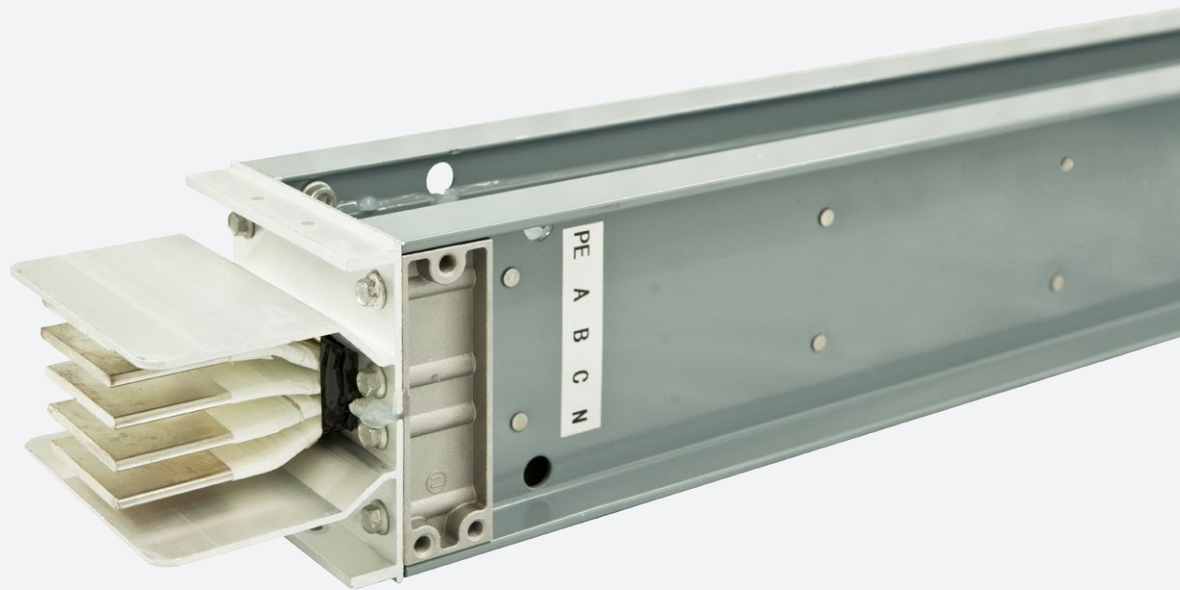


CATALOG

WavePro-II

Low Voltage Busway



- Unparalleled safety and protection measures
- Wide range of designs meeting customer's stringent requirements
- Lower installation and maintenance costs

ABB WavePro-II low voltage busway is a compact design, featuring high quality copper busbars and low temperature rise. All-aluminium housing and sandwich structure provides perfect heat dissipation performance, high level of mechanical strength and corrosion resistance.

ABB WavePro-II series busway is suitable for a broad range of low voltage applications such as medium and large commercial buildings, factory and critical public facilities.

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WavePro-II Busway Overview

WavePro-II low-voltage compact busway features rated currents from 400A-6300A, the ability of providing a neutral busbar with 100% and 200% capacity, and has two options available: 50% integrated housing PE and 50% internal PE, which can meet the requirements of various power distribution systems.

The ingress protection grade is up to IP65, suitable for indoor application, the users can select according to the installation environment.



Technical Data

Standards	IEC 61439-1 2011: LV switchgear and control gear assemblies – Part 1: General rules IEC 61439-6 2012: LV switchgear and control gear assemblies – Part 6: Busbar trunking systems (busways)
Test certificates	KEMA KEUR
Electrical data	
Rated frequency (fn)	50 / 60Hz
Rated current (InA)	400A - 6300A
Rated short-time withstand current (Icw)	30kA / 1s - 120kA / 1s
Rated peak withstand current (Ipk)	63kA - 264kA
Rated operational voltage (Ue)	690V
Rated insulation voltage (Ui)	1000V
Rated impulse withstand voltage (Uimp)	8kV
Construction	
Construction	Sandwich busway
Degree of protection - Busway	Feeder: IP41, IP54, IP65 Plug-in: IP41, IP54
Degree of protection - Tap-off unit	IP41, IP54
Housing	aluminium alloy
Busbars	Cathode copper Tin plating over full length, silver plating as an option
Main insulation material	Polyester film (PET), Class B
Resistance to flame propagation	KEMA report
Fire resistance in building penetration	240 min, KEMA report
Service conditions	
Ambient air temperature – Lower limit	Indoor: -5 °C
Ambient air temperature – Upper limit	40 °C
Ambient air temperature – Daily average maximum	35 °C
Maximum relative humidity	Indoor: 50 % at 40 °C
Pollution degree	III
Altitude	≤ 2000 m



Product Features



Busway construction

- The housing is made of an aluminium alloy profile which is low magnetic material and effectively minimizes the hysteresis loss during busway energisation
- The aluminium alloy profile has excellent heat dissipation performance, ensuring the maximum temperature rise of the busway not exceeding the limit at rated current
- The housing is powder coated and has been tested to withstand 1000 hours of salt fog test
- Optimized housing design, compact structure, stronger busway overall protection



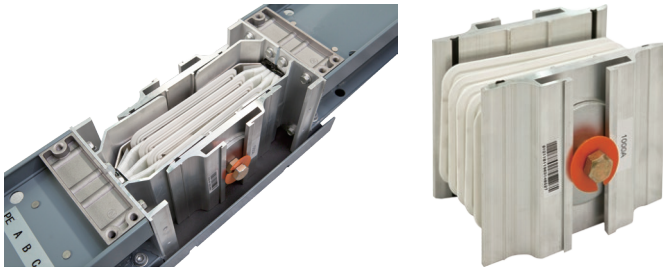
Busbars

- The polish-saw process is used to cut the conductors to ensure a high quality bar end finish. This process is better than cutting and avoids secondary damage to insulation materials
- The conductor is machined and then tin-plated



Reliable insulation material

- WavePro-II busway is wrapped with two layers of polyester film as insulation, insulation level is class B
- Prior to the busway leaving the factory it is tested to withstand 3750V AC high voltage, which ensures 100% qualified insulation performance



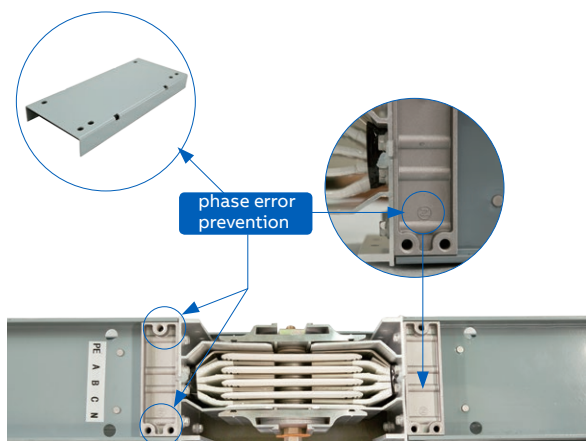
Joint

- It has a stopper mechanism which ensures quick and reliable joint installation
- It uses the double-headed torque limiting joint bolt, with standard tightening torque of $70 \pm 5 \text{ N}\cdot\text{m}$. When the bolt is properly tightened with required torque, the orange identification label is released naturally
- Each joint has a $\pm 4 \text{ mm}$ adjustment range to compensating for the length change due to thermal expansion



Degree of protection

- Standard IP ratings include: IP41/IP54/IP65 (feeder busway), IP41/IP54 (plug-in busway), IP41/IP54 (plug)
- The plug outlet protection module is embedded with waterproof silicone rubber. The joint is protected with an all-round protection cover plate suitable for the busway of IP54 or above
- Suitable for indoor application



Busway phase error prevention mechanism

- Aluminium cast terminal of the busway is of asymmetrically fixed hole construction, and it combines with joint cover to effectively prevent phase error

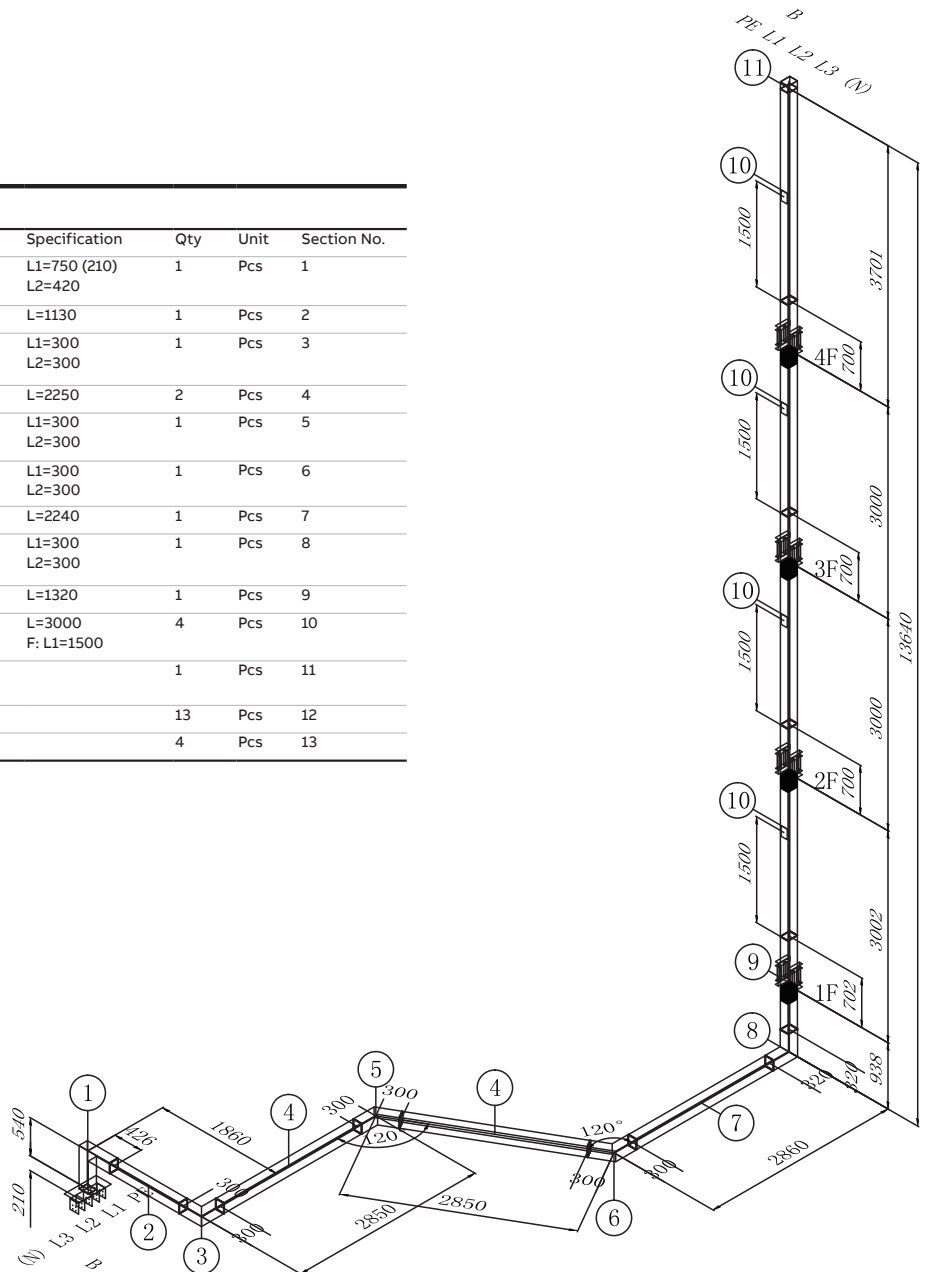
BDM Software

BDM is a software dedicated for WavePro busway routing design, segmentation and BOM generation.

BDM built in detailed busway product parameters and related design standards, seamless integration with ERP system:

- 3D layout generation (direct drawing or generate from polyline)
- Non-standard unit customization
- Wall / floor setting up
- Tap-off units, hangers and customized units' insertion
- Busway segmentation automatically or manually
- Labeling
- BOM output

Bill of Material				
Description	Specification	Qty	Unit	Section No.
Flanged end with elbow	L1=750 (210) L2=420	1	Pcs	1
Straight length	L=1130	1	Pcs	2
Elbow - flatwise	L1=300 L2=300	1	Pcs	3
Straight length	L=2250	2	Pcs	4
Elbow - flatwise	L1=300 L2=300	1	Pcs	5
Elbow - flatwise	L1=300 L2=300	1	Pcs	6
Straight length	L=2240	1	Pcs	7
Elbow - edgewise	L1=300 L2=300	1	Pcs	8
Straight length	L=1320	1	Pcs	9
Riser	L=3000 F: L1=1500	4	Pcs	10
Terminal cover		1	Pcs	11
Joint		13	Pcs	12
Spring Hanger		4	Pcs	13



Electrical Data

Ground resistance

WavePro-II busway all-aluminium housing provides excellent integrated housing ground path, with the equivalent grounding capacity more than 50% of capacity. An internal ground bus bar (50% capacity) is also available to meet customers' special needs.

Ground resistance (DC)

(10⁻⁶Ω/m) @ ambient temperature of 20°C

No.	Rated current	50% housing ground	50% internal ground
1	400	46.5	148.3
2	630	46.5	148.3
3	800	42.4	118.7
4	1000	37.5	91.3
5	1250	32.4	69.8
6	1600	26.3	49.4
7	2000	21.6	37.1
8	2500	17.6	28.3
9	3200	13.7	24.7
10	4000	11.1	18.5
11	5000	9.1	14.1
12	6300	6.3	11.8

Voltage drop

WavePro-II busway features low voltage drop. High-purity copper conductor provides extremely low resistance. The aluminium housing designed with compact sandwich construction and low magnetic materials can minimize the conductor reactance. Electrical impedance and voltage drop data of the busway straight lengths are shown below. The following data is for a 50Hz systems, for 60Hz applications multiply the Reactance by 1.205, there is no change to the Resistance. For distributed loads when using plug in busway, the voltage drop is divided by 2.

[Data source: calculation]

Rated Current ¹	Rated short-time withstand current (I _{cw})	Rated peak withstand current (I _{pk})	20°C 100% Rated Load/steady state (50Hz), 20°C Amb.								
			Line-to-line voltage drop (V/m) - Concentrated load, 20°C Amb. ²								
A	kA/s	kA	Resistance (10 ⁻⁶ Ω/m, phase-to-neutral)	Resistance	Reactance	Impedance	cosφ=0.6	cosφ=0.7	cosφ=0.8	cosφ=0.9	cosφ=1.0
400	30	63	101.5	116.0	34.2	120.9	0.067	0.073	0.079	0.083	0.080
630	30	63	88.9	112.1	31.8	116.6	0.101	0.110	0.119	0.125	0.122
800	30	63	71.1	92.6	28.2	96.8	0.108	0.118	0.126	0.133	0.128
1000	50	105	54.7	72.2	24.4	76.2	0.109	0.118	0.125	0.131	0.125
1250	50	105	41.8	57.4	21.0	61.1	0.111	0.119	0.127	0.132	0.124
1600	65	143	29.6	43.5	17.0	46.7	0.110	0.118	0.125	0.129	0.121
2000	65	143	22.2	32.9	14.0	35.8	0.107	0.114	0.120	0.124	0.114
2500	65	143	16.9	27.0	11.3	29.3	0.109	0.117	0.123	0.127	0.117
3200	120	264	14.8	21.9	9.9	24.1	0.117	0.124	0.130	0.133	0.121
4000	120	264	11.1	17.0	7.1	18.4	0.110	0.117	0.124	0.128	0.118
5000	120	264	8.5	13.6	4.4	14.3	0.101	0.109	0.117	0.122	0.117
6300	120	264	5.9	9.6	4.4	10.5	0.101	0.107	0.112	0.115	0.104

Note:

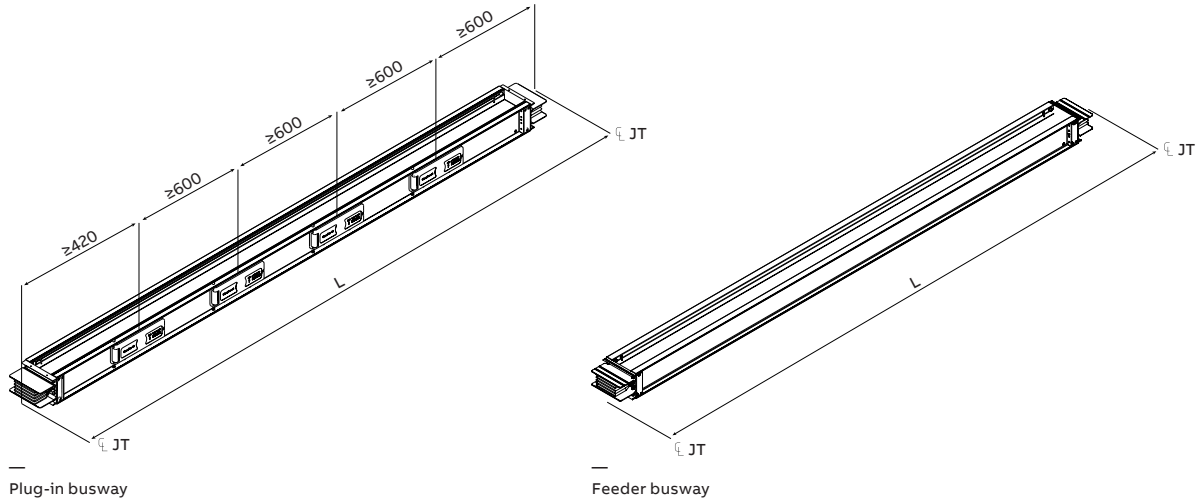
1. With an average ambient temperature of 35°C, the busway can continuously operate at rated current. If the busway is continuously operated at higher ambient temperature, please contact with local ABB office.

2. Concentrated load: Voltage drop= $\sqrt{3} I (R\cos\Phi + X\sin\Phi)$ Distributed load: voltage drop= $[\sqrt{3} I (R\cos\Phi + X\sin\Phi)]/2$

To determine Actual voltage drop = Voltage Drop from Table x actual load/rated load

Physical Data

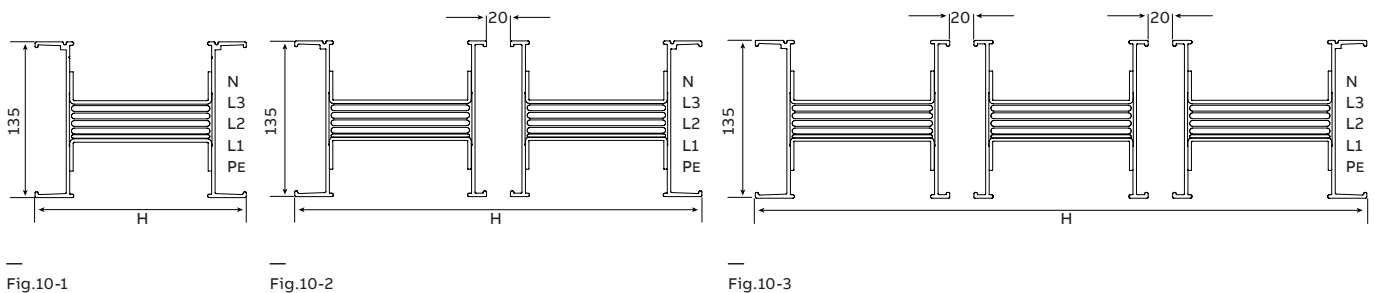
Straight lengths



Feeder busway minimum length is 400mm, maximum length is 3000mm. Other lengths can be customized. Plug-in busway with 1 plug outlet, the minimum length is 720mm. The outlet is set in the center.

Both sides of the plug-in busway can be customized with plug outlets. For the busway with standard length of 3 meters, one side can be customized with up to 4 outlets.

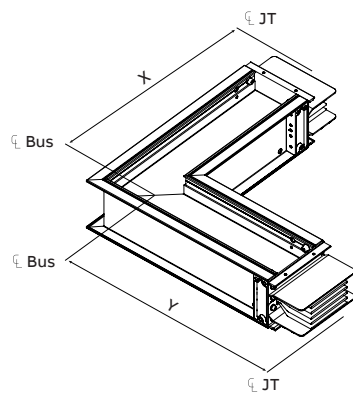
Rating (A)	H (mm)	Weight (kg/m)				Fig. No.
		50% Housing PE		50% Internal PE		
		3L+50%PE	3L+N+50%PE	3L+N+50%PE	3L+2N+50%PE	
400	104	8.4	10.0	10.8	12.4	Fig.10-1
630	104	10.0	11.8	12.9	14.7	
800	114	11.5	13.7	15.1	17.3	
1000	129	13.7	16.6	18.4	21.3	
1250	149	17.7	21.5	23.9	27.7	
1600	184	22.0	27.3	30.5	35.8	Fig.10-2
2000	224	28.0	35.1	39.4	46.5	
2500	274	35.5	44.8	50.4	59.8	
3200	354	42.9	53.6	60.1	70.8	
4000	434	55.0	69.2	77.7	91.9	
5000	534	69.9	88.6	99.8	118.5	Fig.10-3
6300	764	99.3	126.0	145.0	171.7	



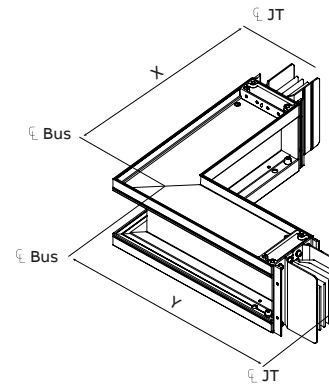
Note: These 3 figures show arrangement with internal PE bar, dimensions are the same for housing PE arrangement

Physical Data

Elbows



Flatwise Elbow



Edgewise Elbow

Flatwise Elbow

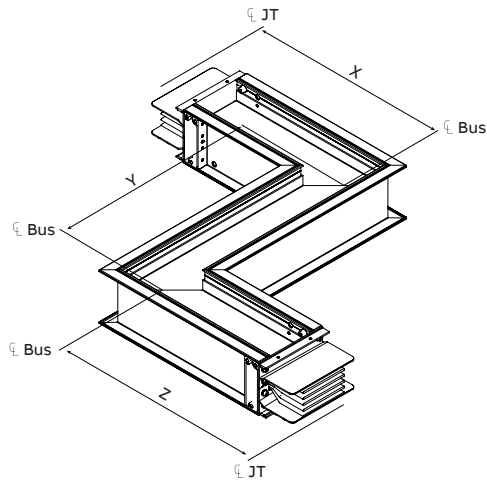
mm

Rated current (A)	Minimum Size		Standard Size	
	X	Y	X	Y
400	293	293	400	400
630	293	293	400	400
800	298	298	400	400
1000	306	306	400	400
1250	316	316	400	400
1600	333	333	500	500
2000	353	353	500	500
2500	378	378	600	600
3200	418	418	600	600
4000	458	458	700	700
5000	508	508	800	800
6300	623	623	900	900

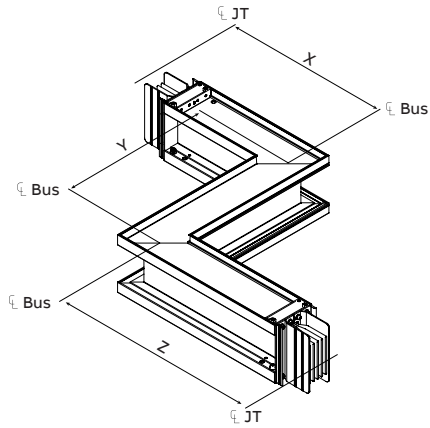
Edgewise Elbow

mm

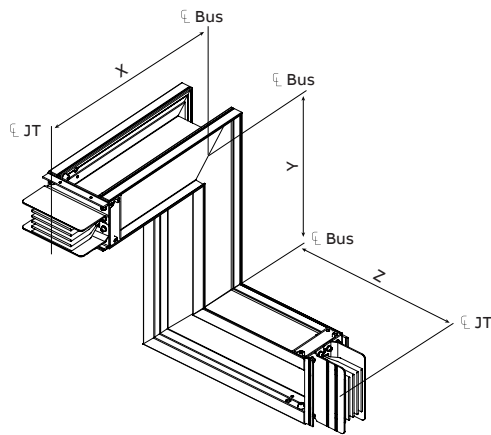
Rated current (A)	Minimum Size		Standard Size	
	X	Y	X	Y
400	308	308	400	400
630	308	308	400	400
800	308	308	400	400
1000	308	308	400	400
1250	308	308	400	400
1600	308	308	400	400
2000	308	308	400	400
2500	308	308	400	400
3200	308	308	400	400
4000	308	308	400	400
5000	308	308	400	400
6300	308	308	400	400



Flatwise offset



Edgewise offset



Combination offset

Flatwise offsets

mm

Rated current (A)	Minimum Size			Standard Size		
	X	Y	Z	X	Y	Z
400	293	186	293	400	300	400
630	293	186	293	400	300	400
800	298	196	298	400	400	400
1000	306	211	306	400	400	400
1250	316	231	316	400	400	400
1600	333	266	333	500	500	500
2000	353	306	353	500	600	500
2500	378	356	378	600	700	600
3200	418	436	418	600	800	600
4000	458	516	458	700	1000	700
5000	508	616	508	800	1200	800
6300	623	846	623	900	1300	900

Edgewise offsets

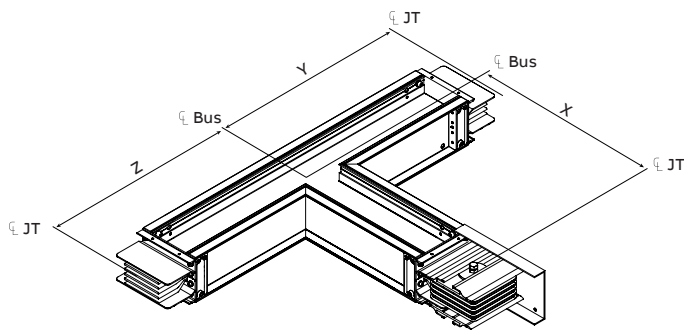
mm

Rated current (A)	Minimum Size			Standard Size		
	X	Y	Z	X	Y	Z
400	308	283	308	400	400	400
630	308	283	308	400	400	400
800	308	283	308	400	400	400
1000	308	283	308	400	400	400
1250	308	283	308	400	400	400
1600	308	283	308	400	400	400
2000	308	283	308	400	400	400
2500	308	283	308	400	400	400
3200	308	283	308	400	400	400
4000	308	283	308	400	400	400
5000	308	283	308	400	400	400
6300	308	283	308	400	400	400

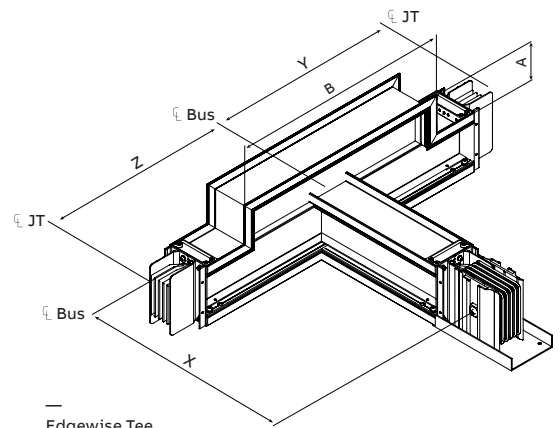
Combination offsets

mm

Rated current (A)	Minimum Size			Standard Size		
	X	Y	Z	X	Y	Z
400	308	254	293	400	400	400
630	308	254	293	400	400	400
800	308	264	298	400	400	400
1000	308	279	306	400	400	400
1250	308	299	316	400	400	400
1600	308	334	333	400	500	500
2000	308	374	353	400	500	500
2500	308	424	378	400	600	600
3200	308	486	418	400	600	600
4000	308	526	458	400	700	700
5000	308	576	508	400	800	800
6300	308	691	623	400	900	900



Flatwise Tee



Edgewise Tee

Flatwise Tee

Rated current (A)	Minimum Size			Standard Size				
	X	Y	Z	X	Y	Z		
400	295	295	295	300	300	300		
630	295	295	295	300	300	300		
800	300	300	300	300	300	300		
1000	305	305	305	400	400	400		
1250	315	315	315	400	400	400		
1600	335	335	335	400	400	400		
2000	355	355	355	400	400	400		
2500	380	380	380	400	400	400		
3200	420	420	420	500	500	500		
4000	460	460	460	500	500	500		
5000	510	510	510	600	600	600		
6300	635	635	635	700	700	700		

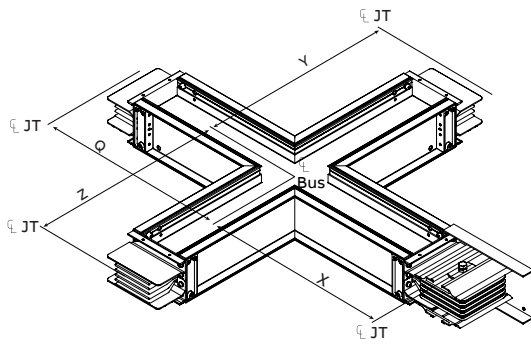
mm

Edgewise Tee

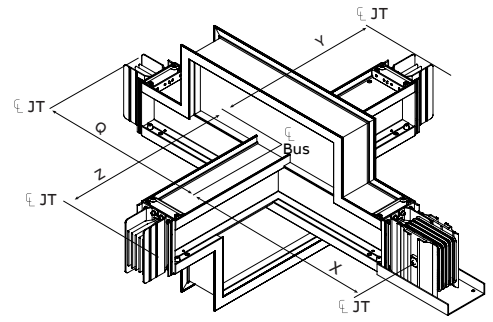
Rated current (A)	Minimum Size			Standard Size				
	X	Y	Z	X	Y	Z	A	B
400	308	386	386	400	400	400	85	309
630	308	386	386	400	400	400	90	319
800	308	396	396	400	400	400	100	339
1000	308	411	411	400	500	500	115	369
1250	308	431	431	400	500	500	135	409
1600	308	466	466	400	500	500	170	479
2000	308	506	506	400	600	600	210	559
2500	308	556	556	400	600	600	260	659
3200	308	466	466	400	500	500	170	479
4000	308	506	506	400	600	600	210	559
5000	308	556	556	400	600	600	260	659

mm

* 6300A is not available



Flatwise Cross



Edgewise Cross

Flatwise Cross

Rated current (A)	Minimum Size				Standard Size			
	X	Y	Z	Q	X	Y	Z	Q
400	295	295	295	295	300	300	300	300
630	295	295	295	295	300	300	300	300
800	300	300	300	300	300	300	300	300
1000	305	305	305	305	400	400	400	400
1250	315	315	315	315	400	400	400	400
1600	335	335	335	335	400	400	400	400
2000	355	355	355	355	400	400	400	400
2500	380	380	380	380	400	400	400	400
3200	420	420	420	420	500	500	500	500
4000	460	460	460	460	500	500	500	500
5000	510	510	510	510	600	600	600	600
6300	635	635	635	635	700	700	700	700

mm

Edgewise Cross

Rated current (A)	Minimum Size				Standard Size			
	X	Y	Z	Q	X	Y	Z	Q
400	386	386	386	386	400	400	400	400
630	386	386	386	386	400	400	400	400
800	396	396	396	396	400	400	400	400
1000	411	411	411	411	500	500	500	500
1250	431	431	431	431	500	500	500	500
1600	466	466	466	466	500	500	500	500
2000	506	506	506	506	600	600	600	600
2500	556	556	556	556	600	600	600	600
3200	466	466	466	466	500	500	500	500
4000	506	506	506	506	600	600	600	600
5000	556	556	556	556	600	600	600	600

mm

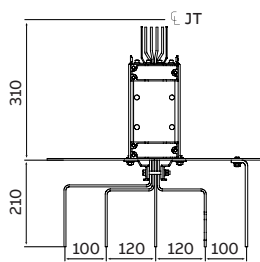
* 6300A is not available

Physical Data

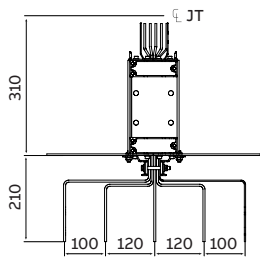
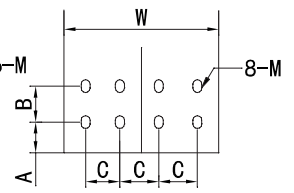
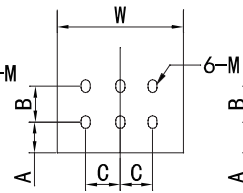
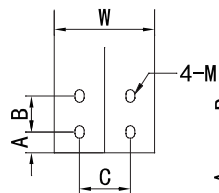
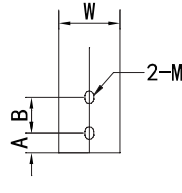
Flanged End

Flanged end

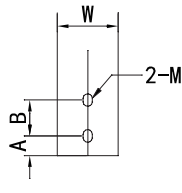
Flanged end provides an interface for field connections.



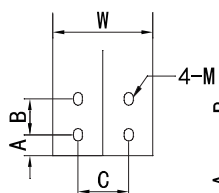
3L+100%N+50% housing ground



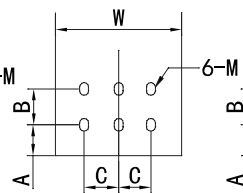
3L+100%N+50% housing ground



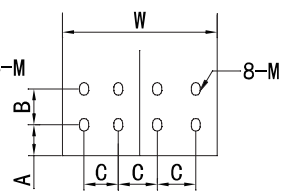
Type 1



Type 2



Type 3

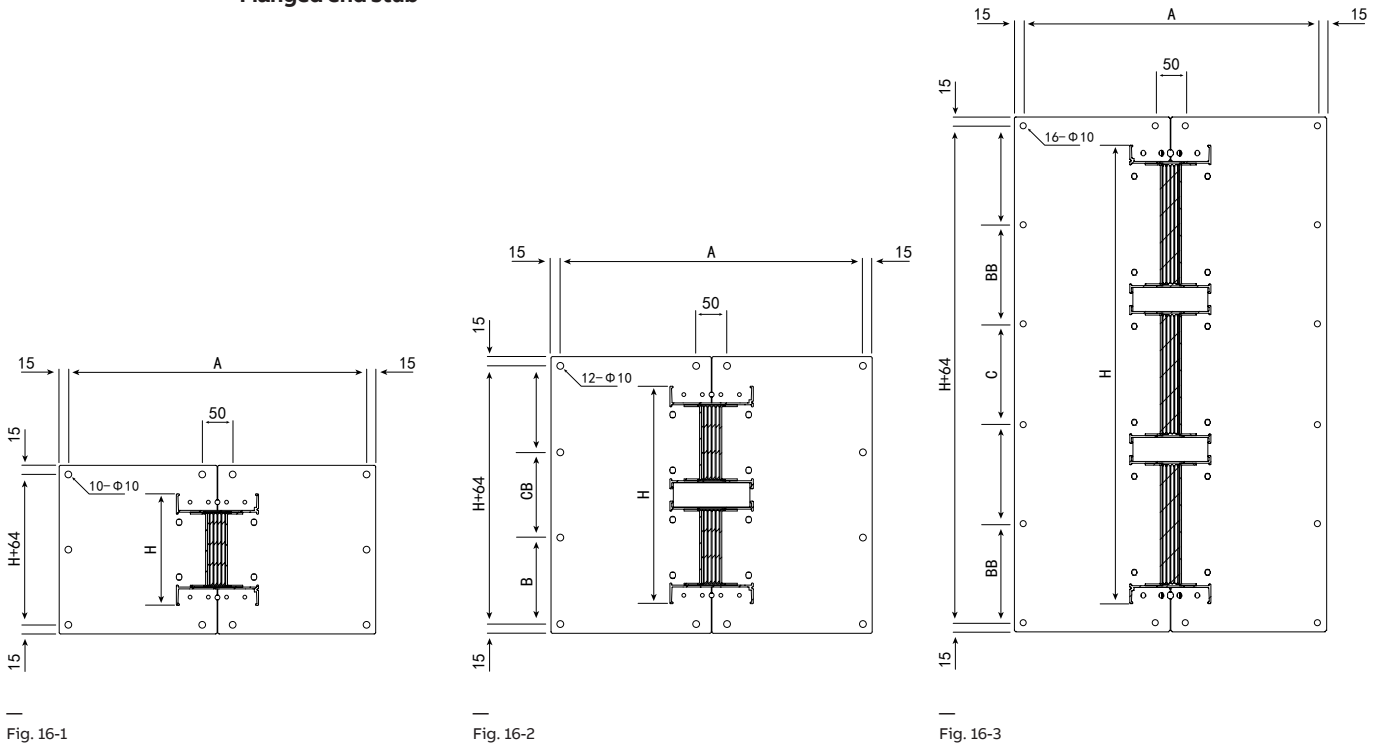


Type 4

mm

Rated current (A)	A	B	C	M	Type
400	25	50	-	Φ12	1
630	25	50	-	Φ14×20	1
800	25	50	-	Φ14×20	1
1000	25	50	-	Φ14×20	1
1250	25	50	50	Φ14×20	2
1600	25	50	50	Φ14×20	2
2000	25	50	50	Φ14×20	3
2500	25	50	50	Φ14×20	4
3200	25	50	50	Φ14×20	2
4000	25	50	50	Φ14×20	3
5000	25	50	50	Φ14×20	4
6300	25	50	50	Φ14×20	4

Flanged end stub



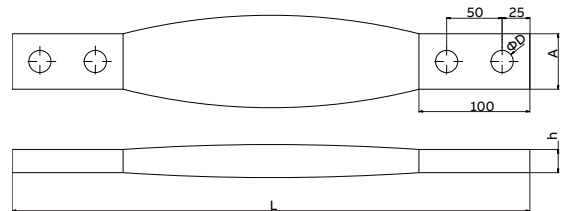
mm

Rated current (A)	H	A	B	C	Fig. No.
400	104	490	-	-	Fig. 16-1
630	104	490	-	-	
800	114	490	-	-	
1000	129	490	-	-	
1250	149	490	-	-	
1600	184	490	-	-	
2000	224	490	-	-	
2500	274	490	-	-	
3200	354	490	140	138	Fig. 16-2
4000	434	490	165	168	
5000	534	490	200	198	
6300	764	490	165	168	Fig. 16-3

Flexible connection

mm

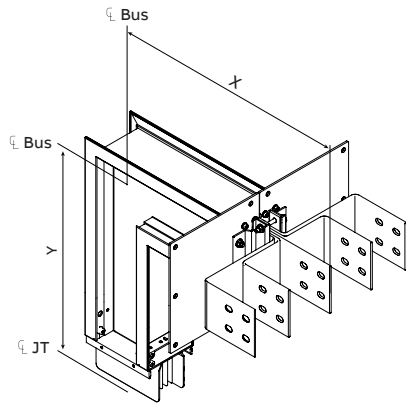
Rated current (A)	A	h	Qty connector / phase	
			A,B,C,N	PE
400	46	10	1	1
630	48	14	1	1
800	46	10	2	1
1000	48	14	2	1
1250	48	14	2	1
1600	48	14	3	2
2000	48	14	4	2
2500	48	14	4	2
3200	48	14	6	3
4000	48	14	7	4
5000	48	14	8	4
6300	48	14	10	6



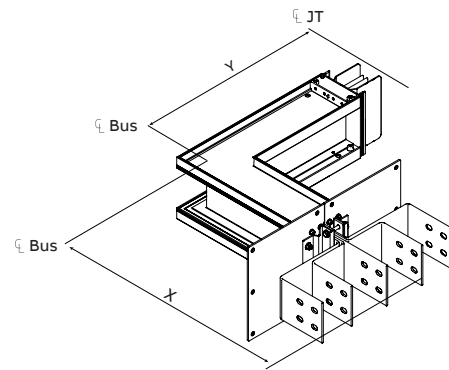
- Notes:
 1. Standard length is 400mm, other lengths can be customized.
 2. φD: φ14 or φ16

Physical Data

Combination Fittings



Flanged End with Elbow - Flatwise



Flanged End with Elbow - Edgewise

Flanged End with Elbow - Flatwise

Rated current (A)	Minimum Size		Standard Size	
	X	Y	X	Y
400	383	293	500	400
630	383	293	500	400
800	388	298	500	400
1000	396	306	500	400
1250	406	316	500	400
1600	423	333	600	500
2000	443	353	600	500
2500	468	378	700	600
3200	508	418	700	600
4000	548	458	800	700
5000	598	508	900	800
6300	713	623	1000	900

mm

Flanged End with Elbow - Edgewise

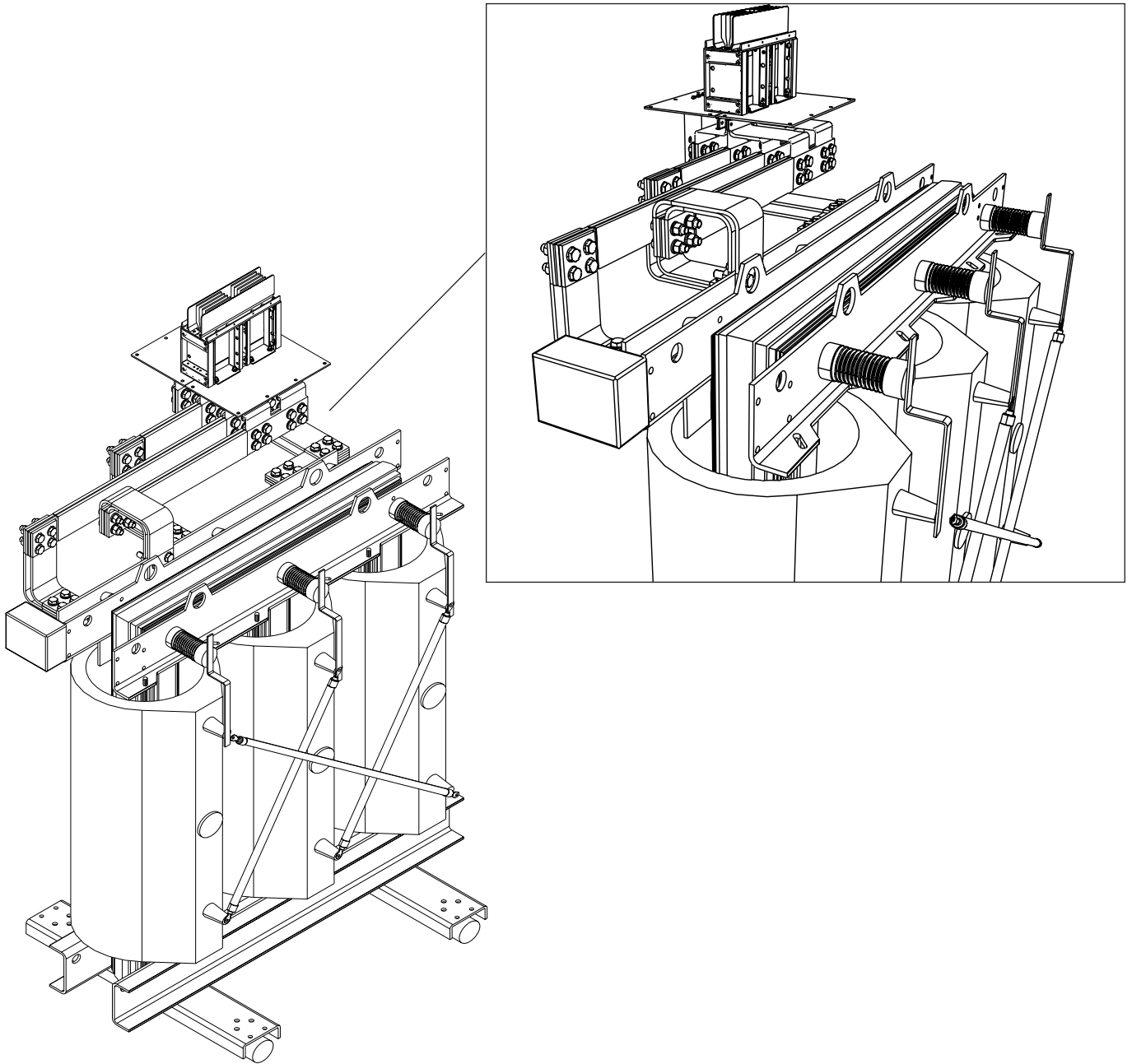
Rated current (A)	Minimum Size		Standard Size	
	X	Y	X	Y
400	398	308	500	400
630	398	308	500	400
800	398	308	500	400
1000	398	308	500	400
1250	398	308	500	400
1600	398	308	500	400
2000	398	308	500	400
2500	398	308	500	400
3200	398	308	500	400
4000	398	308	500	400
5000	398	308	500	400
6300	398	308	500	400

mm

Physical Data

Transformer Connection

For the mechanical connection between busway and transformer outgoing bar on low voltage side, the busway flange end, flexible connection and connecting copper bar are needed. The flexible connection is to isolate the vibration from transformer. The connecting copper bar shall be made locally according to the specific size measured on site, and provided by users.

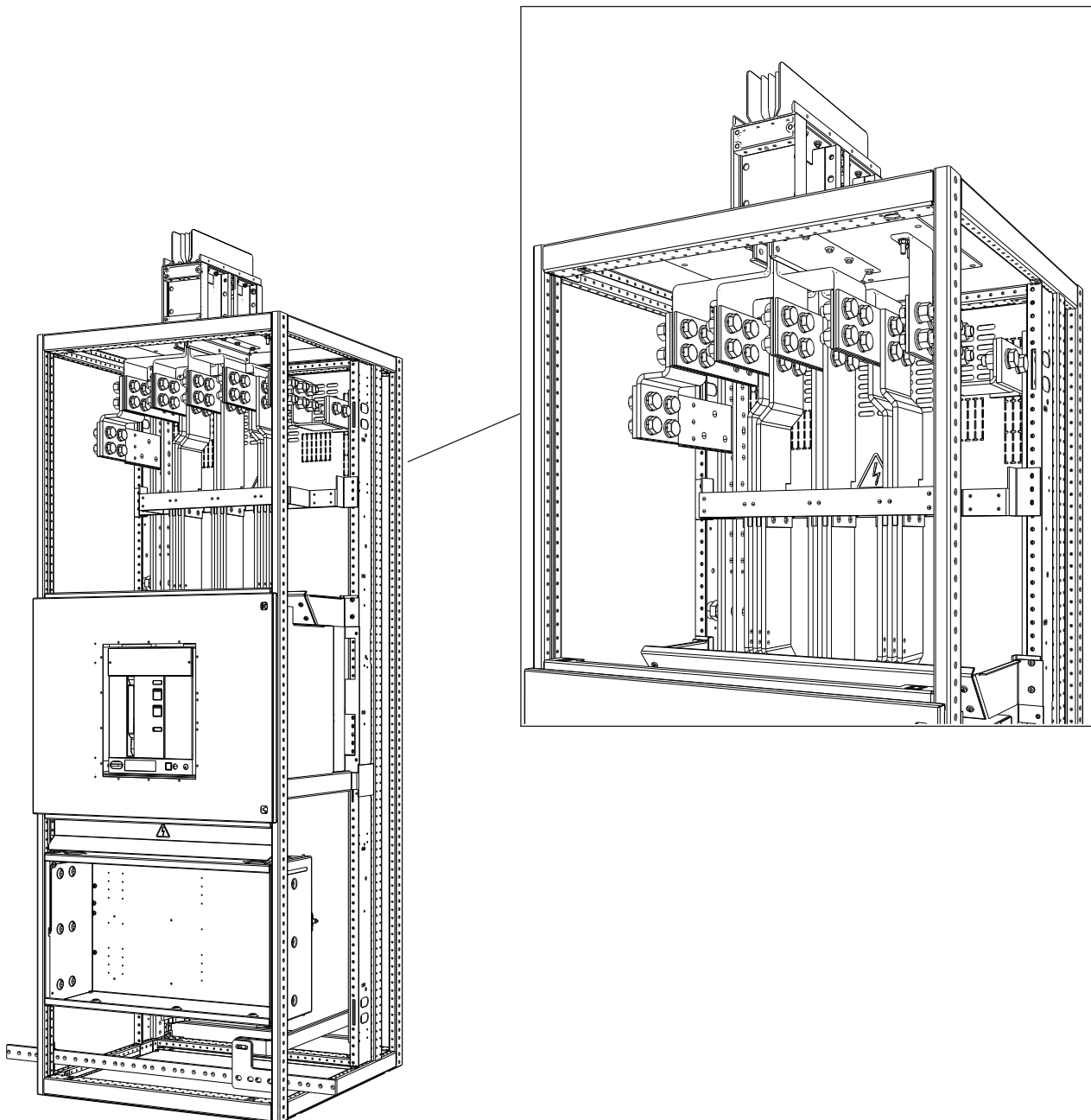


Physical Data

Switchgear Connection

The mechanical connection of busway and low-voltage switchgear need flanged end and connecting copper bar.

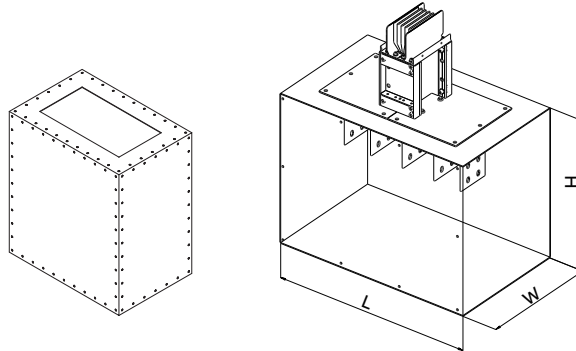
The copper bar shall be made locally according to the specific size measured on site and provided by users.



Physical Data

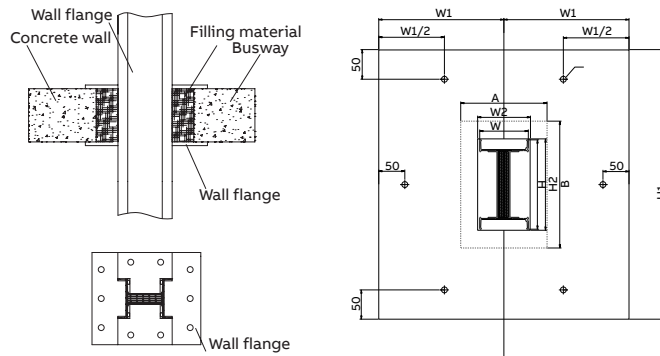
Other Fittings

End tap box



End tap boxes are used where a run of busway is fed by cable. The standard size is 1000mm × 1000mm × 1000mm, while we also able to supply with nonstandard box according to customer requirements.

Wall Flange



Wall flanges are used when the busway is penetrating a wall. To meet the fire resistance specification the wall flanges are required to be installed.

Wall flange and cutout dimensions

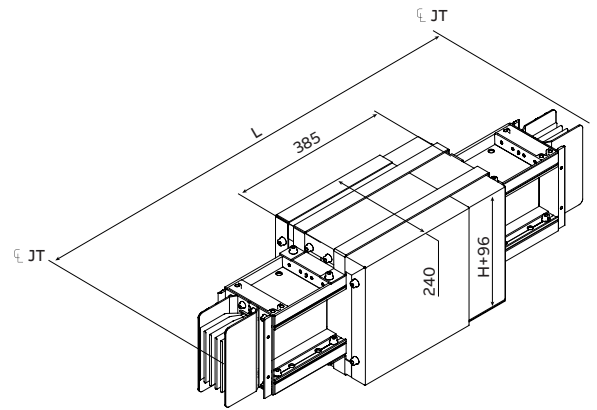
Rated current (A)	External dimension of busway W×H	Dimension of cutout A×B (≥)	External dimension of wall flange W1×H1 (≥)	Internal dimension of wall flange W2×H2 (≥)
400	135×104	240×205	225×405	150×115
630	135×104	240×205	225×405	150×115
800	135×114	240×215	225×415	150×125
1000	135×129	240×230	225×430	150×140
1250	135×149	240×250	225×450	150×160
1600	135×184	240×285	225×485	150×195
2000	135×224	240×325	225×525	150×235
2500	135×274	240×375	225×575	150×285
3200	135×354	240×455	225×655	150×365
4000	135×434	240×535	225×735	150×445
5000	135×534	240×635	225×835	150×545
6300	135×764	240×865	225×1065	150×775

Notes:

1. One SKU includes two wall flanges (one per side)
2. Wall flange is fixed against the wall with internal expansion bolt

Expansion length

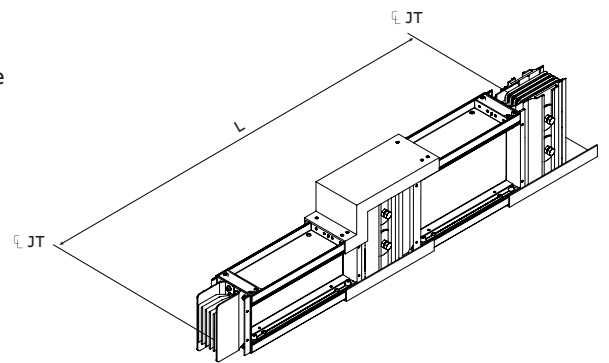
An expansion length is the section compensating for thermal expansion of the busway when it is run either across or up a building. The expansion range of each expansion length is $\pm 25\text{mm}$. It is normally set each 60m on the straight length. When the busway run straight length is 60m or more, particularly if the Busway is not free to move at the ends of the run, the expansion length may be necessary.



Note: The standard length L is 1000mm

Reducer

The reducer is the transition section used for reducing the current. It provides users with more economic power transmission and distribution method.



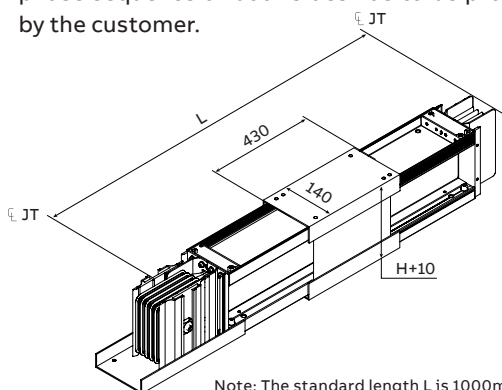
Note: The standard length L is 1000mm

Reducer

Busway rating SKU suffix	Rating after reducer										
	400	630	800	1000	1250	1600	2000	2500	3200	4000	5000
630	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	-	-	-	-	-	-	-	R25	R32	R40	R50

Transposition section

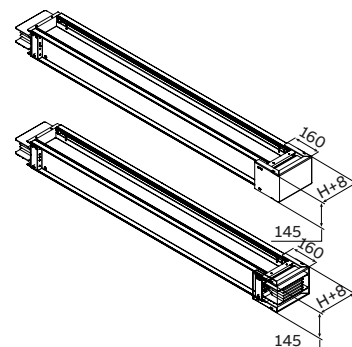
Transposition section is the transition parts used for changing phase sequence of the busbar. The phase sequence of both sides has to be provided by the customer.



Note: The standard length L is 1000mm

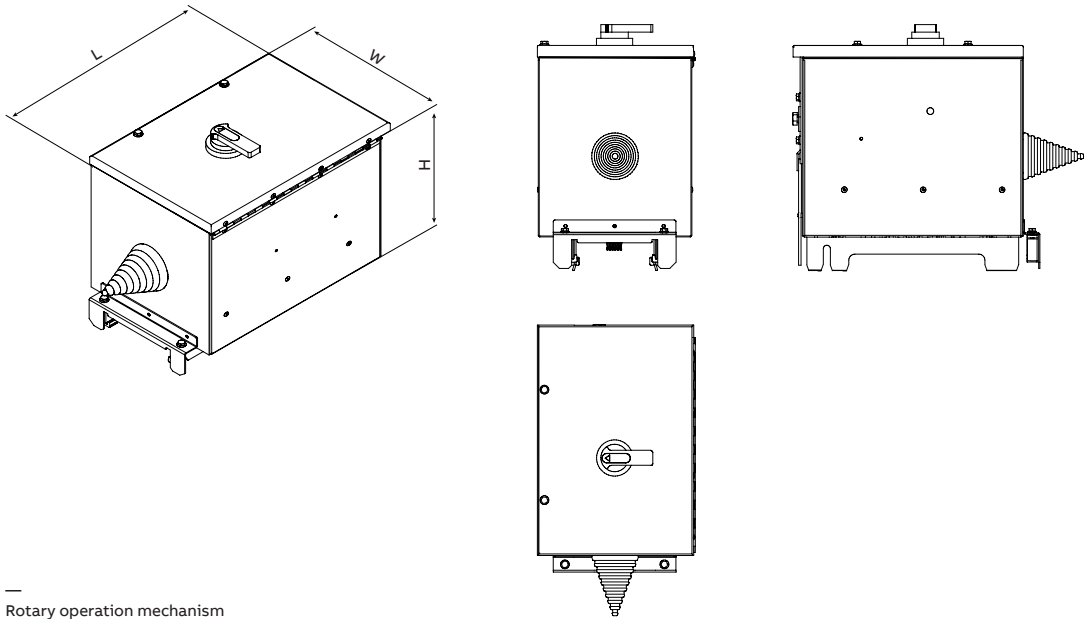
Terminal Cover

Terminal cover is installed to terminate the busway run to prevent ingress of external materials/particles and contact with live parts, thus enclosing the whole busway system.



Physical Data

Tap-off unit



— Rotary operation mechanism

WavePro-II Tap-off Unit with Tmax XT

Plug Rating (A)	Plug Size (L x W x H, mm)	Icc/415V (kA)	Tmax XT MCCB Frame	Type	In (A)	Poles
16	400*250*(310+50)	20	XT1 160 TMD / XT2 160 Ekip	N	16	3/4
25			XT1 160 TMD / XT2 160 Ekip	N	25	3/4
32			XT1 160 TMD / XT2 160 Ekip	N	32	3/4
40			XT1 160 TMD / XT2 160 Ekip	N	40	3/4
50			XT1 160 TMD / XT2 160 Ekip	N	50	3/4
63			XT1 160 TMD / XT2 160 Ekip	N	63	3/4
80			XT1 160 TMD / XT2 160 Ekip	N	80	3/4
100			XT1 160 TMD / XT2 160 Ekip	N	100	3/4
125			XT1 160 TMD / XT2 160 Ekip	N	125	3/4
160			XT1 160 TMD / XT2 160 TMA/Ekip	N	160	3/4
200			520*270*(310+50)	30	XT4 250 TMA/Ekip	N
250	XT4 250 TMA/Ekip	N			250	3/4
400	700*340*(340+50)	50	XT5 400 TMA/Ekip	S	400	3/4
500			XT6 800 Ekip	S	500	3/4
630			XT6 800 TMA/Ekip	S	630	3/4

PTO Rating (A)	PTO Size (L x W x H, mm)	Icc/415V (kA)	Tmax XT MCCB Frame	Type	In (A)	Poles
800	1200*420*(350+54)	50	XT7 1000 Ekip	S	800	3/4
1000			XT7 1250 Ekip	S	1000	3/4

Note: Additional 50/54mm is considered for installing the rotary handle

—
WavePro-II Tap-off Unit (Formula)

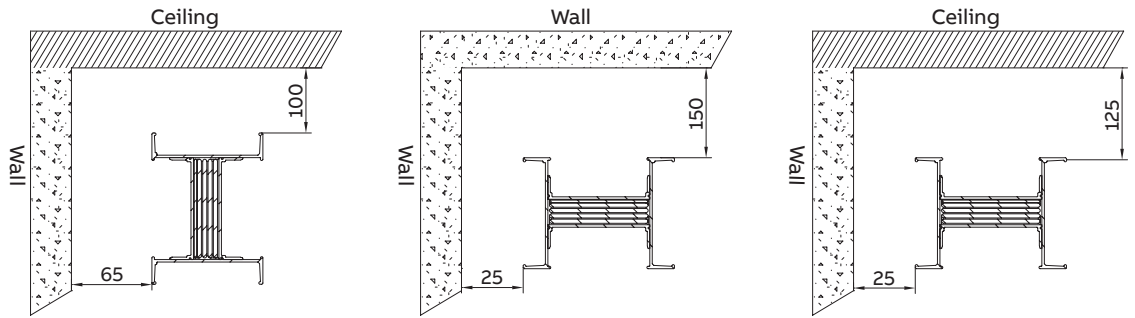
Plug Rating (A)	Plug Size (L x W x H, mm)	Icc/415V (kA)	Formula MCCB Frame	Type	In (A)	Poles
16	400*250*(310+50)	20	A1 125 TMF	C	16	3/4
25			A1 125 TMF	C	25	3/4
32			A1 125 TMF	C	32	3/4
40			A1 125 TMF	C	40	3/4
50			A1 125 TMF	C	50	3/4
63			A1 125 TMF	C	63	3/4
80			A1 125 TMF	C	80	3/4
100			A1 125 TMF	C	100	3/4
125			A1 125 TMF	C	125	3/4
160			520*270*(310+50)		A2 250 TMF	N
200	A2 250 TMF	N			200	3/4
250	A2 250 TMF	N			250	3/4
400	700*340*(340+50)	30	A3 630 TMF	S	400	3/4
500			A3 630 TMF	S	500	3/4

Bolt-on type Rating_A	Box dimensions (L x W x H, mm)	Icc/415V (kA)	Tmax XT Frame	Type	Poles
800	1200*420*(350+54)	50	XT7 1000 Ekip	S	3/4
1000			XT7 1250 Ekip	S	3/4

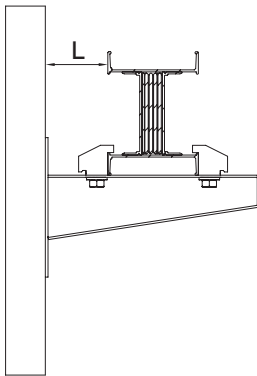
Note: Additional 50/54mm is considered for installing the rotary handle

Busway Installation

Minimum distance required for feeder busway installation



Minimum distance required for plug-in busway installation



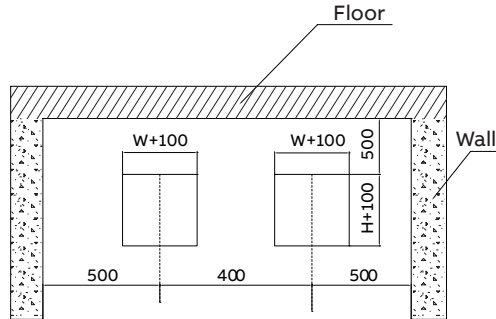
Relationship between the bus plug rated current and the spacing L

When the busway is installed against the wall horizontally or vertically, there should be certain spacing reserved for bus plug installation.

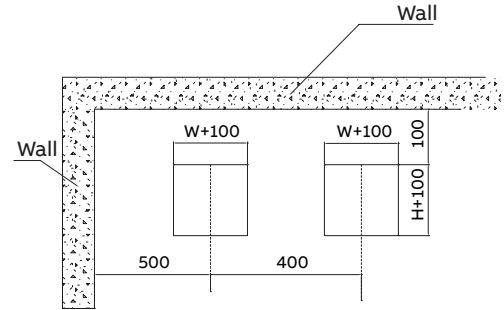
Rated current of bus plug (A)	100	160	250	400	630	800	1000
L (mm)	150	175	195	210	230	260	300

Reserved holes for busway installation

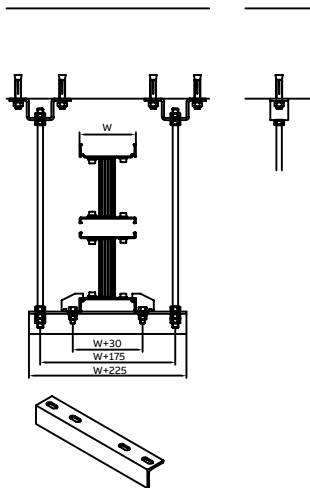
Dimensions of cut holes for busway horizontal through-the-wall installation



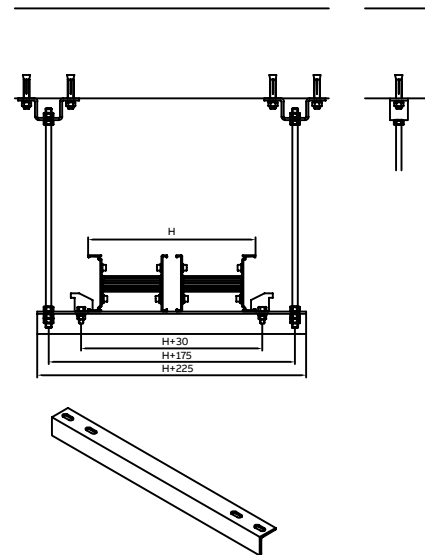
Dimensions of cut holes for busway vertical through-the-floor installation



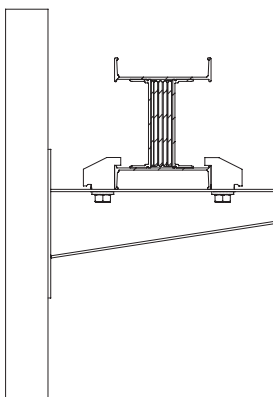
Trapeze - Edgewise



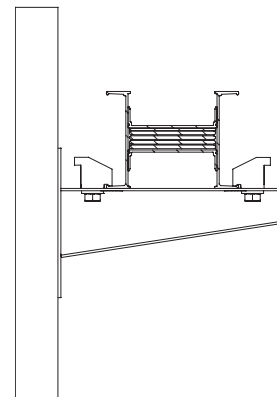
Trapeze - Flatwise



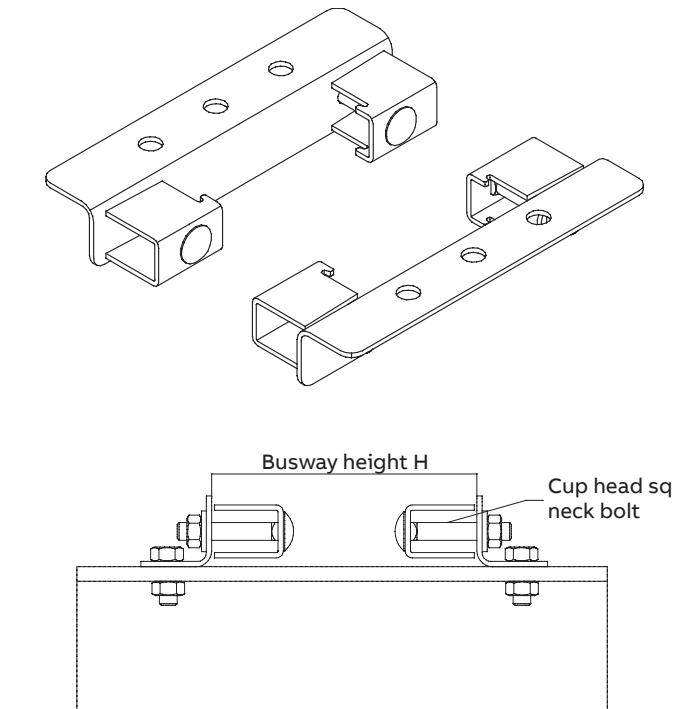
Wall mounted hanger - Edgewise



Wall mounted hanger - Flatwise

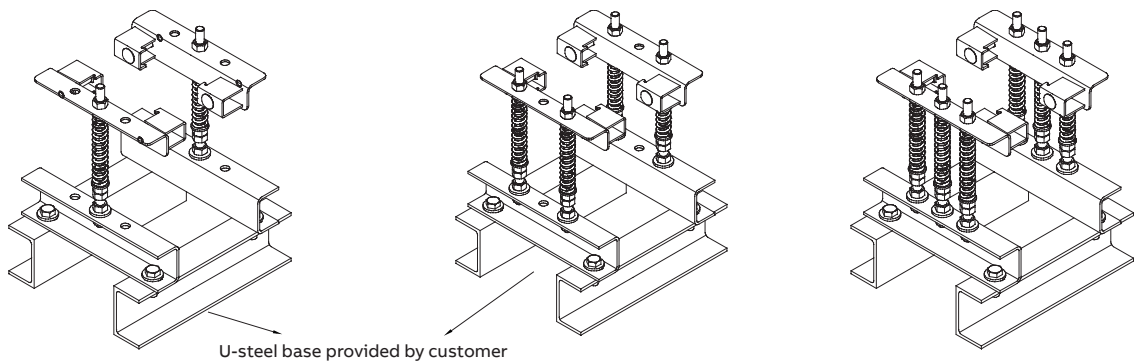


Vertical hanger



Rated current (A)	Number of springs
400-800	2
1000-2500	4
3200-6300	6

Vertical spring hanger



Note 1: For flatwise busway installation, it is recommended the hanger spacing should not be greater than 2 meters
 Note 2: For edgewise busway installation, it is recommended the hanger spacing should not be greater than 4 meters

Numbering System

Straight Length & Fittings

NAAA NN N NN NF

Product	CID	Code
WavePro- II	9AAF600317	W317

Material	Part Name	Code
Straight length	Straight length	SL
Fittings	Flanged end	FE
Fittings	Elbow	EL
Fittings	Offset	ZL
Fittings	Tee	TE
Fittings	Cross	CL
Fittings	Reducer	RE
Fittings	Expansion unit	EX
Fittings	Transposition unit	TR
Fittings	Joint	JT
Fittings	Plug outlet	OL
Fittings	Terminal cover	TC
Fittings	Wall flange	WF
Fittings	Fire Barrier	FB

Neutral	PE	Code
NONE	50% Housing	31
NONE	50% Internal	32
100%	50% Housing	51
100%	50% Internal	52
100%	100% Internal	53
200%	50% Housing	61
200%	50% Internal	62
200%	100% Internal	63
NA	NA	00

IP degree	Code
IP41	41
IP54	54
IP65	65
NA	00

Rated Current_A	Code
400	04
630	06
800	08
1000	10
1250	12
1600	16
2000	20
2500	25
3200	32
4000	40
5000	50
6300	63
NA	00

Accessories

NAAA NNN NN NF

Product	CID	Code
WavePro- II	9AAF600317	W317

IP rating	Code
IP41	41
IP54	54
IP65	65
NA	00

Material	Part Name	Code
Accessories	Trapeze hanger	THR
Accessories	Wall mounted hanger	BKT
Accessories	Spring hanger	SHR
Accessories	Vertical Fixed Hanger	VHR
Accessories	Trapeze hanger clamps	HPP
Accessories	Vertical hanger clamps	VPP
Accessories	End tap box	ETB
Accessories	Flexible connection	FLC
Accessories	Connecting Copper Bar	CNB

Rated Current_A	Code
400	04
630	06
800	08
1000	10
1250	12
1600	16
2000	20
2500	25
3200	32
4000	40
5000	50
6300	63
NA	00

Tap-off Unit

NAAA NN N NN N F

Product	CID	Code
WavePro- II	9AAF600317	W317

Material	Value	Code
Shunt Trip	Y	S
Shunt Trip	N	0

Material	MCCB Type	Code
Tap-off Unit	Tmax XT	TX
Tap-off Unit	Formula	TF

Release	Code
TM	M
Ekip	E

Poles	Code
3P	3
4P	4

Rated Current_A	Code	Rated Current_A	Code
16	01	160	16
25	02	200	20
32	03	250	25
40	04	400	40
50	05	500	50
63	06	630	63
80	08	800	80
100	10	1000	1K
125	12		

Check list

Technical standards	IEC 61439-1 2011 & IEC 61439-6 2012		
Relative humidity (%) at + 20°C	≤90		
Altitude (m)	<2000		
Max. temperature (°C)	40		
Min. temperature (°C)	-5		
Average temperature (°C)	35		
Conductor	<input type="checkbox"/> Copper		
Conductor plating	<input type="checkbox"/> Full length tin-plating <input type="checkbox"/> Silver plated		
Rated operating voltage (V)	<input type="checkbox"/> 415 (plug-in) <input type="checkbox"/> 1000 (feeder)		
Rated insulation voltage (V)	<input type="checkbox"/> 800 (plug-in) <input type="checkbox"/> 1000 (feeder)		
Rated frequency (Hz)	50/60		
Rated current (A)	<input type="checkbox"/> 400 <input type="checkbox"/> 630 <input type="checkbox"/> 800 <input type="checkbox"/> 1000 <input type="checkbox"/> 1250 <input type="checkbox"/> 1600 <input type="checkbox"/> 2000 <input type="checkbox"/> 2500 <input type="checkbox"/> 3200 <input type="checkbox"/> 4000 <input type="checkbox"/> 5000 <input type="checkbox"/> 6300		
Number of phases	3P		
Service	<input type="checkbox"/> 3L + 50% housing ground <input type="checkbox"/> 3L+100%N+50% housing ground <input type="checkbox"/> 3L+100%N+50% internal ground <input type="checkbox"/> 3L+200%N+50% housing ground <input type="checkbox"/> 3L+200%N+50% internal ground <input type="checkbox"/> Other:		
Degree of protection	<input type="checkbox"/> IP41 <input type="checkbox"/> IP54 <input type="checkbox"/> IP65 (Feeder only) <input type="checkbox"/> Other		
Insulation class	<input type="checkbox"/> Class B <input type="checkbox"/> Other		
Housing color	<input type="checkbox"/> RAL7000 <input type="checkbox"/> RAL9001 <input type="checkbox"/> Other		
Phase sequence	<input type="checkbox"/> PE, L1, L2, L3, N <input type="checkbox"/> Other		
System grounding method	<input type="checkbox"/> TN-S <input type="checkbox"/> TN-C		
Bus plug	Protection grade	<input type="checkbox"/> IP41 <input type="checkbox"/> IP54 <input type="checkbox"/> Other	
	Operation method	<input type="checkbox"/> Manual operation <input type="checkbox"/> Rotary handle	
	Circuit breaker	<input type="checkbox"/> Tmax XT <input type="checkbox"/> Tmax <input type="checkbox"/> Formula	
	Number of poles	<input type="checkbox"/> 3 poles, 3 trips <input type="checkbox"/> 4 poles, 4 trips	
Installation	Horizontal installation	Hanger type	<input type="checkbox"/> Trapeze hangers <input type="checkbox"/> Bracket arm
		Hanger accessories	<input type="checkbox"/> Horizontal hanger clamps
	Vertical installation	Hanger type	<input type="checkbox"/> Spring hanger <input type="checkbox"/> Vertical fixed hanger
		Hanger accessories	<input type="checkbox"/> U-steel base <input type="checkbox"/> Vertical hanger clamps
Copper busbar connection, flexible connection	<input type="checkbox"/> ABB provides materials, and the user fabricates on site <input type="checkbox"/> Other:		
Other special requirements			
List of attachments			

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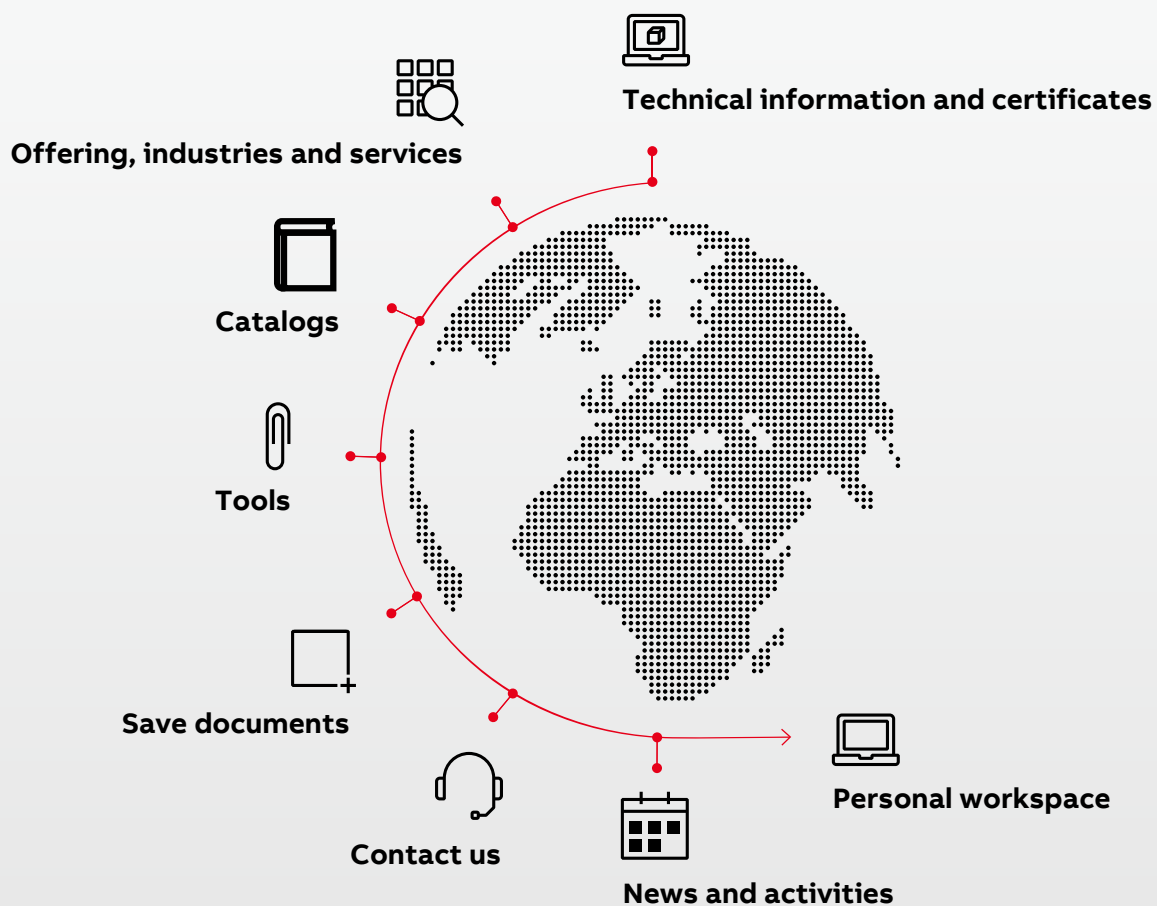




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