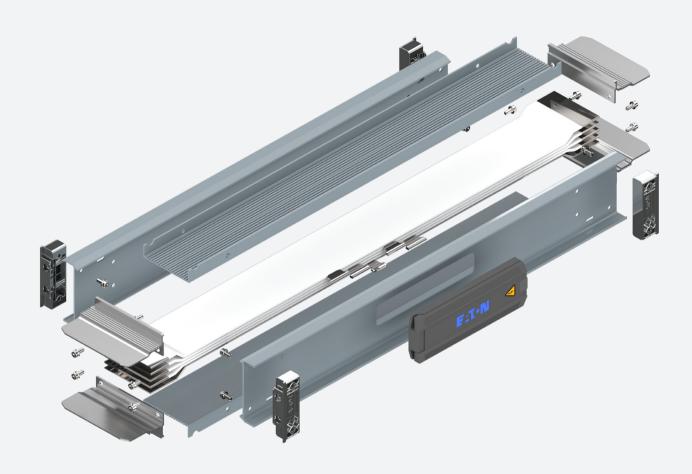
XAP-B Series Compact Busway

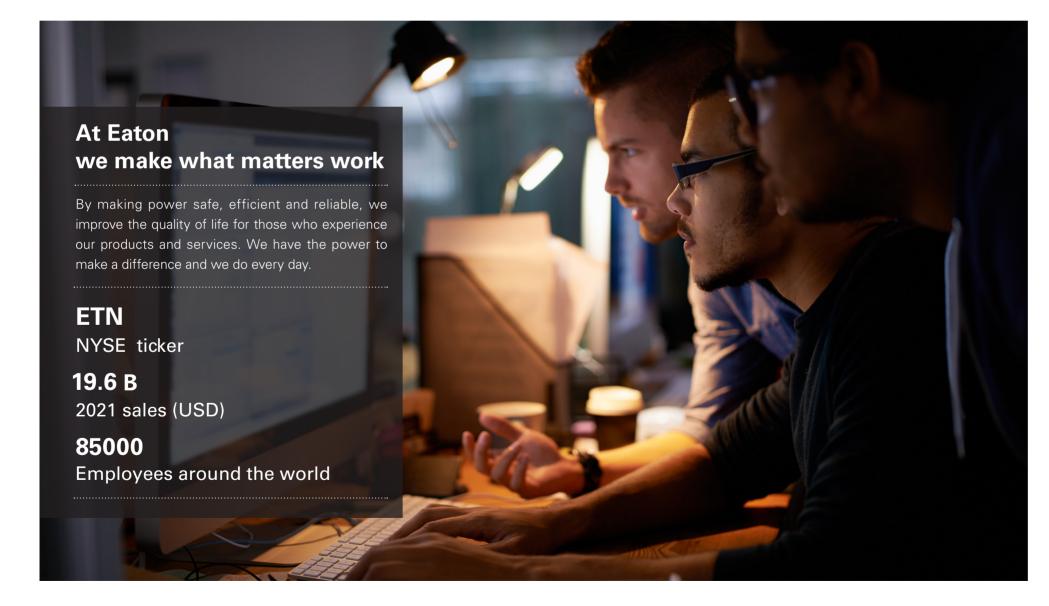
Rated Current 400-5000A





We're dedicated to improving people's lives and the environment with power management technologies that are more reliable, efficient, safe and sustainable.

We are a power management company 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.



CATALOGUE

Product features	/ 12
Installation accessories	/ 14
Technique data	/ 16
System selection	/ 17
Physical data	/ 18
Functional unit standard dimension	/ 20
Flanged end	/ 25
Production selection	/ 26
Connection with equipment	/ 28

SINCE 1911

Eaton was founded by Joseph Eaton in 1911 and started to produce Power distribution buway in 1935. Eaton's continuous innovation in the busway product line not only ensures the economy and reliability of its solutions, but also integrates excellent technology that can be installed horizontally or vertically. To seek the perfect combination of technical performance and exquisite design, Eaton XAP series busway system will be your wisest choice.

Based on local manufacturing

Eaton Busway (Jiangsu) Co., Ltd

According to Eaton's innovative spirit, one hundred years of technology accumulation and the development ability of the Asia Pacific market, Eaton busway factory has continuously introduced new products, It has realized the independent R & D and manufacturing of busway in the Asia Pacific region, providing customers with high-quality products and satisfactory solutions.





Eaton busway manufacturing plant covers an area of 12,000 square meters and has the industry's top manufacturing solutions to fully ensure the high-precision manufacturing of products.



Full automatic busway assembly line integrating assembly, inspection and packing together, effectively guarantees delivery time and greatly improves project execution.



Intelligent warehouse can accept more busway, and the storage capacity is 4 times that of the traditional warehouse.

Online dispatching of national technical service staff view the progress of various services in real time make pre-sales and after-sales service more worry free



Refinement of production management

Standardized production management Plant performs MES system, which can display production, quality, safety and contract execution data on real-time.





Top manufacturing solutions

Advanced insulation technology

- Self research and development fully automatic Polyester film insulation wrapping equipment
- Improve the standardization of product manufacturing

Intelligent warehousing improves delivery efficiency

Dispatching center makes service faster

OUR ADVANTAGE

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



German Trumpf laser cutting and Trupunch ensures ±0.1mm accurancy for sheet-metal parts.



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



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.







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

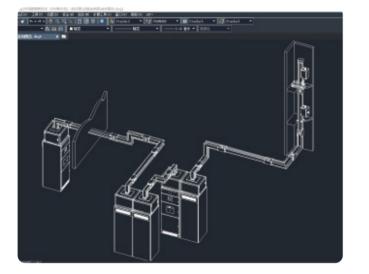
Application of dust simulation tank and water spray platform give product superior IP protection degree performance at the research stage.

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

OUR ADVANTAGE

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

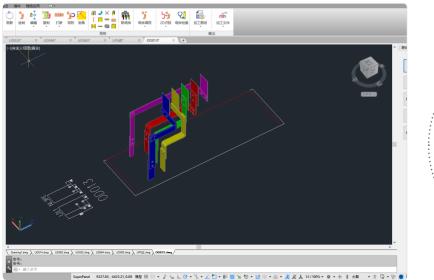
Manufacturing center sets up MES system and Intelligent factory data platform, closely butts with ERP, achieves the jump over from product manufacturing to "intelligent manuafcturing".

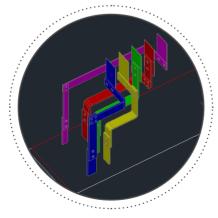




Advanced 3D engineering software, integrated with product features, quickly optimise the busway layout, offers first-best arrangement to the project.

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







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



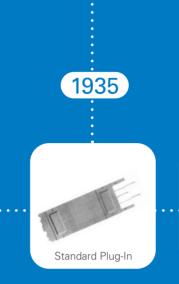
.....

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

KEEP INNOVATION SINCE 1935

In 1935,comes out first type of busway "power distribution bus".

	1935	1940	1950	1960	1970	1980	1990	2000	2010	2020	Pres
	•••••	•••••	••••	••••	•••••	••••	••••		•••••		
Power distribution bus											
Victory bus duct											
Standard plug-in	•										
Low impedance bus											
Life line Unibus											
High frequency bus	<u>.</u>		_								
Cutler-Hammer BV bus	•										
Current limiting bus											
Electric utility bus											
DC busway											
100 ampere busway	•										
Low impedance plug-in	•										
Cutler-Hammer Unibus											
H5000 feeder	•										
H5000 plug-in											
Cutler-Hammer CP2											
Pow-R-Way											
Pow-R-Way II											
Cutler-Hammer CP3	•										
Cutler-Hammer CP4											
Pow-R-Way III											
PDI											
XAP-C											
XAP-S											
XAP-B											
XAP Track											
XAP-J											



Eaton busway history can be traced back to 1935 last century. 1st busway was called "power distribution bus", which consists of aluminum or copper bars inside a metal housing used for power distribution. it is available from 100–5000A.











Power-R-Way III



XAP Series Compact Busway

Rated current rating 250-6300A



To seek the perfect combination of technical performance and exquisite design, Eaton XAP series busway system will be your wisest choice. Eaton's continuous innovation in the busway product line not only ensures the economy and reliability of its solutions, but also integrates excellent technology that can be installed horizontally or vertically.

I M

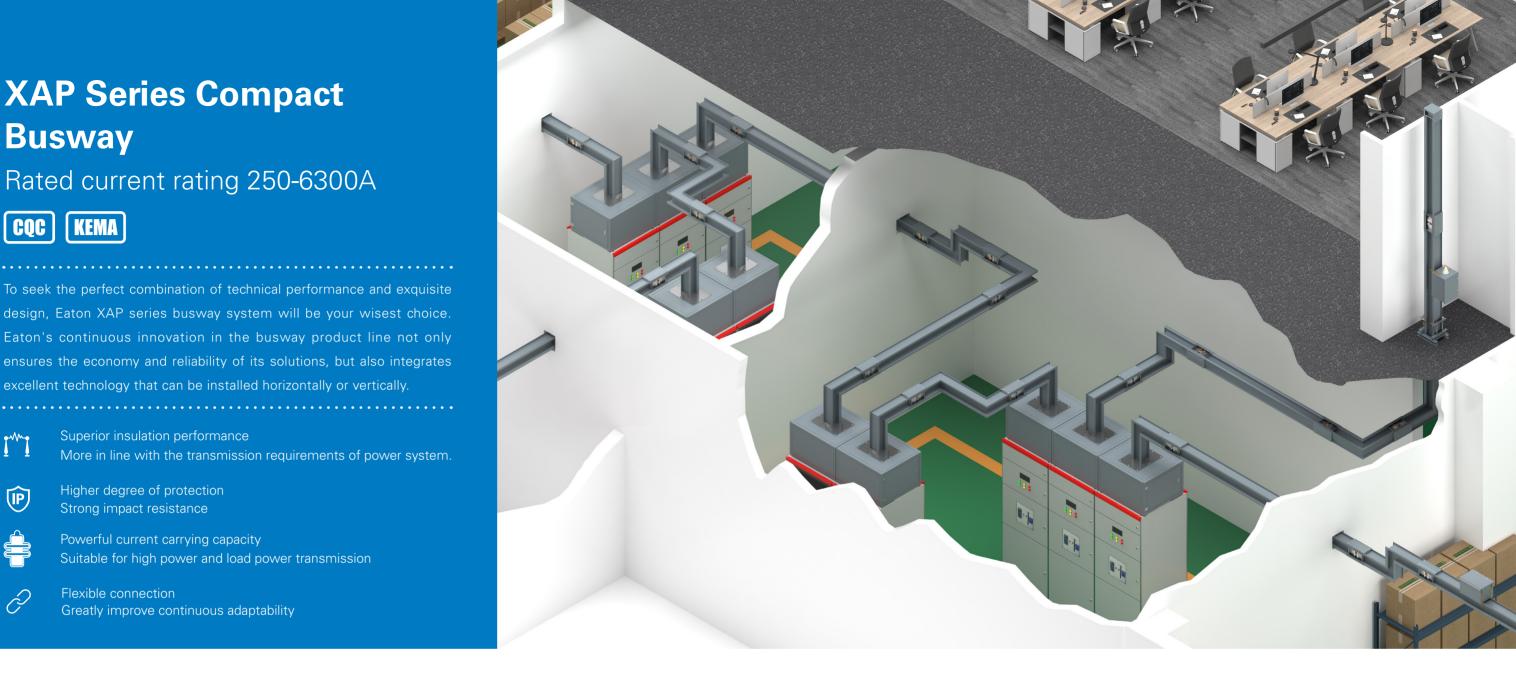
È

Higher degree of protection Strong impact resistance

Superior insulation performance

Powerful current carrying capacity Suitable for high power and load power transmission

Flexible connection Greatly improve continuous adaptability





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



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.



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.





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.

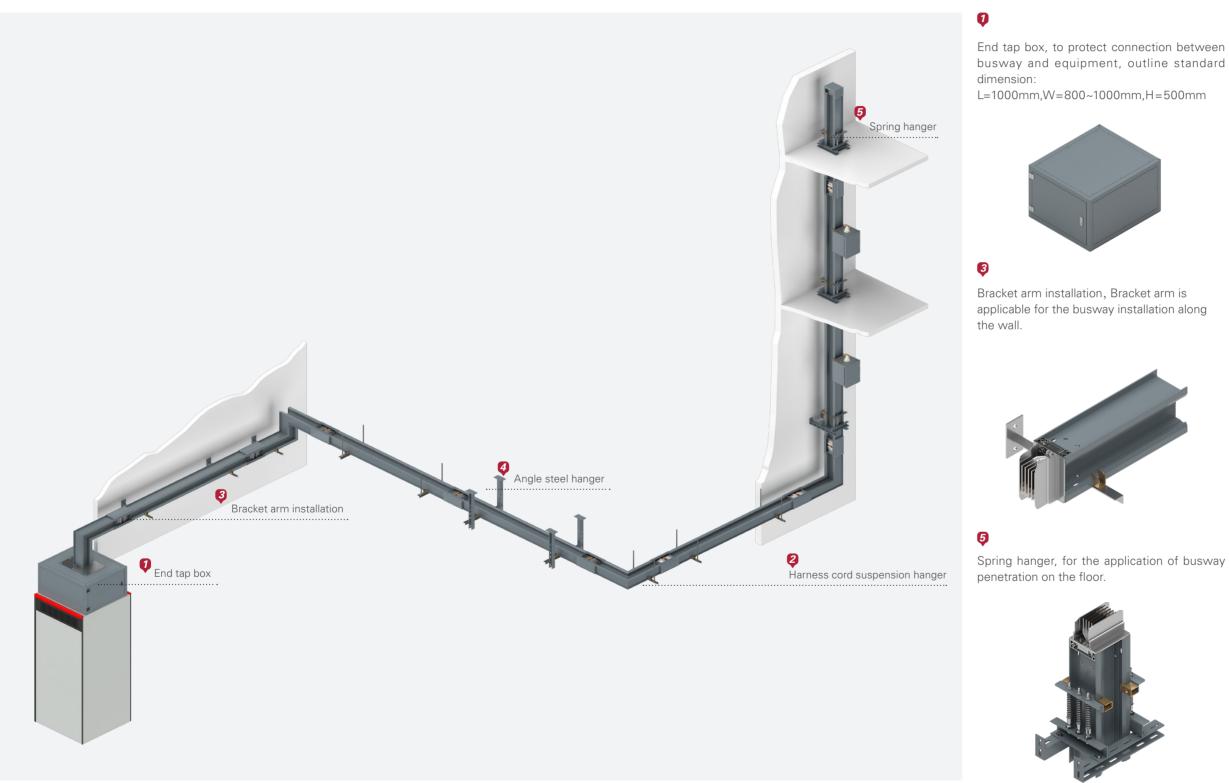


FAT-N			- 1918	母线监测系统				
August Aug								
	23.6 °C	22.2 VC						22.5
	A:216 8:223 C 213 N 224							
81281¥ 95102	22.7 °C		A 214 B 223 C 214 N 213					A:217 B C:215 N
2299	A 214 8 215 C 214 N 215							
870-955	21.9 T							
		A 224 5 235 C 217 N 23					A 214 8 214	
	23.1 °C			A 224 8 224 C 233 N 222				
	A 204 8 204 C 202 N 203				A 10 0 115 C 115 N 215	A 223 8 223 C 224 N 235		
	25.0	A 250 8 251 C 223 N 223						
								A 221 8: C 257 N
	A:212 8:203 C:229 N 223	A 224 8 235 C 214 N 235				A 125 0:25 C 124 N 121	23.0 °C	22.5

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

XAP-B series compact busway

Installation accessories



2

4

End tap box, to protect connection between Harness cord suspension hanger, applicable busway and equipment, outline standard for 400-2500A busway horizontal installation.

Angle steel hanger, applicable for 3200A-5000A busway horizontal installation.



6

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.

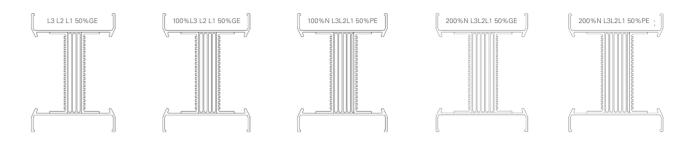


XAP-B series compact busway Technique data

Item	Unit	Currer	nt rating										
Rated current	А	400	500	630	800	1000	1250	1600	2000	2500	3200	4000	5000
Standard	IEC 6 (buswa		2012:LV	switchg	gear and	l contro	l gear a	assemb	lies – F	Part 6:Bu	usbar tr	unking	systems
Third party certificate	CQC,	KEMA-K	EUR										
System	Applic	able for	3P3W, (3P4W ar	nd 3P5V	/ systen	n						
Frequency	Hz	50/60											
Rated operation voltage (Ue)	V	≤ 690	V (with	tap off	unit), ≤	1000 V(without	tap off	unit)				
Rated insulation voltage (Ui)	V	≤ 100	0V										
Rated impulse withstand voltage Uimp	kV	8											
Rated short time withstand current (Icw)	kA	20	20	30	30	50	50	65	80	80	100	120	120
Rated peak short circuit current (lpk)	kA	40	40	63	63	105	105	143	176	176	220	264	264
IP	IP54/II	P66											
Pollution degree													
Ambient temperature	°C	-5 ~ 4() degree	e, averaç	ge tempe	erature	does no	t excee	d 35 de	gree wit	hin 24h		
Above sea level	m	≤ 200	10										
Fire propagation features	Yes												
Housing material	Alumir	num-allo	γ										
Housing finishing	Electri	ic static	powder	spray/ A	luminur	n oxidat	ion						
Conductor material	Alumir	num											
Conductor finishing	Tin / s	ilver plat	ing										
			Cor	nductor r	esistanc	e							
Resistance (R20)	mΩ/n	n 0.113	0.087	0.071	0.054	0.040	0.031	0.026	0.020	0.015	0.012	0.008	0.011
Reactance (X)	mΩ/n	n 0.018	0.014	0.012	0.009	0.007	0.005	0.009	0.007	0.005	0.004	0.004	0.004
Impedance (Z)	mΩ/n	n 0.120	0.095	0.077	0.058	0.044	0.033	0.029	0.022	0.017	0.014	0.010	0.014
				Voltage	drop								
Power factor 0.6	V/m	0.070	0.089	0.092	0.087	0.084	0.077	0.089	0.084	0.086	0.084	0.078	0.085
Power factor 0.7	V/m	0.075	0.095	0.098	0.093	0.089	0.083	0.095	0.089	0.091	0.089	0.082	0.091
Power factor 0.8	V/m	0.080	0.100	0.103	0.098	0.093	0.088	0.098	0.093	0.094	0.093	0.084	0.096
Power factor 0.9	V/m	0.083	0.103	0.106	0.101	0.096	0.091	0.100	0.096	0.096	0.095	0.084	0.099

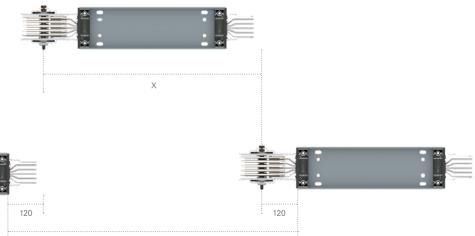
XAP-B series compact busway System selection

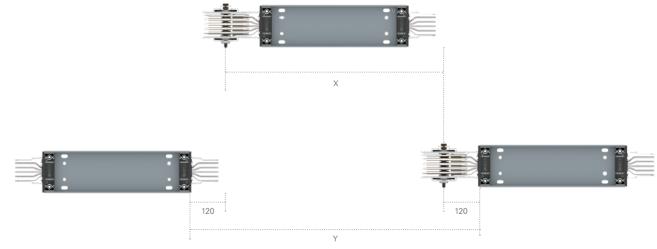
XAP-B busway is widely used in the 3P3W, 3P4W and 3P5W system.



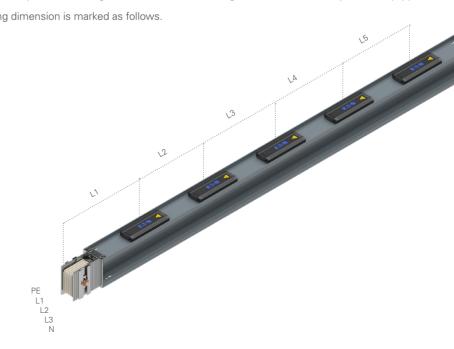
XAP-B busway length definition

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 750mm, standard length is 3000mm, busway can be equipped with five plug in openings on each side, plug in opening dimension is marked as follows.



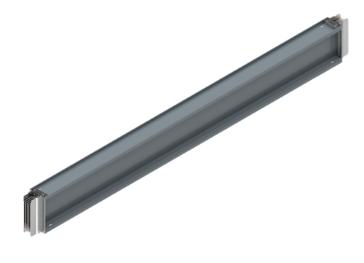


XAP-B series compact busway Physical data

Single deck busway



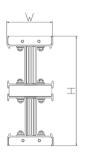
	Current	Dime	nsion	Weight		
No.	rating(A)	Width W (mm)	Height H (mm)	4W (kg/m)	5w (kg/m)	
1	400	142	113	8.4	8.8	
2	500	142	118	8.9	9.3	
3	630	142	128	9.7	10.2	
4	800	142	143	10.9	11.5	
5	1000	142	173	13.3	14.2	
6	1250	142	203	15.7	16.8	
7	1600	142	253	19.8	21.3	



Tripartite decks busway



Joint



Double decks busway

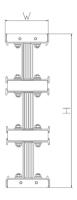
	Current	Dime	nsion	Weight		
No.	rating(A)	Width W (mm)	Height H (mm)	4W (kg/m)	5w (kg/m)	
1	2000	142	337	25.7	27.5	
2	2500	142	387	29.7	32.0	
3	3200	142	487	38.1	41.1	
4	4000	142	607	48.3	52.0	





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

18 | Powering Business Worldwide



	Current ratio	Dime	We	ight	
No.	Current rating (A)	Width W (mm)	Height H (mm)	4W (kg/m)	5w (kg/m)
1	5000	142	826	63.3	68.8

Note: The data is only used as reference to calculate the load for support hangers, not for site acceptance.

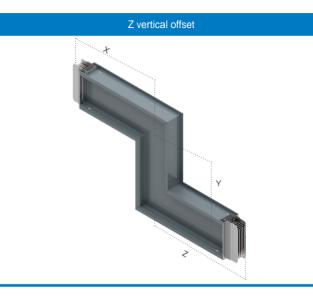
No.	Current rating(A)	Joint bolt qty
1	400	1
2	500	1
3	630	1
4	800	1
5	1000	1
6	1250	1
7	1600	1
8	2000	2
9	2500	2
10	3200	4
11	4000	4
12	5000	6

XAP-B series compact busway Functional unit standard dimension

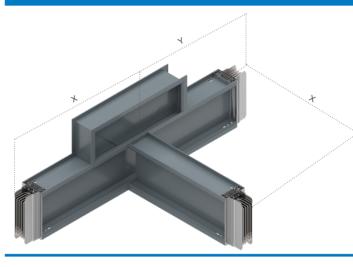
L horizontal elbow	No.	Current class	Dimension
	1	400A	X=400mm Y=400mm
	2	500A	X=400mm Y=400mm
	3	630A	X=400mm Y=400mm
	4	800A	X=400mm Y=400mm
	5	1000A	X=400mm Y=400mm
	6	1250A	X=400mm Y=400mm
	7	1600A	X=400mm Y=400mm
	8	2000A	X=400mm Y=400mm
	9	2500A	X=400mm Y=400mm
	10	3200A	X=400mm Y=400mm
	11	4000A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

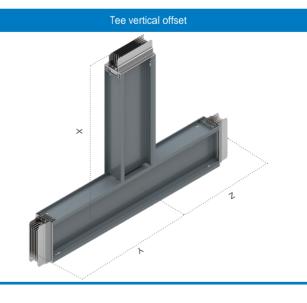






Tee horizontal offset





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

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

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

Powering Business Worldwide | 21

No.	Current class	Dimension
1	400A	X=400mmY=500-1000mm Z=500mm
2	500A	X=400mmY=500-1000mm Z=500mm
3	630A	X=400mmY=500-1000mm Z=500mm
4	800A	X=400mmY=500-1000mm Z=500mm
5	1000A	X=400mmY=500-1000mm Z=500mm
6	1250A	X=400mmY=500-1000mm Z=500mm
7	1600A	X=400mmY=500-1000mm Z=500mm
8	2000A	X=400mm Y=700-1000mm Z=700mm
9	2500A	X=400mm Y=700-1000mm Z=700mm
10	3200A	X=400mm Y=700-1000mm Z=700mm
11	4000A	X=400mm Y=700-1000mm Z=700mm
12	5000A	X=400mm Y=850-1300mm Z=700mm

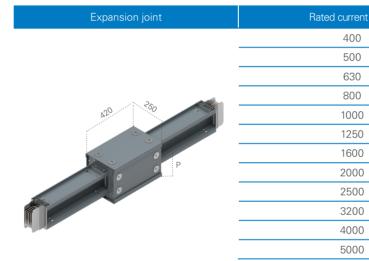


Combination elbow

L special vertical elbow	No.	Current class	Dimension
	1	400A	X=500mm Y=500mm
	2	500A	X=500mm Y=500mm
	3	630A	X=500mm Y=500mm
	4	800A	X=500mm Y=500mm
	5	1000A	X=500mm Y=500mm
	6	1250A	X=500mm Y=500mm
	7	1600A	X=500mm Y=500mm
	8	2000A	X=700mm Y=700mm
	9	2500A	X=700mm Y=700mm
	10	3200A	X=700mm Y=700mm
· · · · · · · · · · · · · · · · · · ·	11	4000A	X=700mm Y=700mm
	12	5000A	X=850mm Y=850mm

	Rated current	Rated current after reduction(A)											
Reducer	before reduction (A)	400	500	630	800	1000	1250	1600	2000	2500	3200	4000	5000
	630	R04	R05	-	-	-	-	-	-	-	-	-	-
	800	R04	R05	R06	-	-	-	-	-	-	-	-	-
	1000	R04	R05	R06	R08	-	-	-	-	-	-	-	-
	1250	-	R05	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	-

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



Note: Expansion joint has adjustment distance of ±40mm, when the linear distance is 50m, need to include one set of expansion joint.



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

nt(A)	Height (P) mm
)	213
)	218
)	228
)	243
D	268
D	303
D	348
D	427
D	287
0	577
D	667
0	926

(A) mm	(B) mm	(C) mm
158	126	149
158	131	149
158	141	149
158	156	149
158	181	149
158	216	149
158	261	149
158	340	149
158	480	149
158	490	149
158	580	149
158	875	149
40.00		

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

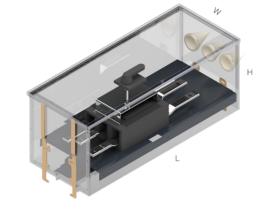
·Plug in box enclosure is made of cold-rolled steel with compact structure and high strength.

·Door panel comes with piano hinge with easy operation.

·Plug in box is equipped with fixiation 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.



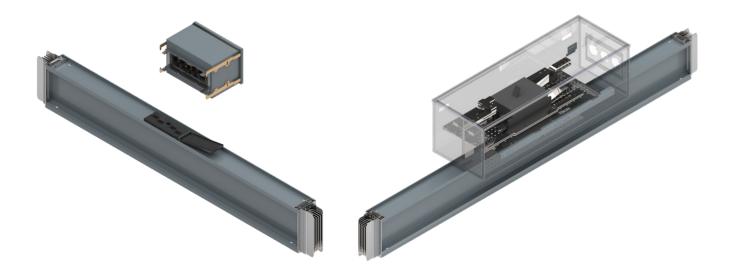
Product spec

·Plug in box includes five 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.

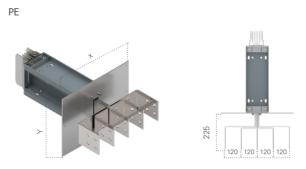
Plug in box outline standard dimension

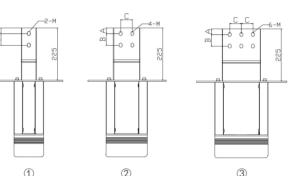
Current(A)	L (mm)	W(mm)	H(mm) w/o rotary handle	H(mm) with rotary handle	Box No.	Figure
100	360	230	230	270	1	
160	400	250	250	290	2	
250	500	270	270	310	3	
400	650	310	310	350	4	
630~1000	1200	420	420	460	5	

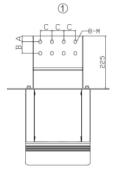
Note: Above dimension indicates standard value, for special design, pls contact our engineer.

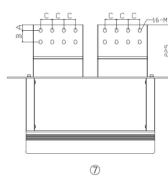


XAP-B series compact busway Flanged end







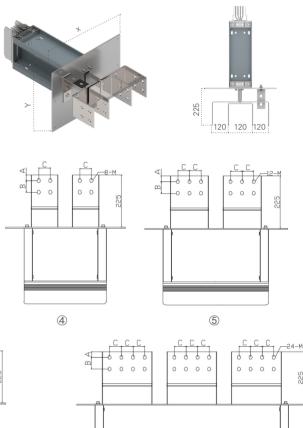


Current class

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



GE



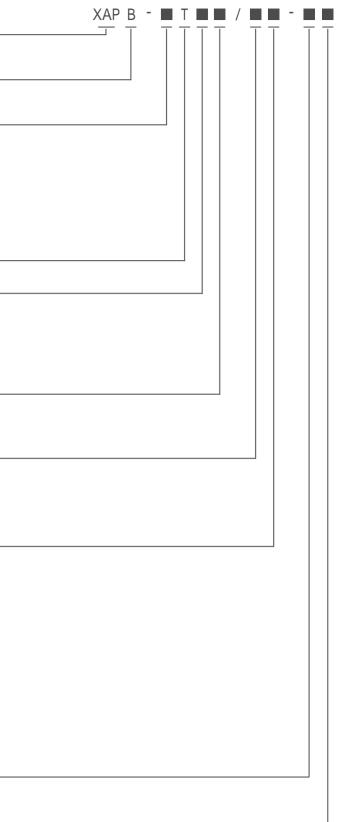
B (mm)	C (mm)	M (mm)	Figure
50	50	13 X 17	
50	50	13 X 17	
50	50	13 X 17	
50	50	13 X 17	
50	50	13 X 17	
50	50	13 X 17	
50	50	13 X 17	
50	50	13 X 17	
50	50	13 X 17	
50	50	13 X 17	
50	50	13 X 17	
50	50	13 X 17	8

XAP-B series compact busway Production selection

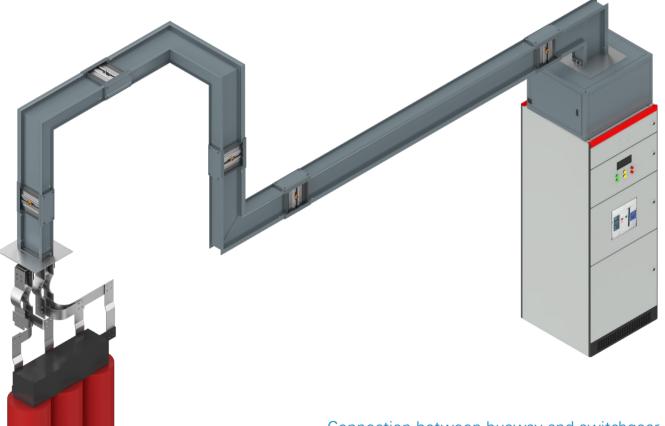
Pr	roduct series
	XAP
	-
	Туре
	В
F	Rated current
Code	
04	400
05	500
06	630
08	800
10	1000
12	1250
16	1600
20 25	2000 2500
32	3200
40	4000
50	5000
	System
30 L1	1+L2+L3+PE (GE)
51 L1-	+L2+L3+PEN (GE)
53 L1+	+L2+L3+N+PE (PE)
	IP
54	IP54
66	IP66
	11.5.7
/	Unit type
/ LL/LR	Straight length L horizontal elbow
LV/LR	L vertical elbow
ZL/ZR	Z horizontal offset
ZV/ZH	Z vertical offset
TL/TR	Tee horizontal offset
TV/TH	T vertical offset
FE	Flanged end
EC	End cover
JP	Joint
EJ	Expansion joint
	Unit length
	Opening qty
	pening position
On	
TOF	front

	D	1
-	Pro	duct series
		XAP
		Туре
		В
	No.	Box spec
	Х	Non-standard
	1	1#standard
	2	2#standard
	3	3#standard
	4	4#standard
	5	5#standard
	Plug	in box code
		System
20		
30		2+L3+PE (GE)
51	L1+L:	2+L3+PEN (GE)
53	L1+L2	2+L3+N+PE (PE)
	NO.	IP
	54	IP54
	NO.	Protection type
	CB	MCCB
	FS	Fused switch
	FU	Fuse
	-	None
	NO.	Rated current
	63	63A
	80	80A
	100	100A
	125	125A
	160	160A
	200	200A
	250	250A
	315	315A
	400	400A
	400 630	630A
	800	800A
	000	
	1000	1000A
	1000	1000A
Pole N	1000	1000A Plug in box code
Pole N 3	1000	1000A Plug in box code 3P
Pole N	1000	1000A Plug in box code
Pole N 3	1000 No.	1000A Plug in box code 3P

NO.	Operation type
-	w/o Operation
R	c/w Rotary handle
Μ	c/w Electrical operation



XAP-B series Compact busway Connection with equipment



Connection between busway and switchgear

Connection between XAP-B series busway and low voltage switchgear includes flanged end busway, extending bar and end tap box.

Based upon low volatge switchgear outgoing arrangement, we will make customized design and guide instruction to optimise the electricity safety.

Connection between busway and transformer

Connection between XAP-B series busway and transformer includes flanged end busway, extending bar ,flexible link and end tap box. Flexible link is used to absorb vibration during transformer operation. End tap box is used to protect the connection unit to secure the reliable safety.

NOTE:

Eaton's mission is to improve the quality of life and the environment through the use of power management technologies and services. We provide sustainable solutions that help our customers effectively manage electrical, hydraulic, and mechanical power – more safely, more efficiently, and more reliably. Eaton's 2021 revenues were \$19.6 billion, and we have about 85000 employees worldwide and sell products to customers in more than 175 countries.

Eaton has been deeply involved in the Chinese market for more than 20 years, and has made rapid development since entering the Chinese market in 1993. In 2004, the company's Asia Pacific headquarters moved from Hong Kong to Shanghai. Greater China has about 8000 employees, 19 manufacturing bases and 5 R & D centers. Today, Eaton's the vast majority of products have been made in China.

For more information, pls visit Eaton Company Official website:www.eaton.com.cn Eaton wechat:Eaton_China



EATON Busway (Jiangsu) Co., Ltd. No. 508 Ganglong Road, Yangzhong Economic Development Zone, Zhenjiang City 212212,PR.China For further information, please visit our website:www.eaton.com.cn

Customer Service Center Te:l+86 511 8821 0138

Information in this catalog is subject to confirmation by business department personnel, may change due to product upgrades and tech nical standards. We reserve the right of final interpretation of this information, and is subject to change without notice.