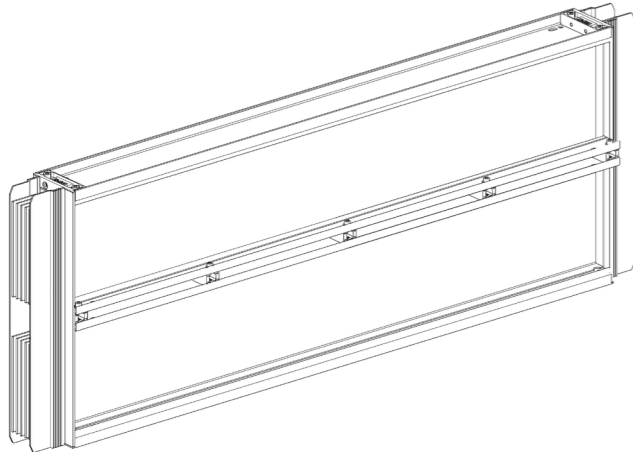
No.	Current class (A)	Dimension		Dimension	
		Width W (mm)	Height H (mm)	4W (kg/m)	5w (kg/m)
1	400	142	113	15.33	16.89
2	630	142	113	17.11	18.15
3	800	142	113	18.89	20.12
4	1000	142	128	23.55	25.32
5	1250	142	148	25.11	27.11
6	1600	142	178	34.44	37.56
7	2000	142	213	41.66	45.12
8	2500	142	268	56.44	61.11

Tripartite decks busway



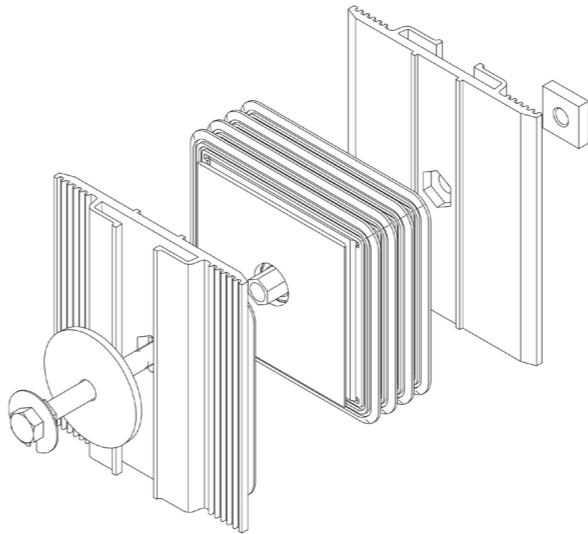
No.	Current class (A)	Dimension		Dimension	
		Width W (mm)	Height H (mm)	4W (kg/m)	5w (kg/m)
1	6300	142	751	137.5	152.2

Double decks busway



No.	Current class (A)	Dimension		Dimension	
		Width W (mm)	Height H (mm)	4W (kg/m)	5w (kg/m)
1	3200	142	347	72.33	75.12
2	4000	142	437	96.33	100.06
3	5000	142	537	120.22	125.35

Joint

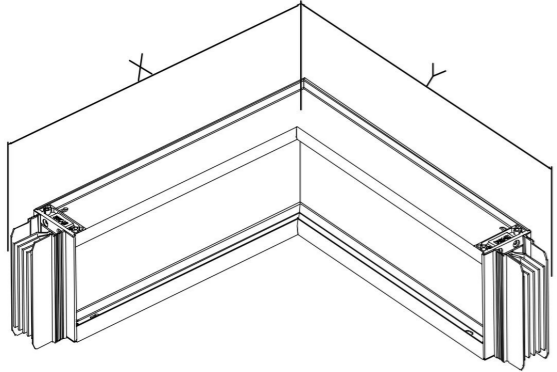


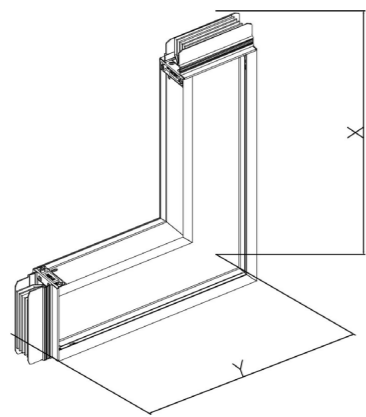
Note: Joint double-headed bolt torque value is 68±7 Nm

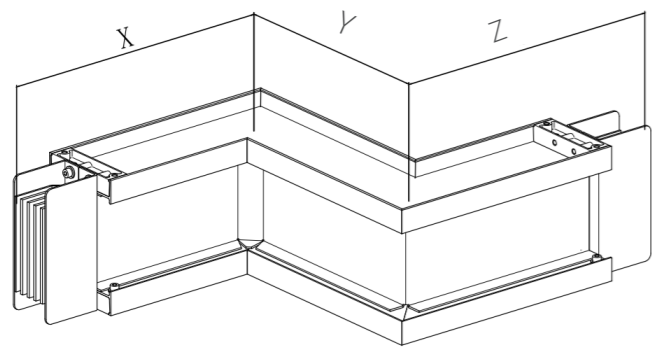
No.	Current rating(A)	Joint bolt qty
1	400	1
2	630	1
3	800	1
4	1000	1
5	1250	1
6	1600	1
7	2000	2
8	2500	2
9	3200	2
10	4000	4
11	5000	4
12	6300	6

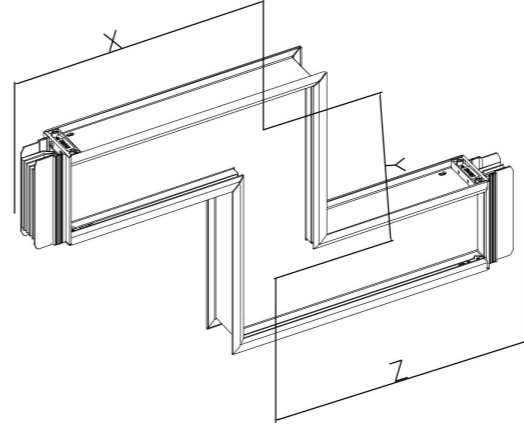
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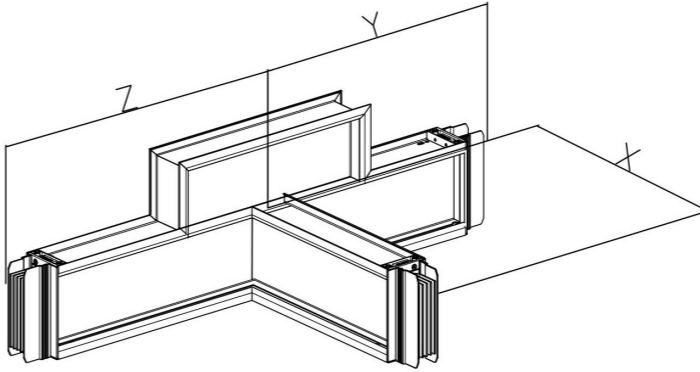
Functional unit standard dimension

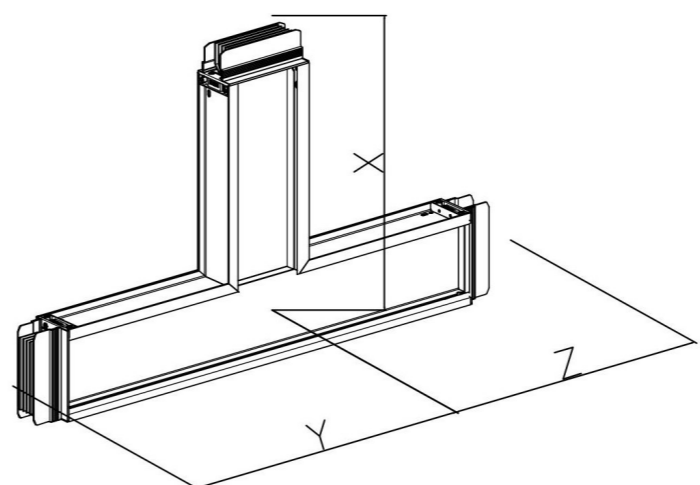
L horizontal elbow		No.	Current class	Dimension
		1	400A	X=400mm Y=400mm
		2	630A	X=400mm Y=400mm
		3	800A	X=400mm Y=400mm
		4	1000A	X=400mm Y=400mm
		5	1250A	X=400mm Y=400mm
		6	1600A	X=400mm Y=400mm
		7	2000A	X=400mm Y=400mm
		8	2500A	X=400mm Y=400mm
		9	3200A	X=400mm Y=400mm
		10	4000A	X=400mm Y=400mm
		11	5000A	X=400mm Y=400mm
		12	6300A	X=400mm Y=400mm

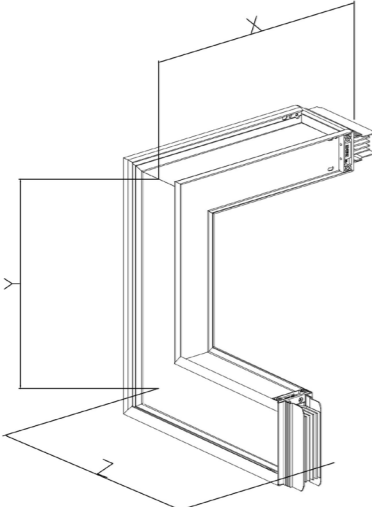
L vertical elbow		No.	Current class	Dimension
		1	400A	X=400mm Y=400mm
		2	630A	X=400mm Y=400mm
		3	800A	X=400mm Y=400mm
		4	1000A	X=400mm Y=400mm
		5	1250A	X=400mm Y=400mm
		6	1600A	X=400mm Y=400mm
		7	2000A	X=400mm Y=400mm
		8	2500A	X=500mm Y=500mm
		9	3200A	X=850mm Y=850mm
		10	4000A	X=850mm Y=850mm
		11	5000A	X=850mm Y=850mm
		12	6300A	X=850mm Y=850mm

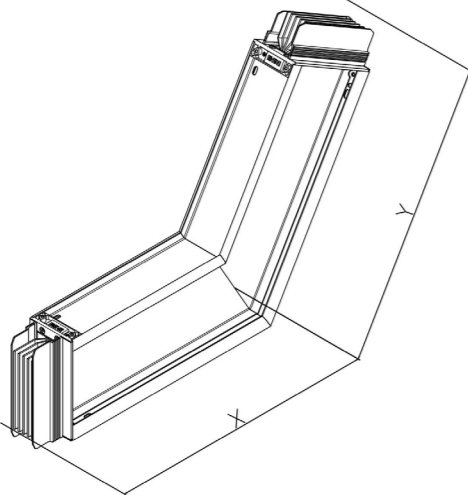
Z horizontal offset		No.	Current class	Dimension
		1	400A	X=400 Y=200~700 Z=400
		2	630A	X=400 Y=200~700 Z=400
		3	800A	X=400 Y=200~700 Z=400
		4	1000A	X=400 Y=200~700 Z=400
		5	1250A	X=400 Y=200~700 Z=400
		6	1600A	X=400 Y=200~700 Z=400
		7	2000A	X=400 Y=200~700 Z=400
		8	2500A	X=400 Y=200~700 Z=400
		9	3200A	X=400 Y=200~700 Z=400
		10	4000A	X=400 Y=200~700 Z=400
		11	5000A	X=400 Y=200~700 Z=400
		12	6300A	X=400 Y=200~700 Z=400

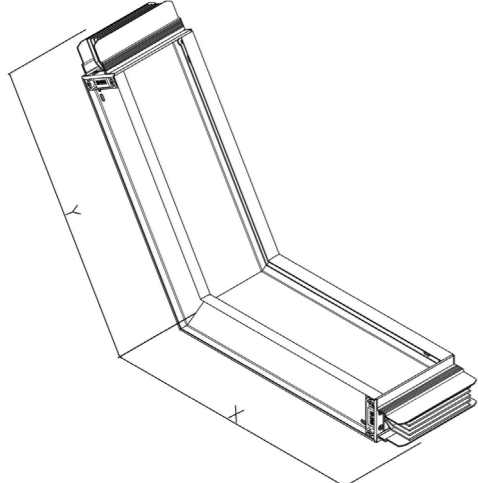
Z vertical offset		No.	Current class	Dimension
		1	400A	X=400mm Y=250~900mm Z=400mm
		2	630A	X=400mm Y=250~900mm Z=400mm
		3	800A	X=400mm Y=250~900mm Z=400mm
		4	1000A	X=400mm Y=250~900mm Z=400mm
		5	1250A	X=400mm Y=250~900mm Z=400mm
		6	1600A	X=500mm Y=400~1100mm Z=500mm
		7	2000A	X=500mm Y=400~1100mm Z=500mm
		8	2500A	X=500mm Y=400~1100mm Z=500mm
		9	3200A	X=850mm Y=700~1700mm Z=850mm
		10	4000A	X=850mm Y=700~1700mm Z=850mm
		11	5000A	X=850mm Y=700~1700mm Z=850mm
		12	6300A	X=850mm Y=700~1700mm Z=850mm

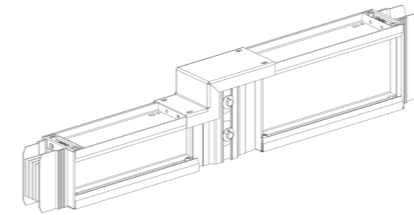
Tee horizontal offset		No.	Current class	Dimension
		1	400A	X=500mm Y=400mm Z=400mm
		2	630A	X=500mm Y=400mm Z=400mm
		3	800A	X=500mm Y=400mm Z=400mm
		4	1000A	X=500mm Y=400mm Z=400mm
		5	1250A	X=500mm Y=400mm Z=400mm
		6	1600A	X=500mm Y=500mm Z=500mm
		7	2000A	X=500mm Y=500mm Z=500mm
		8	2500A	X=500mm Y=500mm Z=500mm
		9	3200A	X=500mm Y=700mm Z=700mm
		10	4000A	X=500mm Y=700mm Z=700mm
		11	5000A	X=500mm Y=700mm Z=700mm
		12	6300A	X=500mm Y=700mm Z=700mm

Tee vertical offset		No.	Current class	Dimension
		1	400A	X=500mm Y=400mm Z=400mm
		2	630A	X=500mm Y=400mm Z=400mm
		3	800A	X=500mm Y=400mm Z=400mm
		4	1000A	X=500mm Y=400mm Z=400mm
		5	1250A	X=500mm Y=400mm Z=400mm
		6	1600A	X=500mm Y=500mm Z=500mm
		7	2000A	X=500mm Y=500mm Z=500mm
		8	2500A	X=500mm Y=500mm Z=500mm
		9	3200A	X=700mm Y=700mm Z=700mm
		10	4000A	X=700mm Y=700mm Z=700mm
		11	5000A	X=700mm Y=700mm Z=700mm
		12	6300A	X=700mm Y=700mm Z=700mm

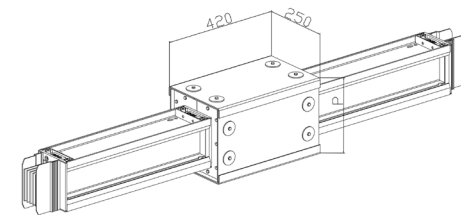
Combination elbow	No.	Current class	Dimension
	1	400A	X=400mm Y=400~900mm Z=400mm
	2	630A	X=400mm Y=400~900mm Z=400mm
	3	800A	X=400mm Y=400~900mm Z=400mm
	4	1000A	X=400mm Y=400~900mm Z=400mm
	5	1250A	X=400mm Y=400~900mm Z=400mm
	6	1600A	X=400mm Y=500~1000mm Z=500mm
	7	2000A	X=400mm Y=500~1000mm Z=500mm
	8	2500A	X=400mm Y=500~1000mm Z=500mm
	9	3200A	X=400mm Y=850~1300mm Z=850mm
	10	4000A	X=400mm Y=850~1300mm Z=850mm
	11	5000A	X=400mm Y=850~1300mm Z=850mm
	12	6300A	X=400mm Y=850~1300mm Z=850mm

L special vertical elbow	No.	Current class	Dimension
	1	400A	X=400mm Y=400mm
	2	630A	X=400mm Y=400mm
	3	800A	X=400mm Y=400mm
	4	1000A	X=400mm Y=400mm
	5	1250A	X=400mm Y=400mm
	6	1600A	X=400mm Y=400mm
	7	2000A	X=400mm Y=400mm
	8	2500A	X=500mm Y=500mm
	9	3200A	X=850mm Y=850mm
	10	4000A	X=850mm Y=850mm
	11	5000A	X=850mm Y=850mm
	12	6300A	X=850mm Y=850mm

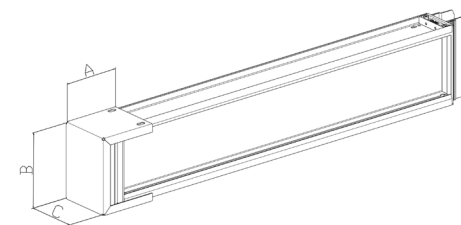
L special horizontal elbow	No.	Current class	Dimension
	1	400A	X=400mm Y=400mm
	2	630A	X=400mm Y=400mm
	3	800A	X=400mm Y=400mm
	4	1000A	X=400mm Y=400mm
	5	1250A	X=400mm Y=400mm
	6	1600A	X=400mm Y=400mm
	7	2000A	X=400mm Y=400mm
	8	2500A	X=400mm Y=400mm
	9	3200A	X=400mm Y=400mm
	10	4000A	X=400mm Y=400mm
	11	5000A	X=400mm Y=400mm
	12	6300A	X=400mm Y=400mm

Reducer	Rated current before reduction (A)	Rated current after reduction(A)													
		400	630	800	1000	1250	1600	2000	2500	3200	4000	5000			
	630A	R04	-	-	-	-	-	-	-	-	-	-	-	-	-
	800	R04	R06	-	-	-	-	-	-	-	-	-	-	-	-
	1000	R04	R06	R08	-	-	-	-	-	-	-	-	-	-	-
	1250	-	R06	R08	R10	-	-	-	-	-	-	-	-	-	-
	1600	-	R06	R08	R10	R12	-	-	-	-	-	-	-	-	-
	2000	-	-	R08	R10	R12	R16	-	-	-	-	-	-	-	-
	2500	-	-	-	R10	R12	R16	R20	-	-	-	-	-	-	-
	3200	-	-	-	-	R12	R16	R20	R25	-	-	-	-	-	-
	4000	-	-	-	-	-	R16	R20	R25	R32	-	-	-	-	-
	5000	-	-	-	-	-	-	R20	R25	R32	R40	-	-	-	-
	6300	-	-	-	-	-	-	-	-	R32	R40	R50	-	-	-

Note: Reducer is also available to be equipped with fuse or MCCB, contact the factory for details.

Expansion joint	Standard (A)		Height (P) mm
	400		213
	630		213
	800		213
	1000		228
	1250		248
	1600		278
	2000		313
	2500		368
	3200		447
	4000		537
	5000		637
	6300		854

Note: Expansion joint has adjustment distance of ± 40 mm, when the linear distance is 60m, need to include one set of expansion joint.

End cover	Rated current (A)	Dimension		
		(A) mm	(B) mm	(C) mm
	400	158	126	149
	630	158	126	149
	800	158	126	149
	1000	158	141	149
	1250	158	161	149
	1600	158	191	149
	2000	158	226	149
	2500	158	281	149
	3200	158	360	149
	4000	158	450	149
	5000	158	550	149
	6300	158	767	149

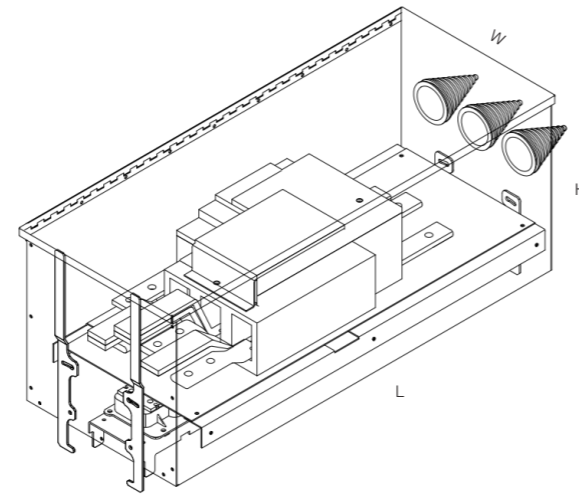
Note: End cover is the terminal part of the busway layout to protect the busway system.

Plug in box

Plug in box distributes electricity power from the busway to the load, and provides over load protection for the branch unit.

Product features

- Plug in box enclosure is made of cold-rolled steel with compact structure and high strength.
- Door panel comes with piano hinge with easy operation.
- Plug in box is equipped with fixation hook, to prevent accidental pull out with load.
- Plug in box bottom is assembled with guide plate to guarantee correct phase during the installation.
- Both T type plug jaw and busway opening stab has silver plating on the surface, which reduces the contact resistance.



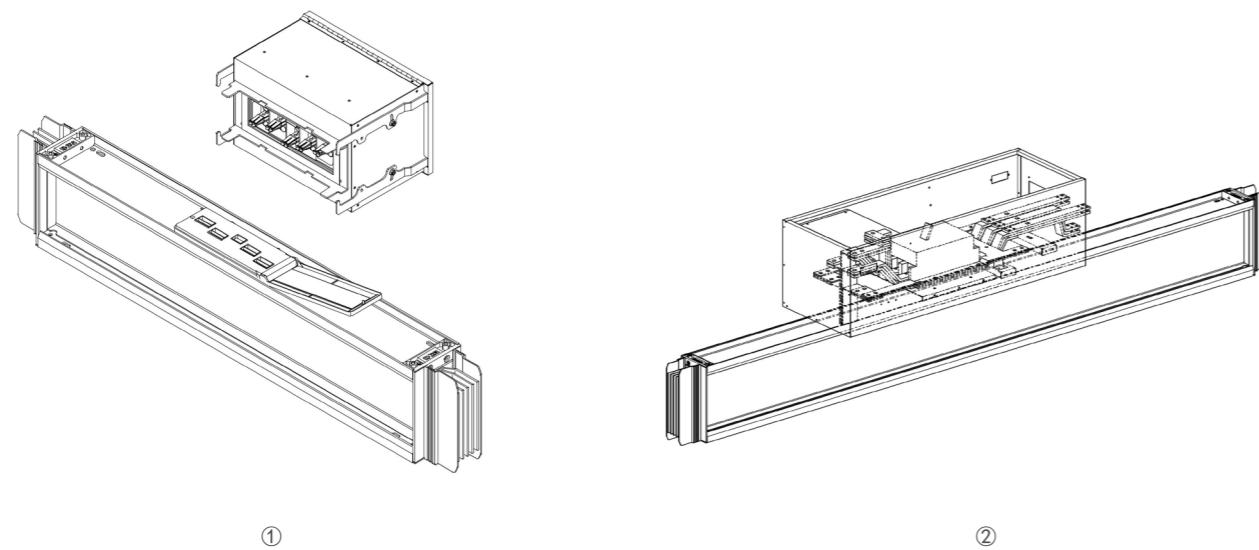
Product spec

- Plug in box includes six standard specification, they can be equipped with fuse, MCCB or any other protection component;
- MCCB can be 3 or 4 pole, with option of shunt trip, fire alarm, leakage protection and electrical operation, etc.

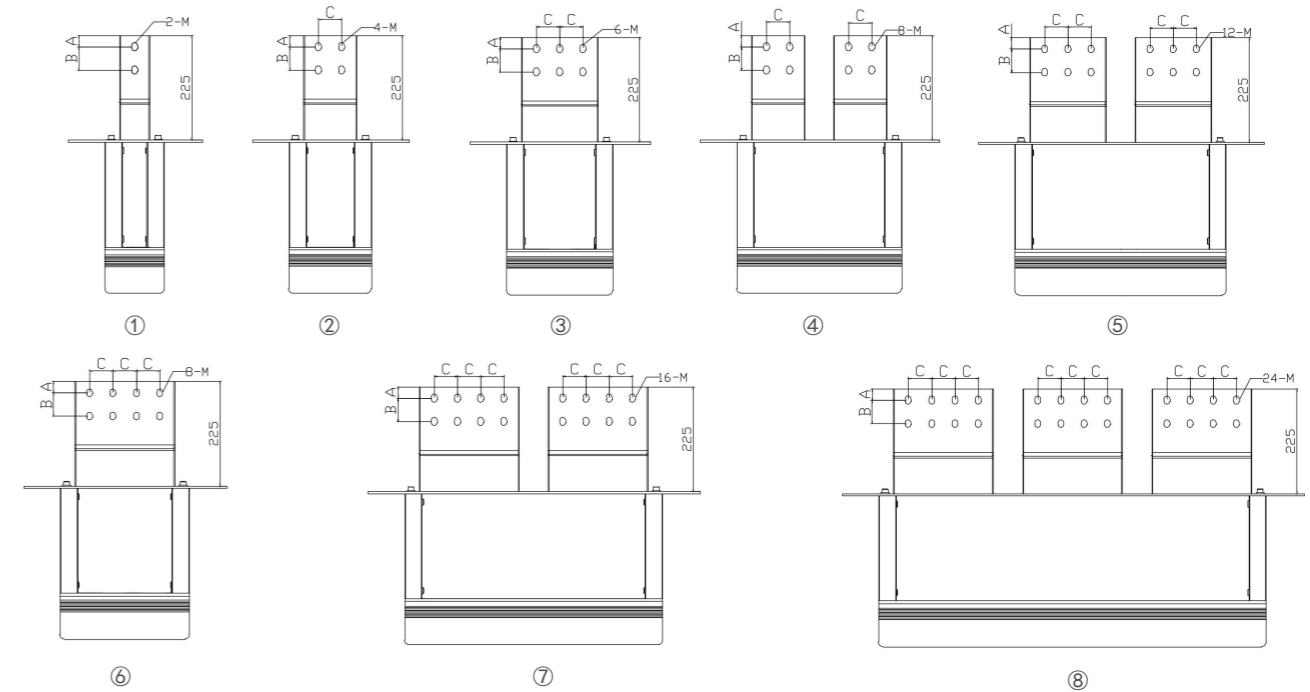
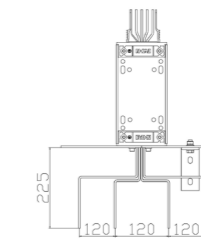
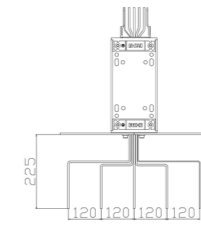
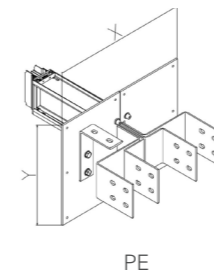
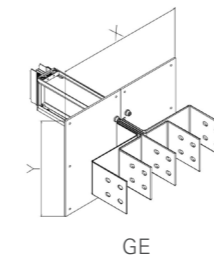
Plug in box outline standard dimension

Current rating (A)	L (mm)	W (mm)	H (mm) w/o rotary handle	H (mm) with rotary handle	Box No.	Figure
100	360	230	230	270	1	①
160	400	250	250	290	2	①
250	500	270	270	310	3	①
400	650	310	310	350	4	①
630	850	340	340	380	5	①
800~1250	1200	420	420	460	6	②

Note: Above dimension indicates standard, for special design, pls contact our engineer.



XAP-C series compact busway Flanged end

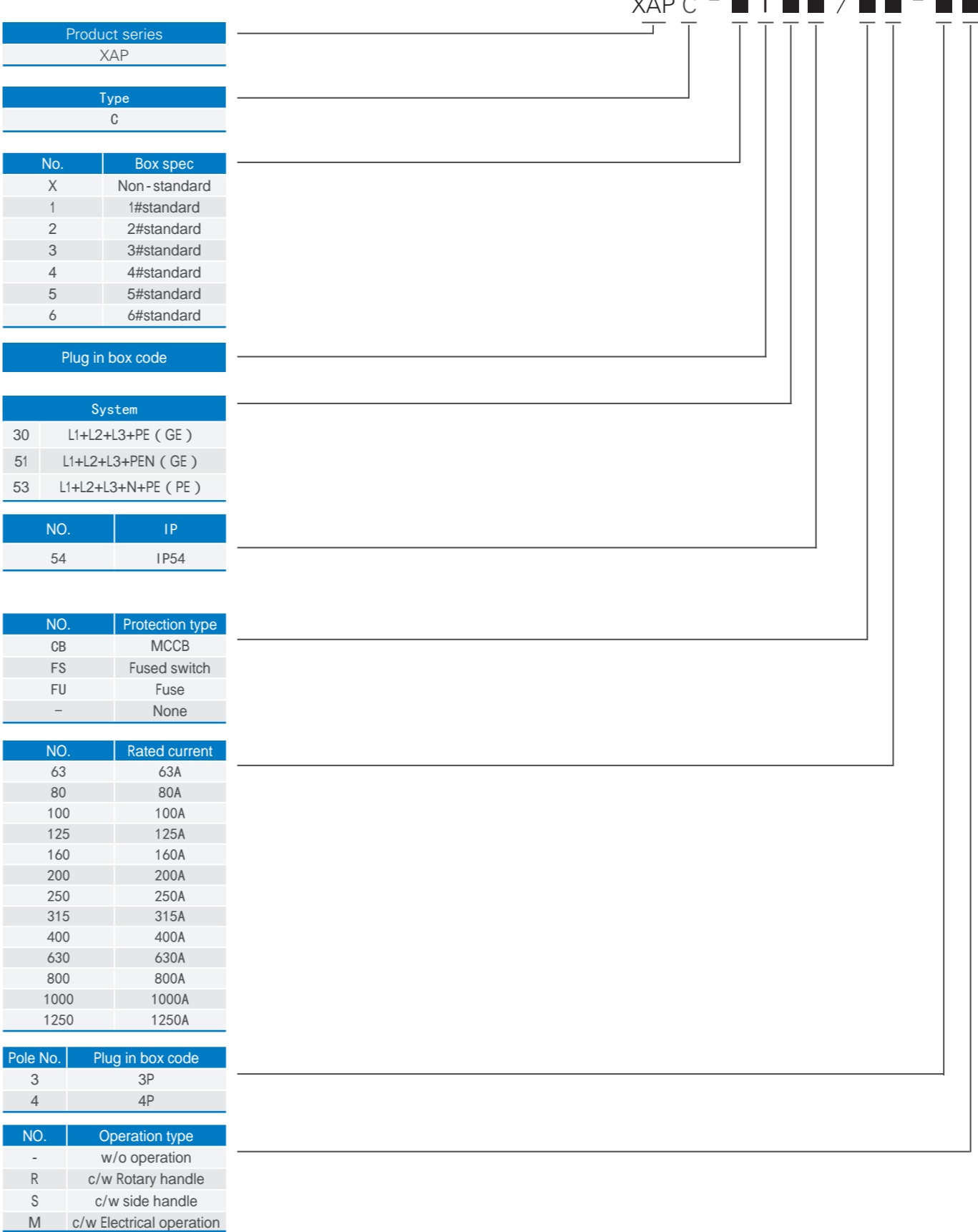
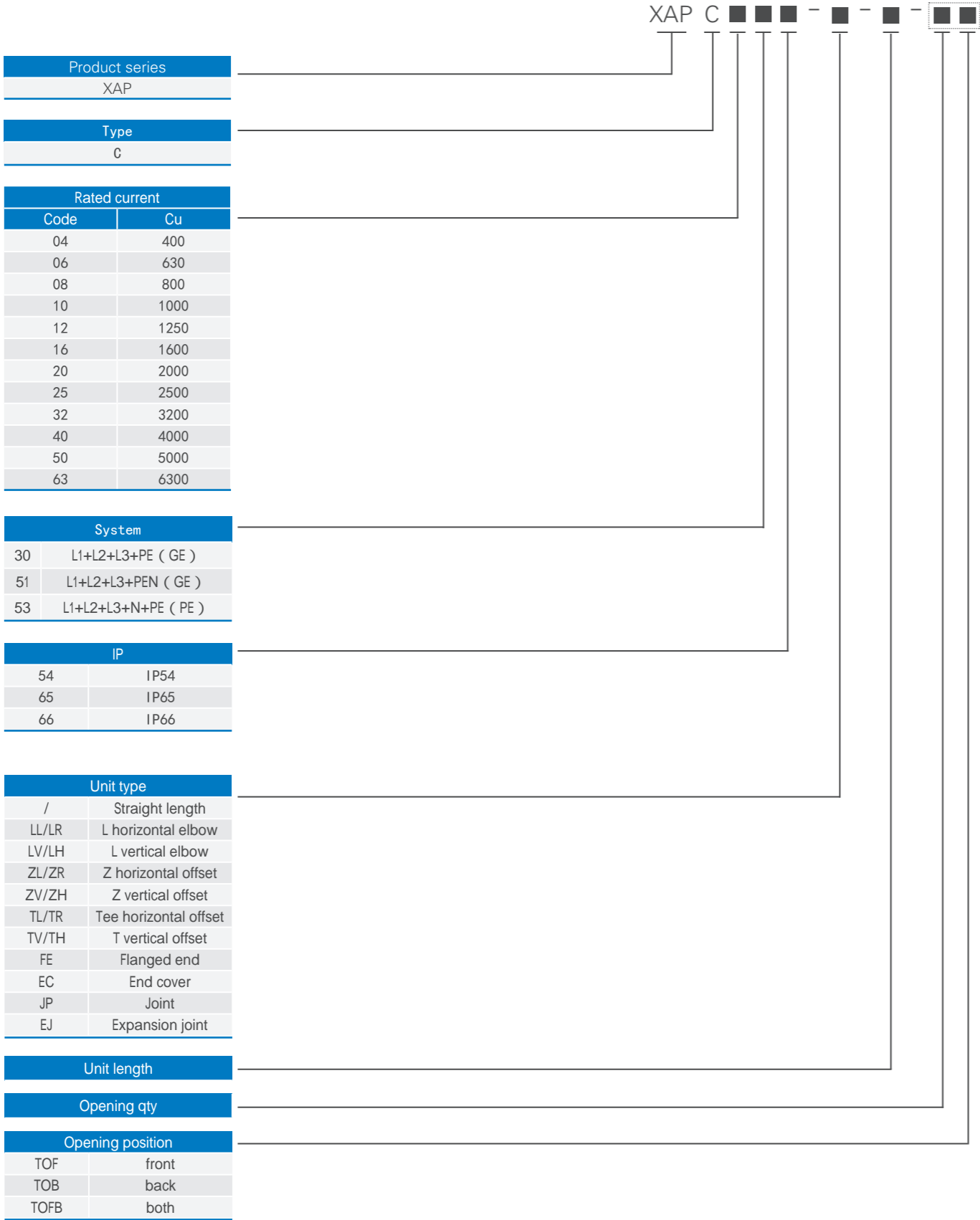


Current class (A)	X (mm)	Y (mm)	A (mm)	B (mm)	C (mm)	M (mm)	Figure
400	450	273	25	50	/	Φ 13 X 17	①
630	450	273	25	50	/	Φ 13 X 17	①
800	450	273	25	50	/	Φ 13 X 17	①
1000	450	285	25	50	/	Φ 13 X 17	①
1250	450	308	25	50	/	Φ 13 X 17	①
1600	450	338	25	50	50	Φ 13 X 17	②
2000	450	373	25	50	50	Φ 13 X 17	③
2500	450	428	25	50	50	Φ 13 X 17	④
3200	450	506	25	50	50	Φ 13 X 17	⑤
4000	450	607	25	50	50	Φ 13 X 17	⑥
5000	450	696	25	50	50	Φ 13 X 17	⑦
6300	450	910	25	50	50	Φ 13 X 17	⑧

Note: All the data above indicates standard, for special design, contact our engineer.

XAP-C series compact busway

Production selection



We make what matters work. *



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