



# WavePro LT

## Busway System



GE imagination at work

# GE imagination at work

## GE Consumer & Industrial

General Electric Consumer & Industrial business was created in January of 2004 when GE Consumer Products merged with GE Industrial Systems. GE Consumer & Industrial is a \$14 billion global business with 75,000 employees in over 150 locations. With more than a century of experience inventing cutting-edge products and services, GE Consumer & Industrial strives to make life better, more convenient and more efficient for consumers as well as commercial and industrial customers.

### Industrial

The industrial division of GE Consumer & Industrial provides integrated electrical equipment and systems used to distribute, protect and control energy and equipment. The business manufactures electrical distribution and control products including medium and low voltage switchgear, circuit breakers, panel boards and general-purpose controls that are used to distribute and manage power in a variety of residential, commercial, consumer and industrial applications. In addition, the division also designs and manufactures motors and control systems used in end-industrial and consumer products such as heating, ventilation and air conditioning, washers, dryers, and dishwashers.

### Lighting

The lighting division of GE Consumer & Industrial manufactures and sells a variety of lighting solutions including incandescent, halogen, fluorescent, high-intensity discharge (HID) light bulbs, as well as light-emitting diodes (LED), automotive and miniature lighting. The business also markets a wide variety of commercial lighting systems. GE Specialty Lighting develops and sells lighting for aircraft and other transportation applications, front and rear projection, video projection, medical, architectural, fiber-optic, stage, studio, nightclub and theater lighting.

### Appliances

GE Consumer & Industrial appliances division manufactures and sells home appliances including refrigerators, freezers, ranges, dishwashers, washing machines, dryers, microwave ovens, speed cooking ovens, room air conditioners, and water filtration, softening and heating systems. In addition, the business offers the largest manufacturer's service organization in the appliances industry.



GE imagination at work

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GE's WavePro LT Busway System provides safe and reliable electrical distribution in commercial and industrial applications. WavePro LT Busway System reduces installation cost while providing superior performance for electrical contractors and end users.

# Reference standards

WavePro LT busway system complies with:

- IEC 60947.2-1997            GB 7251.1-2005
- IEC 60439.1-2004        GB 7251.2-2006
- IEC 60439.2-2000
- IEC 60529

# Certifications

The WavePro LT busway has been issued certificates from KEMA-KUER, following successful testing in according with IEC standards.



# System Overview



WavePro LT busway system is a flexible and reliable electrical distribution system with a sandwich construction and superior performance. It is a safe and robust system with high electrical efficiency, low temperature rise, efficient heat dissipation, low voltage drop, high mechanical strength and ease of installation. It is suitable for alternating current three-phase three-wire, three-phase four-wire and three-phase five-wire power supply and distribution system, with the frequency 50~60Hz, rated working voltage up to 690V, rated insulation voltage up to 1000V, and rated working current 100-5000A.



WavePro LT busway system makes a logical choice for commercial and industrial electrical distribution applications that require up to 5,000 amps of capacity with short-circuit protection. It's one of the lightest busway systems in the industry, considering customer requirements for installation and system reliability.



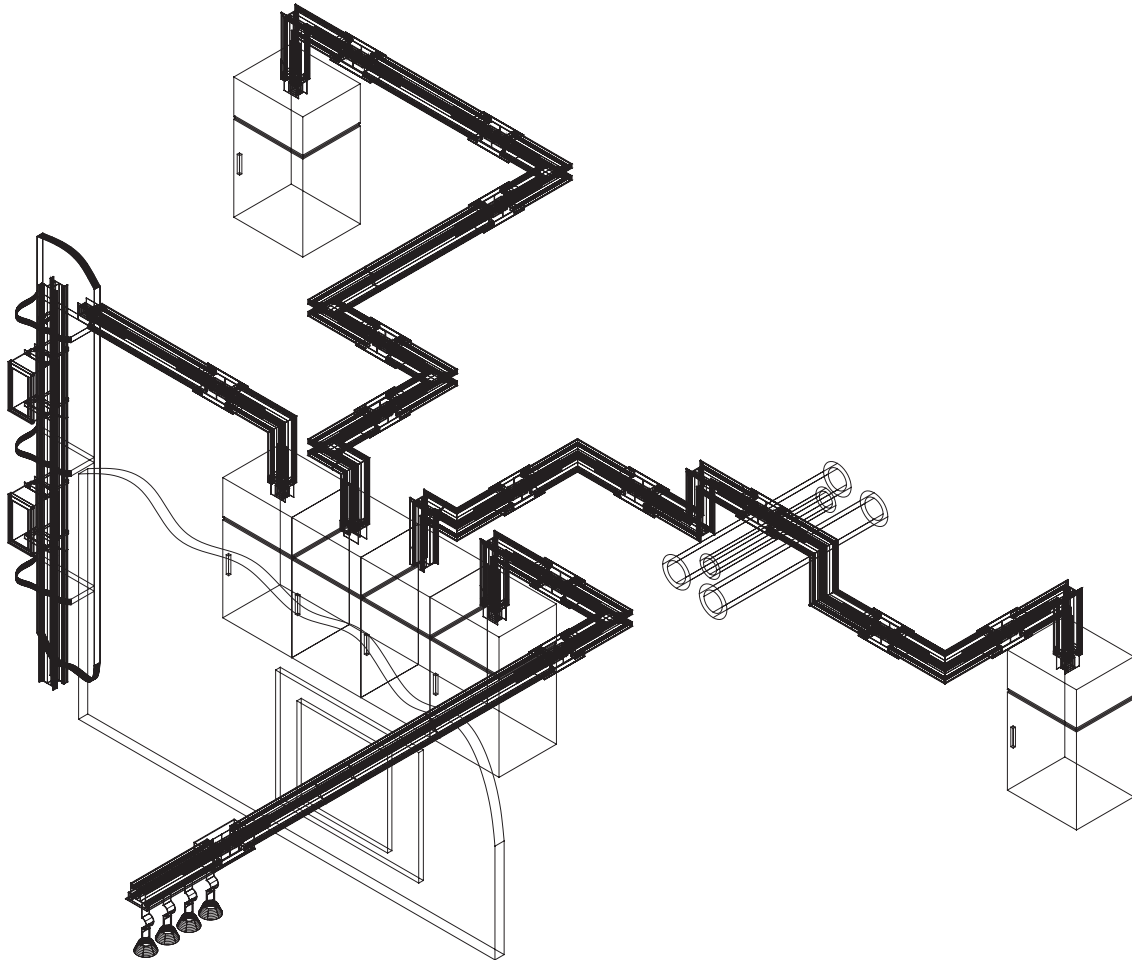
WavePro LT busway system provides internal neutral busbar 100% or 200%, which can meet with the requirements of various power systems for eliminating harmonic effects in the installations where non-linear loads are present. The housing, made from low magnetic material (aluminium and magnesium alloy), will not produce hysteresis loss on the distribution system.



As one of high current carrying capacity power transmission and distribution solutions, WavePro LT busway system can be widely applied in the areas of industrial factories, commercial buildings, hospitals, power generation, oil & gas, data centre applications, etc.



# Features of WavePro LT Busway System



## Safety Feature of the Bus Plug

- The operating handle of plug can be installed on the top or side with accurate opening or closing indication.
- The padlock mechanism is set for protecting the plug from mal-operation and any unauthorized access.
- Plug outlet covers prevent unintentional contact of the busbar.
- Plug in units are automatically grounded on installation. Polarized engagement of the plug to the busway provides the installer with positive plug/phase alignment.
- Bus plugs are provided with internal interlocking mechanisms to prevent their doors from being opened whilst energized, ensuring operation safety.



## Compact design means flexibility

- The compact "sandwich" design saves space with minimum voltage drop. Specially designed to fit into the tight angle and height requirements of today's architectural space, between floors and along walls.
- The conductor is fully enclosed with the aluminium housing, which provides excellent heat dissipation, thus improving the power transmission efficiency and reducing voltage drop.



## Robust Housing with Light-weight Feature



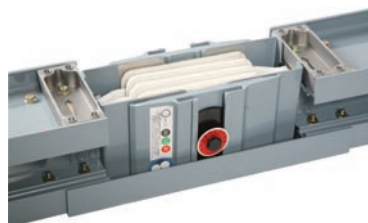
- With light-weight, aluminum alloy housing, the unique design can fit your specific application with high flexibility, safety and reliability.
- The powder coated aluminum alloy housing has been tested to withstand the salt spray test.
- The aluminum alloy housing is corrosion resistant , provides high heat dissipation and an extremely low impedance ground path , with 50% grounding capacity.

## Reliable Insulation

- Busway system utilizes high performance tin-plated copper or silver-plated aluminium conductor, and provides high quality protection from corrosion and high conductivity at the contact surface.
- The conductive busbar is wholly wrapped in Class B (130°C) insulating material, providing significant insulation level and resistance to impact.
- The insulating material meets the requirements of ROHS, and safety requirements of GE

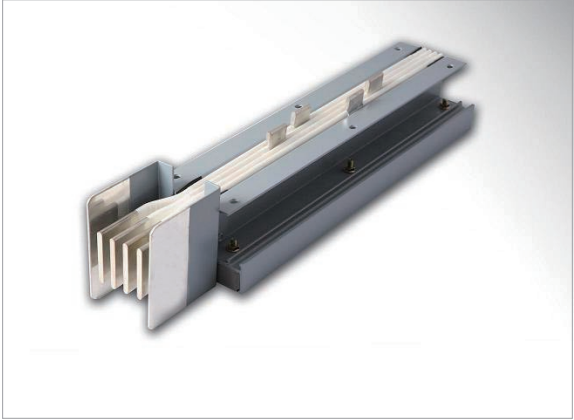


## Ease of Installation



- The joint assembly's cone-shaped insulation plate design increases mechanical strength while its molded joint ground side plate ensures even pressure applied across the joint.
- Large sized Belleville washers assure even pressure on contact .
- No special torque wrench is required. Just a common 16mm socket wrench is used to fasten the fixed captive torque bolt with red indication disc. (When the indicating disc falls off, the joint is properly tightened automatically).
- $\pm 4$ mm per joint field adjustable isolation allows for job site flexibility during installation.

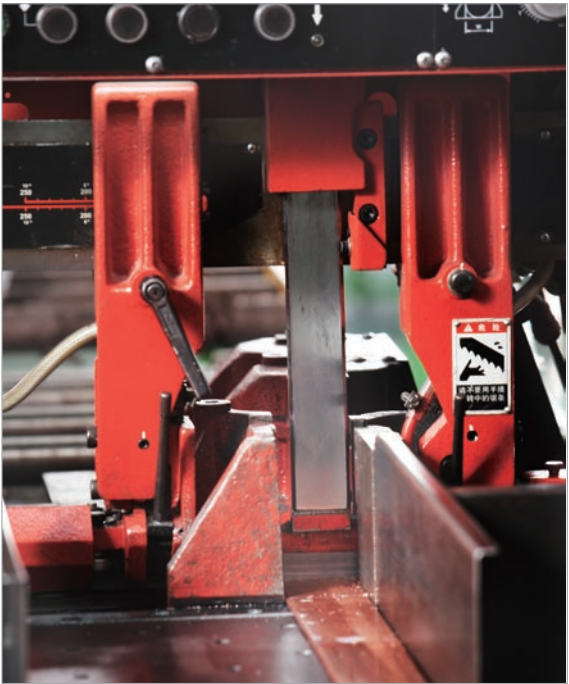
# Product Advantages



WavePro LT busway features an aluminum housing that cuts busway weight up to 50% – reducing installation costs.

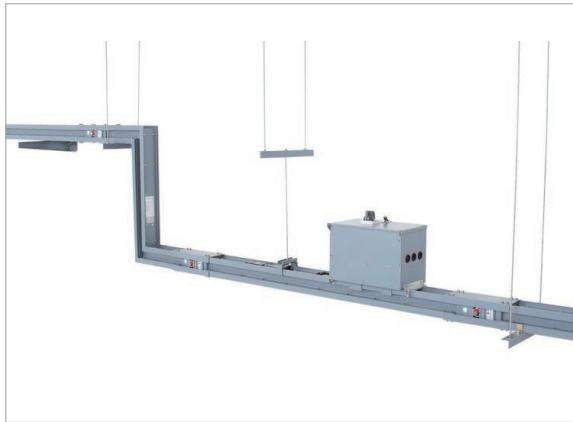


WavePro LT Busway busbars are completely wrapped with two layers of Mylar, insulation material, class B temperature rated to 130 °C.

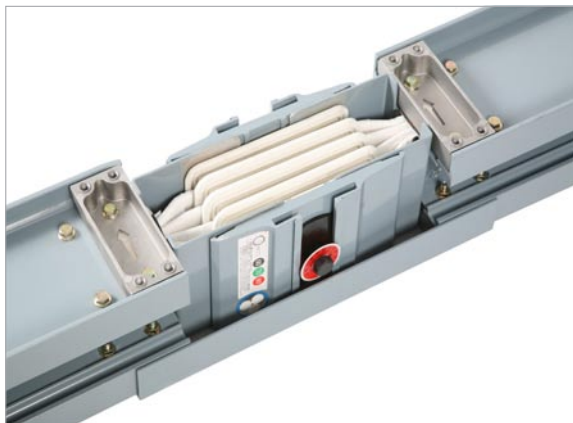


Numerical control machinery is used to precision polish-saw all busbar ends. The resulting high quality bus end finish does not suffer from the deformed, stretched, inconsistent flat end-surfaces common with punched busbar at the most critical interconnection joint locations.





Sections can be hung every 2m with a standard trapeze hanger up to 2000 amp aluminum or 1600 amp copper. For high amp rating busway, please contact with our engineer for the trapeze hanger installation. WavePro LT busway is light enough to reduce ceiling loads up to 50%.



For secure, flexible long-term reliability and minimal maintenance, WavePro LT busway offers up to  $\pm 4\text{mm}$  adjustable joints with Belleville spring washers that do not require re-torquing.

And the Double headed "break off" joint bolt is used to tighten the busway without the use of a torque wrench. Every busway joint is provided with color coded temperature indicator to give an early warning when high temperature occurs at the joint.



WavePro LT Plug-in unit has a mechanical plug assist to ensure positive, safe and reliable installation. The Plug-in unit can be installed easily with the help of wrenching the plug assist

# Cable and Wire Conversion

Busway is quick and easy to install. Using busway can save up to 30% of the total cost of using cable. And it takes approximately half the time to install compared with cable.

High overload capacity: All insulation materials used in busway is Class B (130°C) while cable is generally rated at 95°C and 105°C. Therefore, the overload capacity of the busway is much higher than that of cables.

WavePro LT has good heat dissipation performance; Insulating layers of cables (core insulation and outer insulation) are insulating electrically as well as thermally, while the busway disperses heat through convection and radiates heat through the tightly connected housing. Busway has superior heat dissipation performance compared with cable.

## WavePro LT busway weight

weight: (kg/m)

Rated current (A)	Copper busbar 4W	Copper busbar 5W	Aluminium busbar 4W	Aluminium busbar 5W
100	~	~	8.8	9.2
160	~	~	8.8	9.2
200	~	~	8.8	9.2
250	12.5	13.4	8.8	9.2
400	12.5	13.4	9.9	10.3
500	~	~	11.0	11.5
630	14.8	15.9	12.0	12.7
800	17.4	18.8	14.1	15.0
1000	21.5	23.3	15.8	16.8
1250	26.6	29.0	18.9	20.1
1350	27.9	30.5	20.5	22.0
1600	34.4	37.8	22.7	24.3
2000	43.6	48.0	26.9	29.0
2500	59.3	65.5	32.2	34.9
3150	72.6	80.2	48.0	51.9
3800	85.7	94.8	57.9	62.8
4000	91.0	100.6	62.3	67.6
4500	114.6	126.9	~	~
5000	125.1	138.6	~	~

2000A, 3P4W

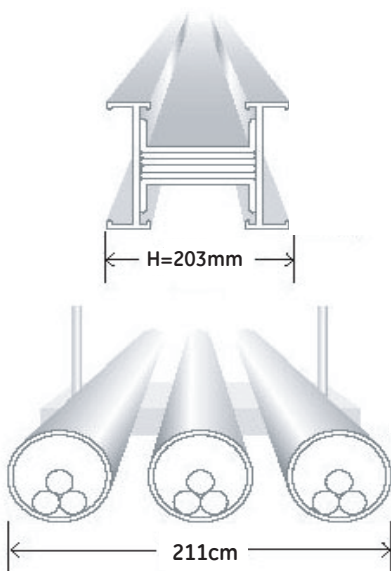


fig.8-1

## WavePro LT busway dimension

Size: mm

Rated current (A)	Copper busbar (H)	Aluminium busbar (H)
100	~	88
160	~	88
200	~	88
250	90	88
400	90	98
500	~	108
630	93	118
800	103	138
1000	131	153
1250	138	183
1350	143	198
1600	168	218
2000	203	258
2500	263	308
3150	340	460
3800	390	550
4000	410	590
4500	500	~
5000	540	~

table.8-2

## Typical application of Cable and Busway system

Below are the drawings to show the differences of typical application between cable and busway system. Cable system requires one separate cable for each power terminal. Busway system uses a main power supply busway and separate the current close to the power terminal. It saves installation space and make the whole system more safe.

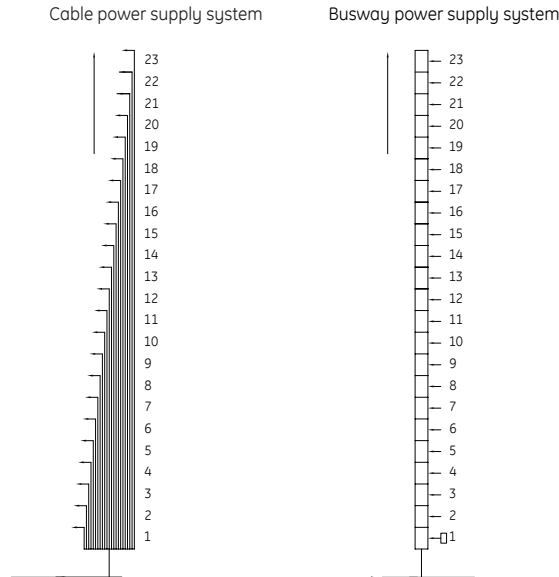


fig.9-1

Item	Busway	Cable
From transformer to incoming cubicle	Max current of busway is up to 5000A, and can match transformers upto 2.5MVA. Busway is 100% load rated and in its own housing, with ground.	Higher currents require additional cables per phase, installed in separate housings and derating. Additional cable ground is required.
Power supply control of multistage buildings	Riser busways for distributed power to each floor enables reduced switchboard sizing	Multiple circuits are required to each floor requiring larger riser space and multiple MCCB's in the main switchboard

table.9-1

## Performance and price comparison of busway, cable

Item	Description	Busway	Cable
1	Long-term investment cost	Less than cable 50~60%, less than branch cable 60~70%.	Higher than bus 50~60%
2	Depreciation Rate (Annually)	2%	5~8%
3	Life	50 years	15~20 years
4	Insulation performance	$\geq 20M\Omega$	$\geq 5M\Omega$
5	Alteration loss rate	10~20%	70~80%
6	Occupying area	reduced size	large cable tray sizing
7	Current carrying capacity	Large current up to 5000A, applicable for many circumstances.	Multiple cables per phase to suit current required, up to 1600A, poor application range.
8	Mechanical strength	Strong mechanical strength, high protection degree, applicable for large span installation.	Cable tray must be added.
9	Feature and dimension	Customized color, small volume, sandwich configuration.	Large volume
10	Current branch	Offering multi plug outlets for plug to increase branch circuits without disconnecting power supply, easy installation.	Main power supply and cable must be disconnected.
11	Over loading capacity	Maximum temperature of insulation material is 130°C, short time over load capacity, excellent heat dissipation.	Maximum operation temperature of insulation lagging and outer coating 105°C, poor over loading capacity.
12	Installation and maintenance	Easy installation and disassembly, Positive to do electric check for branch circuit without disconnecting main power supply.	The main power supply has to be disconnected down when checking either of the branch circuit.
13	Maintenance	Easy maintenance, without maintenance degradation.	Difficult maintenance, with maintenance degradation.
14	Flexibility	Spare circuit bus plug helps recover power supply during system error, steady power supply system, flexible for extension and upgrade.	Negative to do electric check during accident, delayed power recovery.

table.9-2

# Electrical Characteristics

WavePro LT busway's all-aluminum and aluminum alloy housing provides an extremely low impedance ground path with small resistance (reduce watt losts) for both copper and aluminum systems.

Plug-in outlet grounding is supplied with tin-plated copper tabs bolted to the plug in box housing for superior continuity through standard bus plug ground stabs. Optional internal ground busbar (50% or 100% capacity ) is also available to provide a complete system.

## Grounding bar resistance of WavePro LT busway system (Temperature=20°C):

**DC resistance Copper bar  
(Internal 50% ground bus)**

No.	Rated current (A)	Resistance (10 <sup>-6</sup> Ω/m)
1	250	234.1
2	400	234.1
3	630	179.1
4	800	151.9
5	1000	106.6
6	1250	82.4
7	1350	81.0
8	1600	69.2
9	2000	50.0
10	2500	40.5
11	3150	28.9
12	3800	24.8
13	4000	23.3
14	4500	18.8
15	5000	17.4

table.10-1

**DC resistance Copper bar  
(Internal 50% ground bus + Integrated housing ground)**

No.	Rated current (A)	Resistance (10 <sup>-6</sup> Ω/m)
1	250	117.1
2	400	117.1
3	630	89.6
4	800	76.0
5	1000	53.3
6	1250	41.2
7	1350	40.5
8	1600	34.6
9	2000	25.0
10	2500	20.3
11	3150	14.4
12	3800	12.4
13	4000	11.7
14	4500	9.4
15	5000	8.7

table.10-2

**DC resistance Aluminium bar  
(Internal 50% ground bus)**

No.	Rated current (A)	Resistance (10 <sup>-6</sup> Ω/m)
1	100	342.7
2	160	342.7
3	200	342.7
4	250	342.7
5	400	259.8
6	500	210.7
7	630	178.1
8	800	138.0
9	1000	119.4
10	1250	102.9
11	1350	86.1
12	1600	76.9
13	2000	63.3
14	2300	56.4
15	2500	52.7
16	3150	35.0
17	3800	28.6
18	4000	25.2

table.10-3

**DC resistance Aluminium bar  
(Internal 50% ground bus + Integrated housing ground)**

No.	Rated current (A)	Resistance (10 <sup>-6</sup> Ω/m)
1	100	171.3
2	160	171.3
3	200	171.3
4	250	171.3
5	400	129.9
6	500	105.3
7	630	89.0
8	800	69.0
9	1000	59.7
10	1250	51.4
11	1350	43.0
12	1600	38.5
13	2000	31.7
14	2300	28.2
15	2500	26.3
16	3150	17.5
17	3800	14.3
18	4000	12.6

table.10-4

## Short-circuit current ratings

The WavePro LT busway provides predictable, consistent strength and high short-circuit ratings.

WavePro busway is third party certified by KEMA to be in compliance with IEC60439-1 and-2 short circuit withstand test for 1 second.

### Copper conductor

Rated current (A)	Rated short-time withstand current (kA)	Rated peak withstand current (kA)
250~800	30	63
1000~1600	50	105
2000~2500	65	143
3150~5000	100	220

table.11-1

lcw@1s

### Aluminium conductor

Rated current (A)	Rated short-time withstand current (kA)	Rated peak withstand current (kA)
100~250	10	17
400~500	20	40
630~800	30	63
1000~2500	50	105
3150~4000	80	176

table.11-2

lcw@1s

## Ambient temperature's influence on application

Within the ambient temperature of 40°C, WavePro LT busway system can continuously operate at rated current while the maximum housing temperature rise won't exceed 55 K.

If the busway continuously operated at higher ambient temperature, it should be derated first, i.e. the busway current-carrying capacity = rated current x de-rating factor. (As shown in tables)

Ambient temperature (°C)	Factor
40	1.00
45	0.95
50	0.90
55	0.85
60	0.80
65	0.74
70	0.67

table.11-3

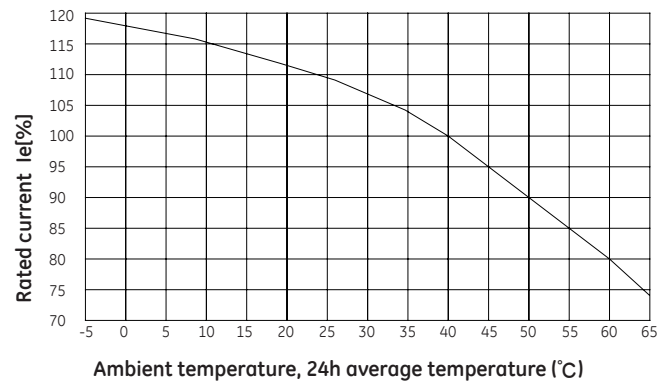


table.11-4



# Electrical Characteristics

## Resistance, reactance, impedance and voltage drop

WavePro LT busway has low voltage-drop values. Minimum reactance (X) is due to very close bar spacings (sandwiched construction) and a non-magnetic housing. Values shown are identical for plug-in and feeder.

50 Hz values shown. For 60 Hz, multiply reactance (X) by 1.2048 and resistance values do not change. For 400 Hz, multiply reactance by 4.6988 and multiply resistance by 1.4. Calculate new voltage drop  $V_d = \text{amps load} \times \sqrt{3} (R \cos Q + X \sin Q) \text{ m}$ , where  $\cos Q = \text{Power Factor}$ . Contact your local GE representative for help with electrical calculations.

### Copper busbar (50 Hz, temperature=20°C)

Rated current (A)	Resistance	Reactance	Impedance	Voltage drop (V/m)				
				Power factor $\cos \phi$				
				(10 <sup>-6</sup> Ω/m)	0.6	0.7	0.8	0.9
250	122.0	22.4	124.0	0.039	0.044	0.048	0.052	0.053
400	122.0	22.4	124.0	0.063	0.070	0.077	0.083	0.084
630	89.6	32.1	95.1	0.087	0.093	0.099	0.103	0.098
800	70.5	27.4	75.7	0.089	0.095	0.101	0.105	0.098
1000	55.5	18.1	58.4	0.083	0.090	0.096	0.100	0.096
1250	41.2	20.7	46.1	0.089	0.094	0.098	0.100	0.089
1350	40.5	18.3	44.4	0.091	0.097	0.101	0.104	0.095
1600	32.1	16.6	36.2	0.090	0.095	0.099	0.100	0.089
2000	25.0	14.2	28.8	0.091	0.096	0.099	0.100	0.087
2500	18.8	10.7	21.6	0.086	0.090	0.093	0.094	0.081
3150	14.4	9.5	17.3	0.089	0.092	0.094	0.094	0.079
3800	12.4	6.5	14.0	0.083	0.087	0.091	0.092	0.082
4000	11.7	6.3	13.3	0.083	0.088	0.091	0.092	0.081
4500	9.4	5.4	10.8	0.078	0.081	0.084	0.084	0.073
5000	8.7	5.0	10.0	0.080	0.084	0.086	0.087	0.075

table.12-1

### Aluminium busbar (50 Hz, temperature=20°C)

Rated current (A)	Resistance	Reactance	Impedance	Voltage drop (V/m)				
				Power factor $\cos \phi$				
				(10 <sup>-6</sup> Ω/m)	0.6	0.7	0.8	0.9
100	171.3	35.3	174.9	0.023	0.025	0.027	0.029	0.03
160	171.3	35.3	174.9	0.036	0.04	0.044	0.047	0.047
200	171.3	35.3	174.9	0.045	0.05	0.055	0.059	0.059
250	171.3	35.3	174.9	0.057	0.063	0.069	0.073	0.074
400	129.9	29.5	133.2	0.07	0.078	0.084	0.09	0.09
500	105.3	25.6	108.4	0.072	0.08	0.086	0.092	0.091
630	89	22.8	91.9	0.078	0.086	0.093	0.098	0.097
800	69	19.1	71.6	0.079	0.086	0.092	0.098	0.096
1000	59.7	17.1	62.1	0.086	0.093	0.1	0.106	0.103
1250	47.6	14.5	49.8	0.087	0.094	0.101	0.107	0.103
1350	43	13.6	45.1	0.086	0.093	0.1	0.105	0.101
1600	38.5	12.5	40.4	0.092	0.099	0.106	0.111	0.107
2000	31.7	10.9	33.5	0.096	0.104	0.11	0.115	0.11
2500	26.3	9.5	28	0.101	0.109	0.116	0.121	0.114
3150	17.5	5.8	18.5	0.083	0.089	0.095	0.1	0.096
3800	14.3	5	15.2	0.083	0.089	0.095	0.099	0.094
4000	12.6	4.8	13.5	0.079	0.085	0.09	0.093	0.087

table.12-2

Note:  
 ① Actual voltage drop =  $V_d$  (from Table)  $\times \frac{\text{actual load}}{\text{rated load}}$   
 ② 1 feet=0.3048m  
 Get the data/feet, please multiply the data with 0.3048.

# Physical Data

## Straight Length

### Feeder straight length

Feeder straight lengths may be installed either vertically or horizontally.

Standard length is 3000mm, and the minimum length is 400mm.

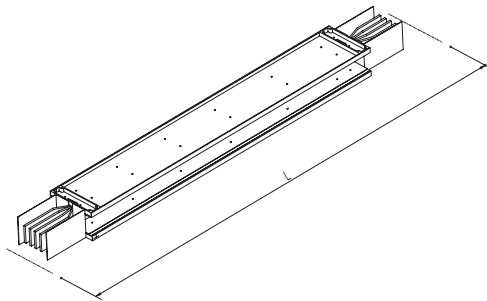


fig.13-1

### Dimensions and weight

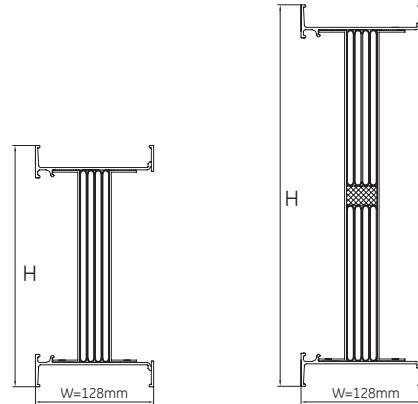


fig.13-2

fig.13-3

### Copper busbar

Rated current (A)	Width W (mm)	Height H (mm)	Weight of busbar (kg/m)		Fig.
			Four-wire 100%N	Five-wire 100%N, 50%PE	
250	128	90	12.5	13.4	13-2
400	128	90	12.5	13.4	
630	128	93	14.8	15.9	
800	128	103	17.4	18.8	
1000	128	131	21.5	23.3	
1250	128	138	26.6	29.0	
1350	128	143	27.9	30.5	
1600	128	168	34.4	37.8	
2000	128	203	43.6	48.0	
2500	128	263	59.3	65.5	
3150	128	340	72.6	80.2	13-3
3800	128	390	85.7	94.8	
4000	128	410	91.0	100.6	
4500	128	500	114.6	126.9	
5000	128	540	125.1	138.6	

table.13-1

### Aluminum busbar

Rated current (A)	Width W (mm)	Height H (mm)	Weight of busbar (kg/m)		Fig.
			Four-wire 100%N	Five-wire 100%N, 50%PE	
100~250	128	88	8.8	9.2	13-2
400	128	98	9.9	10.3	
500	128	108	11.0	11.5	
630	128	118	12.0	12.7	
800	128	138	14.1	15.0	
1000	128	153	15.8	16.8	
1250	128	183	18.9	20.1	
1350	128	198	20.5	22.0	
1600	128	218	22.7	24.3	
2000	128	258	26.9	29.0	
2500	128	308	32.2	34.9	13-3
3150	128	460	48.0	51.9	
3800	128	550	57.9	62.8	
4000	128	590	62.3	67.6	

table.13-2



fig.13-4

# Plug-in straight length

Plug-in busway has a flexible design with optional plug outlets on both sides. The minimum space between plugs is 610mm and up to 4 plug outlets may be fixed on each side of the 3-meter standard length. The customer may reserve plug outlets for extension in the future when changes occurs in terms of the equipment load or busway run. The plug-in busway may be installed either vertically or horizontally.

Both base plate and socket cover are set for each plug outlet. The former helps to prevent fingers from contacting live conductors (IP2X) by accident, on which the phase sequences of conductors are identified. And the latter prevents the conductive contacting surface from ingress of dust or contaminant . A pad may be used to keep off dust or moisture. Standard length is 3000mm, and the minimum length is 400mm. The minimum length of L1 (distance from the center of plug outlet to standard end) is 400mm, and the minimum length of L2 (distance between the centers of two adjacent plug outlets) is 610mm.

Below is a drawing and form to show the minimum dimension of the busway length.

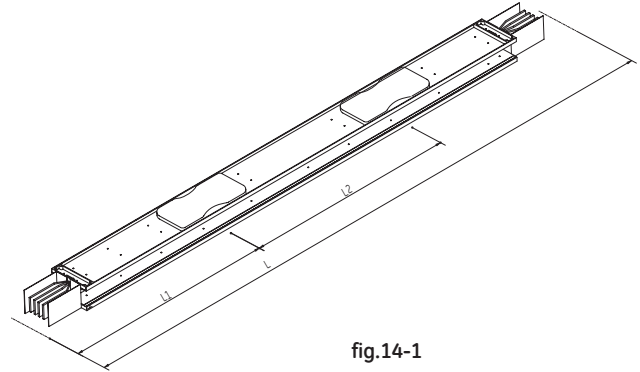


fig.14-1

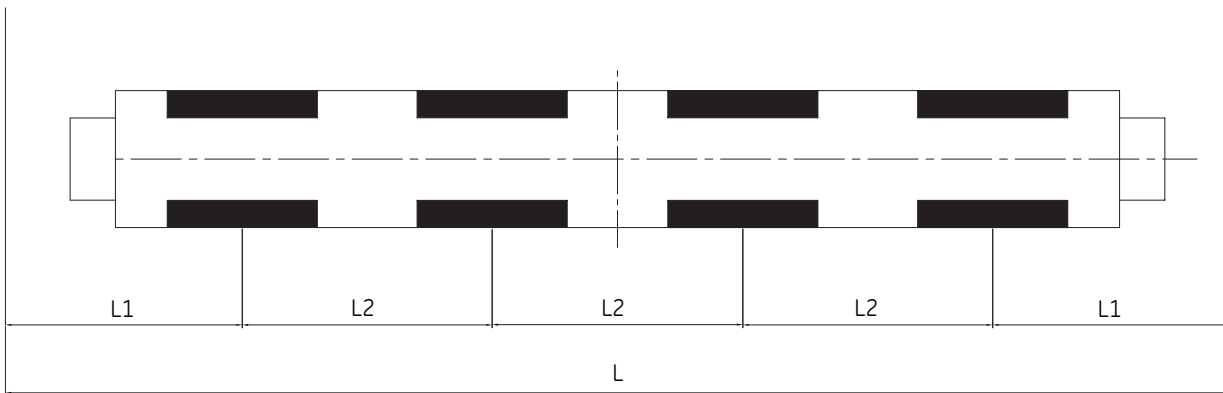


fig.14-2

Size: mm

Number of Plug in one side	Minimum size fit 100-250A Plug-in box			Minimum size fit 400-630A Plug-in box		
	L	L1	L2	L	L1	L2
4	2830	500	610	3131	650	610
3	2220	500	610	2520	650	610
2	1610	500	610	1910	650	610
1	1000	500	0	1300	650	0
0	400	/	/	400	/	/

table.14-1



fig.14-3

# Physical Data

## Joint

WavePro LT busway system adopts the double-headed torque limiting joint bolt. When the bolt is properly tightened, the top bolt head will break off so as to ensure the correctness of installation.

The joint has  $\pm 4\text{mm}$  adjustments for both side busway.

The connection cover plate avoids excessive adjustment of the joint. The joint may be safely removed without obstructing the adjacent length.

## Double-Headed Torque Limiting Joint Bolt

This bolt is the standard joint bolt offered for all WavePro LT Series Busway.

- When the bolt is properly tightened, the outer head will break off with the bright red label removed. This will help eliminate any errors occur during installation by a quick visual inspection.
- No torque wrench is required for initial installation.
- The bolt is reusable after the top head is broken off by using a standard torque wrench on the second bolt head.
- The standard torque is  $68 \pm 5\text{N.m}$ .

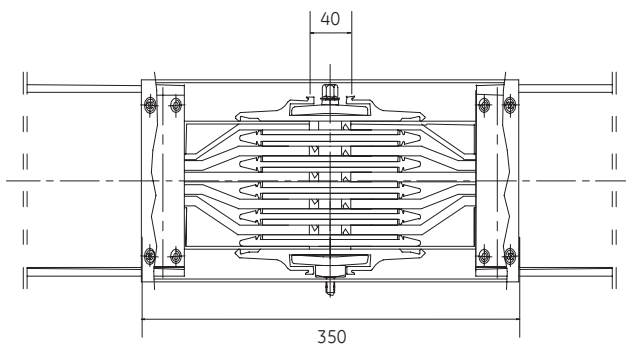


fig.15-1



fig.15-2

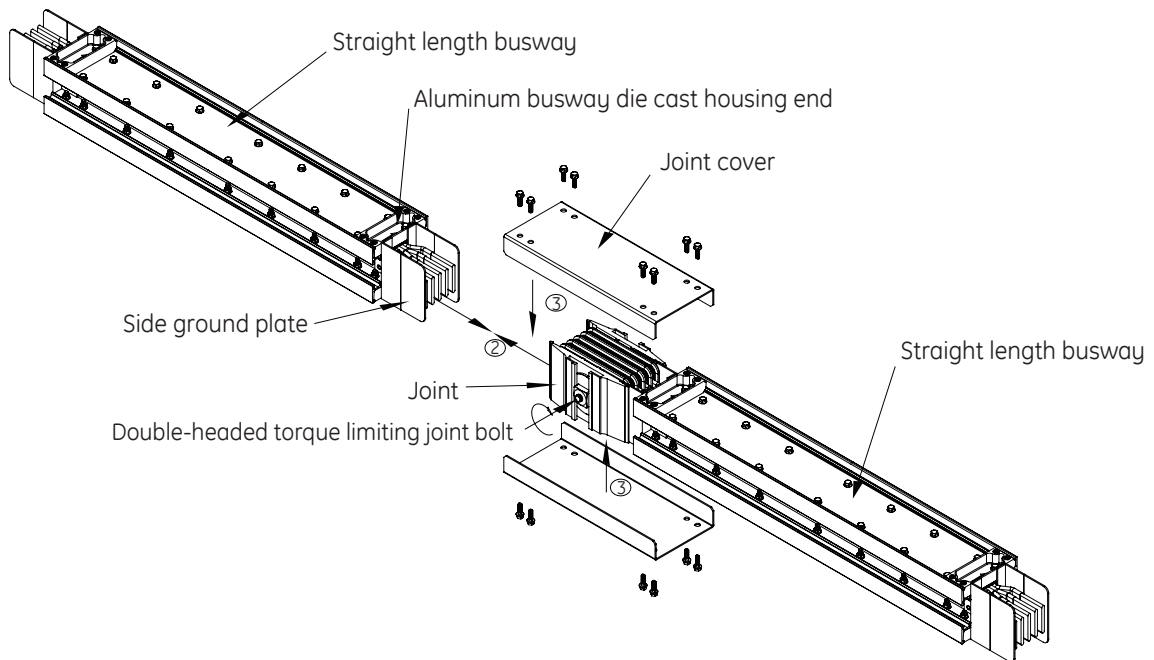


fig.15-3

# Physical Data

## Fittings

WavePro LT busway system has a complete family of fittings to meet virtually all layout requirements using the compact minimum sizes shown. Special turns such as flat angles greater than 90° and crosses are also available.

Each piece of busway is labeled to maintain proper phasing. All housing width and depth dimensions are identical to straight lengths.

**Note: Offsets and combination elbows are typically used only when standard elbows will not fit.**

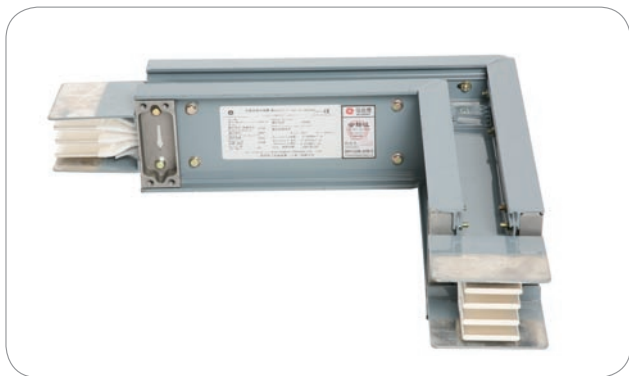
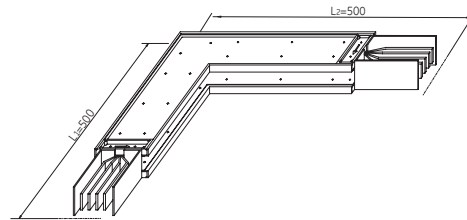
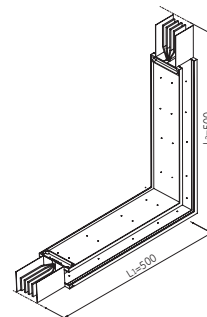


fig.16-1



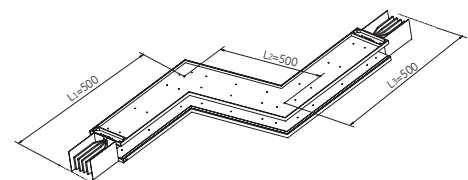
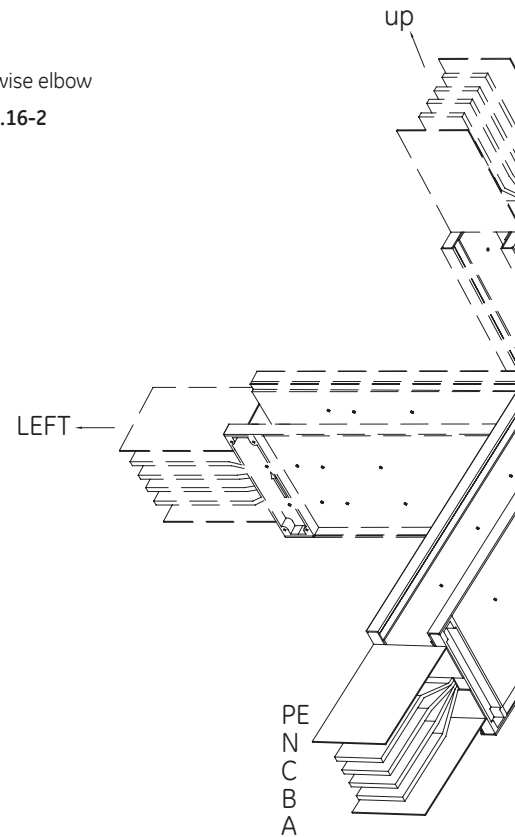
Edgewise elbow

fig.16-2



Flatwise elbow

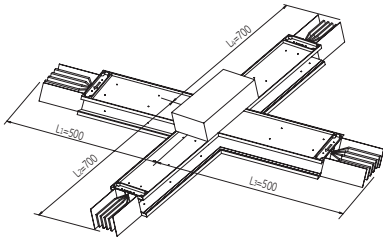
fig.16-3



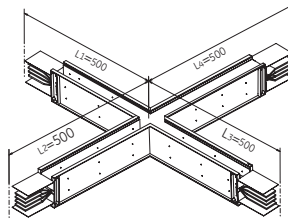
Edgewise offset

fig.16-4





Edgewise cross  
fig.17-5



Flatwise cross  
fig.17-4

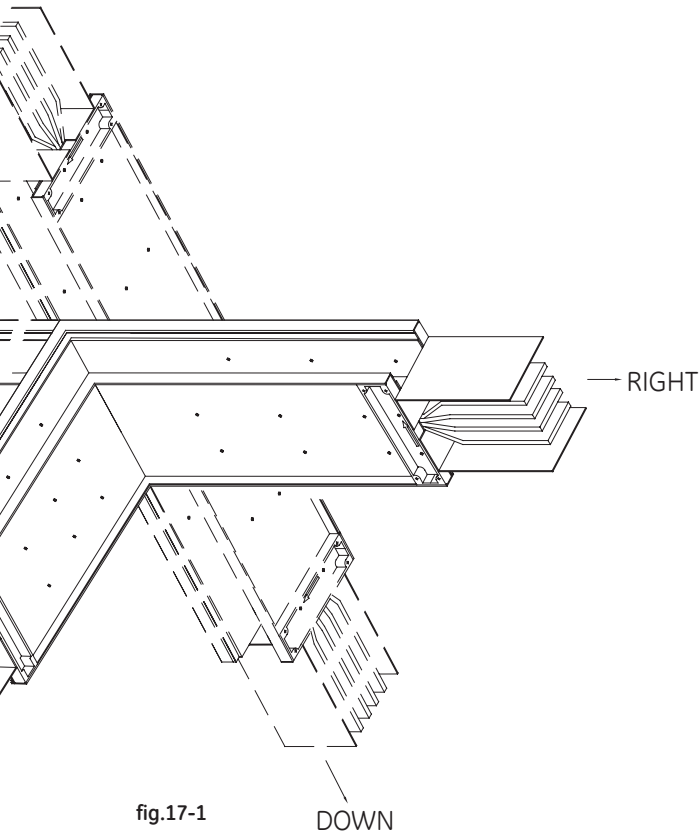
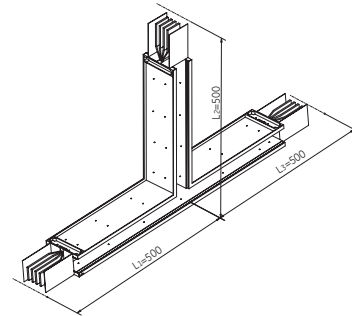
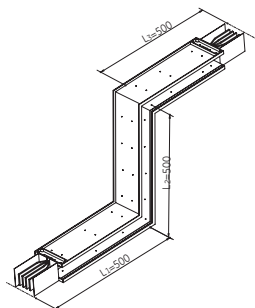


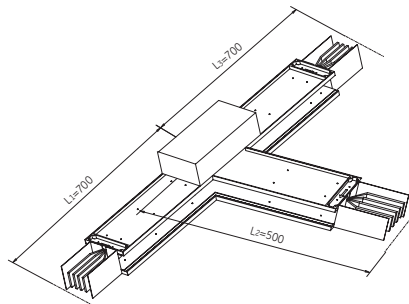
fig.17-1



Flatwise tee  
fig.17-4

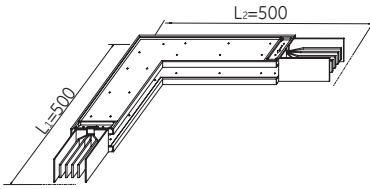


Flatwise offset  
fig.17-2

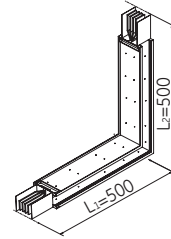


Edgewise tee  
fig.17-3

# Physical Data



Edgewise elbow  
fig.18-1



Flatwise elbow  
fig.18-2

## Fittings Data

### Edgewise elbow

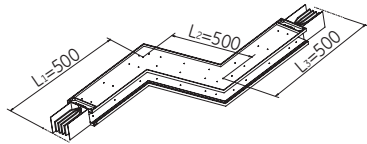
Rated current (A)	Copper busway size (mm)					Aluminium busway size (mm)				
	Busway height H	Minimum		Standard		Busway height H	Minimum		Standard	
		L1	L2	L1	L2		L1	L2	L1	L2
100	~	~	~	~	~	88	245	245	500	500
160	~	~	~	~	~	88	245	245	500	500
200	~	~	~	~	~	88	245	245	500	500
250	90	245	245	500	500	88	245	245	500	500
400	90	245	245	500	500	98	245	245	500	500
500	~	~	~	~	~	108	245	245	500	500
630	93	245	245	500	500	118	245	245	500	500
800	103	245	245	500	500	138	245	245	500	500
1000	131	245	245	500	500	153	245	245	500	500
1250	138	245	245	500	500	183	245	245	500	500
1350	143	245	245	500	500	198	245	245	500	500
1600	168	245	245	500	500	218	245	245	500	500
2000	203	245	245	500	500	258	245	245	500	500
2500	248	245	245	500	500	308	245	245	500	500
3150	340	245	245	500	500	460	245	245	500	500
3800	390	245	245	500	500	550	245	245	500	500
4000	410	245	245	500	500	590	245	245	500	500
4500	450	245	245	500	500	~	~	~	~	~
5000	540	245	245	500	500	~	~	~	~	~

table.18-1

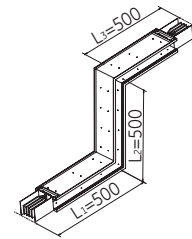
### Flatwise elbow

Rated current (A)	Copper busway size (mm)					Aluminium busway size (mm)				
	Busway height H	Minimum		Standard		Busway height H	Minimum		Standard	
		L1	L2	L1	L2		L1	L2	L1	L2
100	~	~	~	~	~	88	224	224	500	500
160	~	~	~	~	~	88	224	224	500	500
200	~	~	~	~	~	88	224	224	500	500
250	90	225	225	500	500	88	224	224	500	500
400	90	225	225	500	500	98	229	229	500	500
500	~	~	~	~	~	108	234	234	500	500
630	93	226.5	226.5	500	500	118	239	239	500	500
800	103	231.5	231.5	500	500	138	249	249	500	500
1000	131	245.5	245.5	500	500	153	256.5	256.5	500	500
1250	138	249	249	500	500	183	271.5	271.5	500	500
1250	138	249	249	500	500	183	271.5	271.5	500	500
1250	138	249	249	500	500	183	271.5	271.5	500	500
1250	138	249	249	500	500	183	271.5	271.5	500	500
2500	248	304	304	500	500	308	334	334	500	500
3150	340	350	350	500	500	460	410	410	500	500
3800	390	375	375	500	500	550	455	455	500	500
4000	410	385	385	500	500	590	475	475	500	500
4500	450	405	405	500	500	~	~	~	~	~
5000	540	450	450	500	500	~	~	~	~	~

table.18-2



Edgewise offset  
fig.19-1



Flatwise offset  
fig.19-2

### Edgewise offset

Rated current (A)	Copper busway size (mm)							Aluminium busway size (mm)						
	Busway height H	Minimum			Standard			Busway height H	Minimum			Standard		
		L1	L2	L3	L1	L2	L3		L1	L2	L3	L1	L2	L3
100	~	~	~	~	~	~	~	88	245	50	245	500	500	500
160	~	~	~	~	~	~	~	88	245	50	245	500	500	500
200	~	~	~	~	~	~	~	88	245	50	245	500	500	500
250	90	245	50	245	500	500	500	88	245	50	245	500	500	500
400	90	245	50	245	500	500	500	98	245	50	245	500	500	500
500	~	~	~	~	~	~	~	108	245	50	245	500	500	500
630	93	245	50	245	500	500	500	118	245	50	245	500	500	500
800	103	245	50	245	500	500	500	138	245	50	245	500	500	500
1000	131	245	50	245	500	500	500	153	245	50	245	500	500	500
1250	138	245	50	245	500	500	500	183	245	50	245	500	500	500
1350	143	245	50	245	500	500	500	198	245	50	245	500	500	500
1600	168	245	50	245	500	500	500	218	245	50	245	500	500	500
2000	203	245	50	245	500	500	500	258	245	50	245	500	500	500
2500	248	245	50	245	500	500	500	308	245	50	245	500	500	500
3150	340	245	50	245	500	500	500	460	245	50	245	500	500	500
3800	390	245	50	245	500	500	500	550	245	50	245	500	500	500
4000	410	245	50	245	500	500	500	590	245	50	245	500	500	500
4500	450	245	50	245	500	500	500	~	~	~	~	~	~	~
5000	540	245	50	245	500	500	500	~	~	~	~	~	~	~

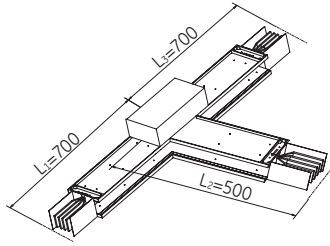
table.19-1

### Flatwise offset

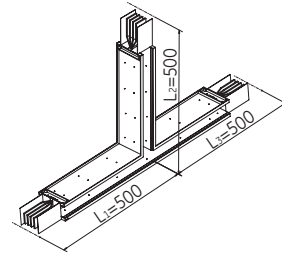
Rated current (A)	Copper busway size (mm)							Aluminium busway size (mm)						
	Busway height H	Minimum			Standard			Busway height H	Minimum			Standard		
		L1	L2	L3	L1	L2	L3		L1	L2	L3	L1	L2	L3
100	~	~	~	~	~	~	~	88	224	50	224	500	500	500
160	~	~	~	~	~	~	~	88	224	50	224	500	500	500
200	~	~	~	~	~	~	~	88	224	50	224	500	500	500
250	90	225	50	225	500	500	500	88	224	50	224	500	500	500
400	90	225	50	225	500	500	500	98	229	50	229	500	500	500
500	~	~	~	~	~	~	~	108	234	50	234	500	500	500
630	93	226.5	50	226.5	500	500	500	118	239	50	239	500	500	500
800	103	231.5	50	231.5	500	500	500	138	249	50	249	500	500	500
1000	131	245.5	50	245.5	500	500	500	153	256.5	50	256.5	500	500	500
1250	138	249	50	249	500	500	500	183	271.5	50	271.5	500	500	500
1350	143	251.5	50	251.5	500	500	500	198	279	50	279	500	500	500
1600	168	264	50	264	500	500	500	218	289	50	289	500	500	500
2000	203	281.5	50	281.5	500	500	500	258	309	50	309	500	500	500
2500	248	304	50	304	500	500	500	308	334	50	334	500	500	500
3150	340	350	50	350	500	500	500	460	410	50	410	500	500	500
3800	390	375	50	375	500	500	500	550	455	50	455	500	500	500
4000	410	385	50	385	500	500	500	590	475	50	475	500	500	500
4500	450	405	50	405	500	500	500	~	~	~	~	~	~	~
5000	540	450	50	450	500	500	500	~	~	~	~	~	~	~

table.19-2

# Physical Data



Edgewise tee  
fig.20-1



Flatwise tee  
fig.20-2

## Fittings Data

### Edgewise tee

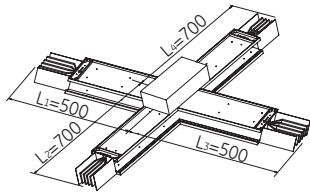
Rated current (A)	Copper busway size (mm)							Aluminium busway size (mm)						
	Busway height H	Minimum			Standard			Busway height H	Minimum			Standard		
		L1	L2	L3	L1	L2	L3		L1	L2	L3	L1	L2	L3
100	~	~	~	~	~	~	~	88	340	300	340	500	500	500
160	~	~	~	~	~	~	~	88	340	300	340	500	500	500
200	~	~	~	~	~	~	~	88	340	300	340	500	500	500
250A	90	342	300	342	500	500	500	88	340	300	340	500	500	500
400A	90	342	300	342	500	500	500	98	350	300	350	500	500	500
500	~	~	~	~	~	~	~	108	360	300	360	500	500	500
630	93	345	300	345	500	500	500	118	370	300	370	500	500	500
800	103	355	300	355	500	500	500	138	390	300	390	500	500	500
1000	131	383	300	383	500	500	500	153	405	300	405	500	500	500
1250A	138	390	300	390	500	500	500	183	435	300	435	500	500	500
1350A	143	395	300	395	500	500	500	198	450	300	450	500	500	500
1600A	168	420	300	420	500	500	500	218	470	300	470	500	500	500
2000A	203	455	300	455	500	500	500	258	510	300	510	700	500	700
2500	248	500	300	500	500	500	500	308	560	300	560	700	500	700
3150	340	435	300	435	700	500	700	460	495	300	495	700	500	700
3800	390	460	300	460	700	500	700	550	540	300	540	700	500	700
4000	410	470	300	470	700	500	700	590	560	300	560	700	500	700
4500	450	490	300	490	700	500	700	~	~	~	~	~	~	~
5000	540	535	300	535	700	500	700	~	~	~	~	~	~	~

table.20-1

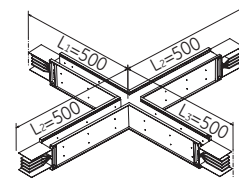
### Flatwise tee

Rated current (A)	Copper busway size (mm)							Aluminium busway size (mm)						
	Busway height H	Minimum			Standard			Busway height H	Minimum			Standard		
		L1	L2	L3	L1	L2	L3		L1	L2	L3	L1	L2	L3
100	~	~	~	~	~	~	~	88	224	224	224	500	500	500
160	~	~	~	~	~	~	~	88	224	224	224	500	500	500
200	~	~	~	~	~	~	~	88	224	224	224	500	500	500
250	90	225	225	225	500	500	500	88	224	224	224	500	500	500
400	90	225	225	225	500	500	500	98	229	229	229	500	500	500
500	~	~	~	~	~	~	~	108	234	234	234	500	500	500
630	93	226.5	226.5	226.5	500	500	500	118	239	239	239	500	500	500
800	103	231.5	231.5	231.5	500	500	500	138	249	249	249	500	500	500
1000	131	245.5	245.5	245.5	500	500	500	153	256.5	256.5	256.5	500	500	500
1250	138	249	249	249	500	500	500	183	271.5	271.5	271.5	500	500	500
1350	143	251.5	251.5	251.5	500	500	500	198	279	279	279	500	500	500
1600	168	264	264	264	500	500	500	218	289	289	289	500	500	500
2000	203	281.5	281.5	281.5	500	500	500	258	309	309	309	500	500	500
2500	248	304	304	304	500	500	500	308	334	334	334	500	500	500
3150	340	350	350	350	500	500	500	460	410	410	410	500	500	500
3800	390	375	375	375	500	500	500	550	455	455	455	500	500	500
4000	410	385	385	385	500	500	500	590	475	475	475	500	500	500
4500	450	405	405	405	500	500	500	~	~	~	~	~	~	~
5000A	540	450	450	450	500	500	500	~	~	~	~	~	~	~

table.20-2



Edgewise cross  
fig.21-1



Flatwise cross  
fig.21-2

### Edgewise cross

Rated current (A)	Copper busway size (mm)									Aluminium busway size (mm)								
	Busway height H	Minimum				Standard				Busway height H	Minimum				Standard			
		L1	L2	L3	L4	L1	L2	L3	L4		L1	L2	L3	L4	L1	L2	L3	L4
100	~	~	~	~	~	~	~	~	~	88	300	372	300	372	500	500	500	500
160	~	~	~	~	~	~	~	~	~	88	300	372	300	372	500	500	500	500
200	~	~	~	~	~	~	~	~	~	88	300	372	300	372	500	500	500	500
250	90	300	374	300	374	500	500	500	500	88	300	372	300	372	500	500	500	500
400	90	300	374	300	374	500	500	500	500	98	300	382	300	382	500	500	500	500
500	~	~	~	~	~	~	~	~	~	108	300	392	300	392	500	500	500	500
630	93	300	377	300	377	500	500	500	500	118	300	402	300	402	500	500	500	500
800	103	300	387	300	387	500	500	500	500	138	300	422	300	422	500	500	500	500
1000	131	300	415	300	415	500	500	500	500	153	300	437	300	437	500	500	500	500
1250	138	300	422	300	422	500	500	500	500	183	300	467	300	467	500	500	500	500
1350	143	300	427	300	427	500	500	500	500	198	300	482	300	482	500	500	500	500
1600	168	300	452	300	452	500	500	500	500	218	300	502	300	502	500	700	500	700
2000	203	300	487	300	487	500	700	500	700	258	300	542	300	542	500	700	500	700
2500	248	300	532	300	532	500	700	500	700	308	300	592	300	592	500	700	500	700
3150	340	300	467	300	467	500	700	500	700	460	300	527	300	527	500	700	500	700
3800	390	300	492	300	492	500	700	500	700	550	300	572	300	572	500	700	500	700
4000	410	300	502	300	502	500	700	500	700	590	300	592	300	592	500	700	500	700
4500	450	300	522	300	522	500	700	500	700	~	~	~	~	~	~	~	~	~
5000A	540	300	567	300	567	500	700	500	700	~	~	~	~	~	~	~	~	~

table.21-1

### Flatwise cross

Rated current (A)	Busway height H	Copper busway size (mm)								Busway height H	Aluminium busway size (mm)							
		Minimum				Standard					Minimum				Standard			
		L1	L2	L3	L4	L1	L2	L3	L4		L1	L2	L3	L4	L1	L2	L3	L4
100	~	~	~	~	~	~	~	~	~	88	224	224	224	224	500	500	500	500
160	~	~	~	~	~	~	~	~	~	88	224	224	224	224	500	500	500	500
200	~	~	~	~	~	~	~	~	~	88	224	224	224	224	500	500	500	500
250	90	225	225	225	225	500	500	500	500	88	224	224	224	224	500	500	500	500
400	90	225	225	225	225	500	500	500	500	98	229	229	229	229	500	500	500	500
500	~	~	~	~	~	~	~	~	~	108	234	234	234	234	500	500	500	500
630	93	226.5	226.5	226.5	226.5	500	500	500	500	118	239	239	239	239	500	500	500	500
800	103	231.5	231.5	231.5	231.5	500	500	500	500	138	249	249	249	249	500	500	500	500
1000	131	245.5	245.5	245.5	245.5	500	500	500	500	153	256.5	256.5	256.5	256.5	500	500	500	500
1250	138	249	249	249	249	500	500	500	500	183	271.5	271.5	271.5	271.5	500	500	500	500
1350	143	251.5	251.5	251.5	251.5	500	500	500	500	198	279	279	279	279	500	500	500	500
1600	168	264	264	264	264	500	500	500	500	218	289	289	289	289	500	500	500	500
2000	203	281.5	281.5	281.5	281.5	500	500	500	500	258	309	309	309	309	500	500	500	500
2500	248	304	304	304	304	500	500	500	500	308	334	334	334	334	500	500	500	500
3150	340	350	350	350	350	500	500	500	500	460	410	410	410	410	500	500	500	500
3800	390	375	375	375	375	500	500	500	500	550	455	455	455	455	500	500	500	500
4000	410	385	385	385	385	500	500	500	500	590	475	475	475	475	500	500	500	500
4500	450	405	405	405	405	500	500	500	500	~	~	~	~	~	~	~	~	~
5000	540	450	450	450	450	500	500	500	500	~	~	~	~	~	~	~	~	~

table.21-2



# Physical Data

## Flanged End

Flanged end and end tap box can be used in connection with switchgear and transformer of any type, and users can determine, the spacing between the stubs of the bus bar based on the specific applications.

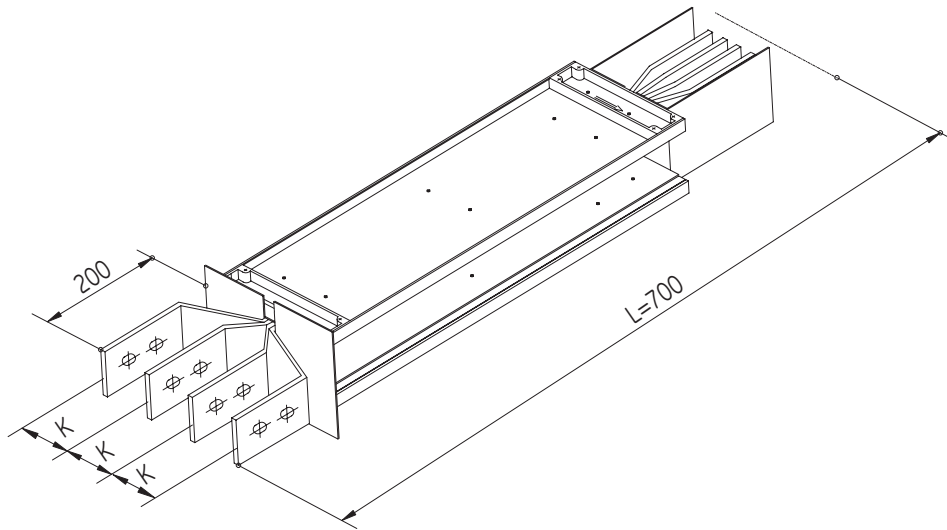


fig.22-1

**Note:**

1. AS a standard flanged end, when the bus bar current is less than or equal to 1600A,  $K = 100\text{mm}$ ; when the bus bar current is more than 1600A,  $K = 120\text{mm}$ .
2. All the dimensions provided are for standard products. Please contact our engineers for customized products' dimensions.

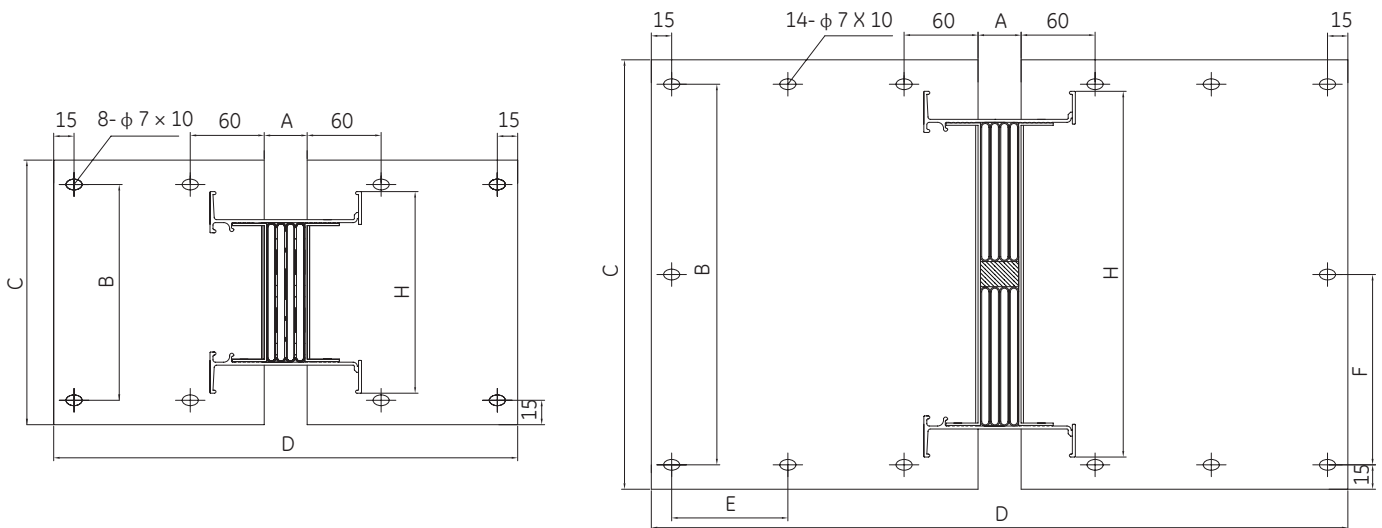


fig.23-1

**Copper Bar**

Size: mm

Rated current (A)	H	A		B	C	D	
		4 Wire	5 Wire			4 Wire	5 Wire
100	~	~	~	~	~	~	~
160	~	~	~	~	~	~	~
200	~	~	~	~	~	~	~
250	90	35	39	92	122	390	490
400	90	35	39	92	122	390	490
500	~	~	~	~	~	~	~
630	93	35	39	95	125	390	490
800	103	35	39	105	135	390	490
1000	131	35	39	133	163	390	490
1250	138	35	39	140	170	390	490
1350	143	35	39	145	175	390	490
1600	168	35	39	170	200	390	490
2000	203	35	39	205	235	450	570
2500	263	35	39	265	295	450	570
3150	340	35	39	342	372	450	570
3800	390	35	39	392	422	450	570
4000	410	35	39	412	442	450	570
4500	500	35	39	502	532	450	570
5000	540	35	39	542	572	450	570

table.23-1

**Aluminium Bar**

Size: mm

Rated current (A)	H	A		B	C	D	
		4 Wire	5 Wire			4 Wire	5 Wire
100	88	35	39	90	120	390	490
160	88	35	39	90	120	390	490
200	88	35	39	90	120	390	490
250	88	35	39	90	120	390	490
400	98	35	39	100	130	390	490
500	108	35	39	110	140	390	490
630	118	35	39	120	150	390	490
800	138	35	39	140	170	390	490
1000	153	35	39	155	185	390	490
1250	183	35	39	185	215	390	490
1350	198	35	39	200	230	390	490
1600	218	35	39	220	250	390	490
2000	258	35	39	260	290	450	570
2500	308	35	39	310	340	450	570
3150	460	35	39	462	492	450	570
3800	550	35	39	552	582	450	570
4000	590	35	39	592	622	450	570
4500	~	~	~	~	~	~	~
5000	~	~	~	~	~	~	~

table.23-2

**Note:**

- As shown in the figure, for the location of the hole of outboard, it shall be 15mm away from the outer edge; while for the location of the one of inboard, it shall be 60mm away from the inner edge. The rest distance wherein is given uniformly for mid holes according to situation.
- E and F indicate the distance between the centers of two adjacent holes, and the value shall be limited with the extension from 100mm to 250mm, E and F will be confirmed and sent to the customer when the end tap box dimension is confirmed.

# Physical Data

## Flanged End Details

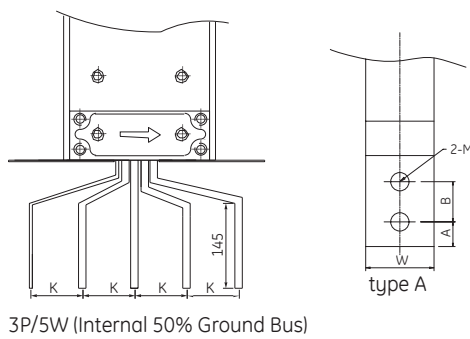
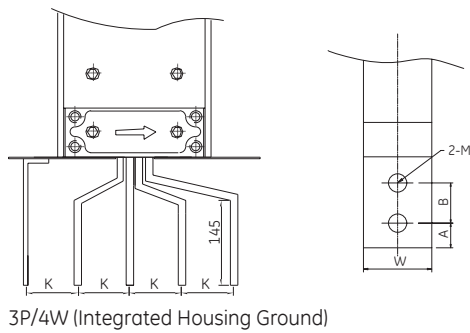
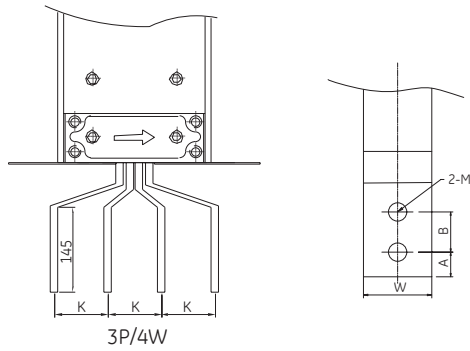


fig.24-1

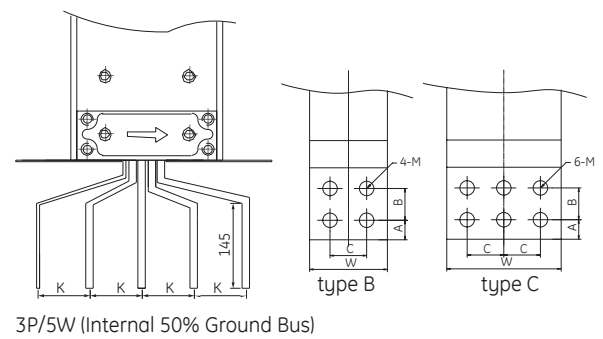
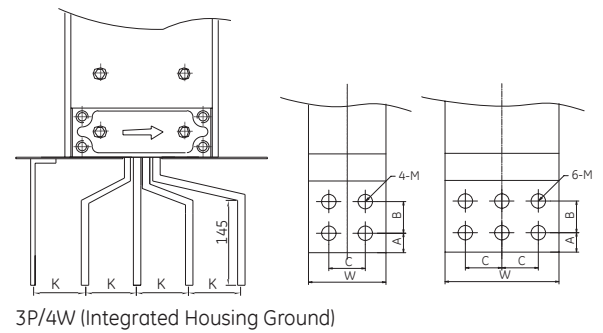
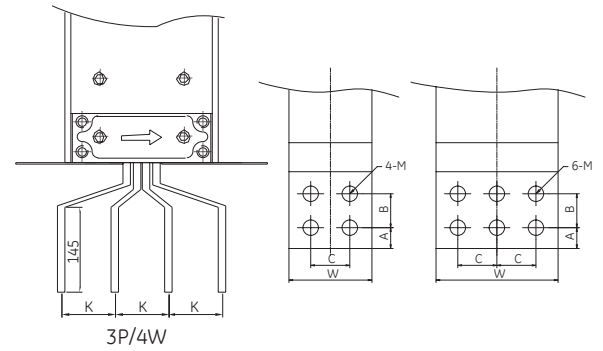


fig.24-2

### Copper Busbar

Size: mm

Rated current (A)	A	B	C	K	2-M	Type
100	~	~	~	~	~	~
160	~	~	~	~	~	~
200	~	~	~	~	~	~
250	20	40	~	100	2-φ 11	A
400	20	40	~	100	2-φ 11	A
500	~	~	~	~	~	~
630	20	40	~	100	2-φ 11	A
800	20	40	~	100	2-φ 11	A
1000	25	50	~	100	2-φ 13	A
1250	20	40	40	100	4-φ 13	B
1350	25	50	50	100	4-φ 13	B
1600	30	60	60	100	4-φ 17	B
2000	25	50	50	120	6-φ 17	C
2500	30	60	60	120	6-φ 17	C
3150	30	60	60	120	4-φ 17	B
3800	25	50	50	120	6-φ 17	C
4000	25	50	50	120	6-φ 17	C
4500	30	60	60	120	6-φ 17	C
5000	30	60	60	120	6-φ 17	C

table.24-1

### Aluminium Busbar

Size: mm

Rated current (A)	A	B	C	K	2-M	Type
100	20	40	~	100	2-φ 11	A
160	20	40	~	100	2-φ 11	A
200	20	40	~	100	2-φ 11	A
250	20	40	~	100	2-φ 11	A
400	20	40	~	100	2-φ 11	A
500	25	50	~	100	2-φ 13	A
630	25	50	~	100	2-φ 13	A
800	20	40	40	100	4-φ 13	B
1000	20	40	40	100	4-φ 13	B
1250	30	60	60	100	4-φ 17	B
1350	30	60	60	100	4-φ 17	B
1600	25	50	50	100	6-φ 17	C
2000	30	60	60	120	6-φ 17	C
2500	30	60	60	120	6-φ 17	C
3150	25	50	50	120	6-φ 17	C
3800	30	60	60	120	6-φ 17	C
4000	30	60	60	120	6-φ 17	C
4500	~	~	~	~	~	~
5000	~	~	~	~	~	~

table.24-2

Note: For the current equal to or above 3150A, two bars shall be adopted for per phase, and the hole dimension shown in the tab shall be furnished in both bars.

## End Tap Box

WavePro LT busway system tap boxes are used where a run of busway is fed by cable. We offer standard size end tap box (1m × 1m × 1m) while we also supply with nonstandard box according to the on-site measurement.

All the dimension provided are for standard products. Please contact our engineers for customized products' dimensions.

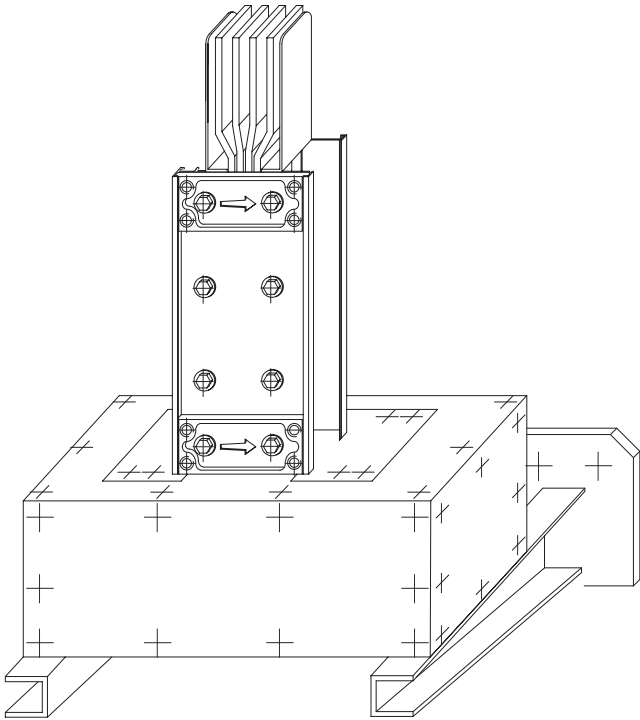


fig.25-1

## Terminal Cover

Terminal cover is installed to terminate the busway, preventing outsider environment from contacting with the live parts, thus enclosing the whole bus system.

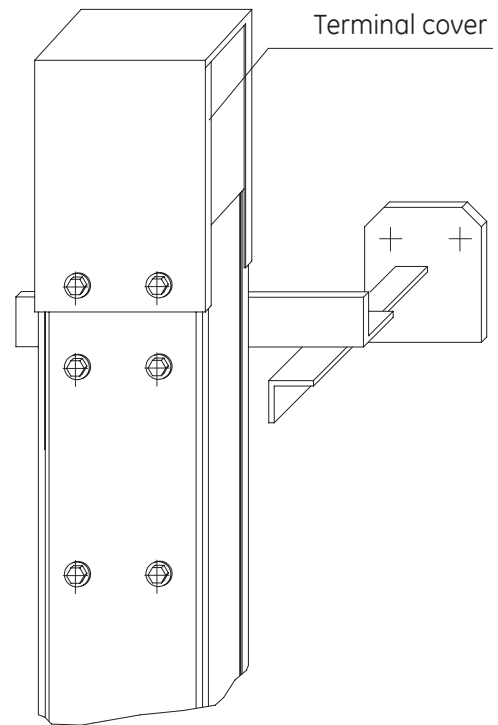


fig.25-2

# Physical Data

## Flanged End Cutout and Hole Pattern

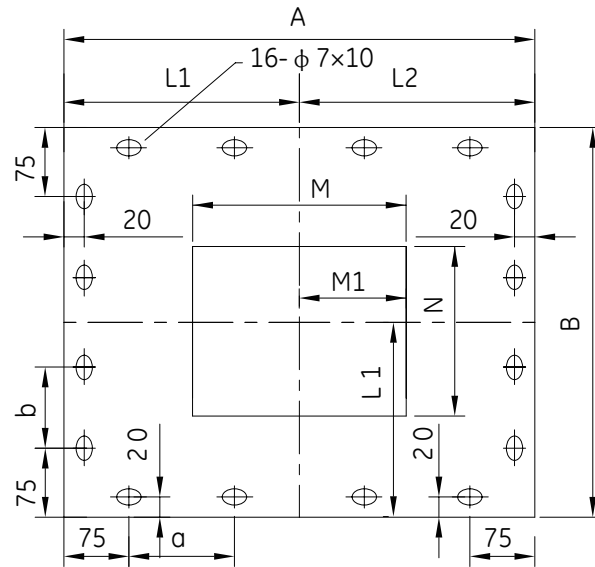


fig.26-1

### Copper Busbar

Size: mm

Rated current (A)	M		N
	4 Wire	5Wire	
100	~	~	~
160	~	~	~
200	~	~	~
250	330	430	62
400	330	430	62
500	~	~	~
630	330	430	65
800	330	430	75
1000	330	430	103
1250	330	430	110
1350	330	430	115
1600	330	430	140
2000	390	510	175
2500	390	510	235
3150	390	510	312
3800	390	510	362
4000	390	510	382
4500	390	510	472
5000	390	510	512

table.26-1

Note:

- "A" indicates the length of end tap box while "B" indicates the width, they are based on the site situation.
- "L1" and "L2" are based on the location of flanged end. For standard product, they are the same.
- "M1" is based on the location of flanged end. For standard product,  $M1=M/2$

### Aluminium Busbar

Size: mm

Rated current (A)	M		N
	4 Wire	5Wire	
100	330	430	60
160	330	430	60
200	330	430	60
250	330	430	60
400	330	430	70
500	330	430	80
630	330	430	90
800	330	430	110
1000	330	430	125
1250	330	430	155
1350	330	430	170
1600	330	430	190
2000	390	510	230
2500	390	510	280
3150	390	510	432
3800	390	510	522
4000	390	510	562
4500	~	~	~
5000	~	~	~

table.26-2

- As shown in the figure, the hole in the corner shall be 75mm away from one edge of end tap box and 20mm away from the other, the rest distance wherein is given uniformly for mid holes according to situation.
- "a" and "b" indicate the distance between the centers of two adjacent holes, and the value shall be limited with the extension from 100mm to 250mm.

# Wall Flange

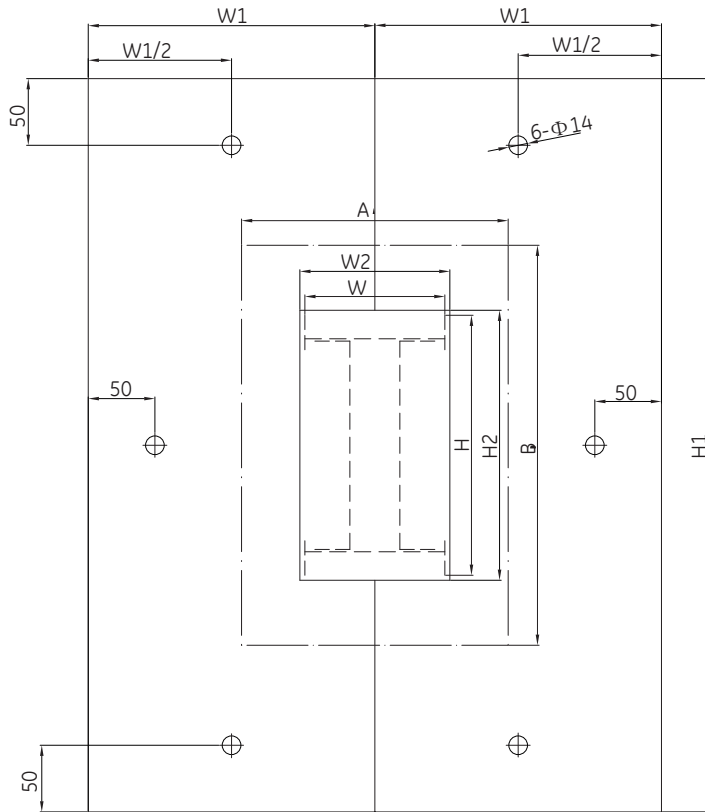


fig.27-1

**Note:**

1. W indicates the width of busway while H indicates the height;
2. A indicates the width of cutout while B indicates the height;
3. W1 indicates the external width of flange while H1 indicates the height;
4. W2 indicates the internal width of flange while H2 indicates the height;
5. The flange is dimidiate;
6. Flange is necessary in both sides of the cutout;
7. Flange is fixed against the wall with internal expansion bolt.

Size: mm

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 (≥)	
	Cu	Al	Cu	Al	Cu	Al	Cu	Al
100	~	128 × 88	~	230 × 190	~	215 × 390	~	140 × 100
160	~	128 × 88	~	230 × 190	~	215 × 390	~	140 × 100
200	~	128 × 88	~	230 × 190	~	215 × 390	~	140 × 100
250	128 × 90	128 × 88	230 × 192	230 × 190	215 × 392	215 × 390	140 × 102	140 × 100
400	128 × 90	128 × 98	230 × 192	230 × 200	215 × 392	215 × 400	140 × 102	140 × 110
500	~	128 × 108	~	230 × 210	~	215 × 410	~	140 × 120
630	128 × 93	128 × 118	230 × 195	230 × 220	215 × 395	215 × 420	140 × 105	140 × 130
800	128 × 103	128 × 138	230 × 205	230 × 240	215 × 405	215 × 440	140 × 115	140 × 150
1000	128 × 131	128 × 153	230 × 233	230 × 255	215 × 433	215 × 455	140 × 143	140 × 165
1250	128 × 138	128 × 183	230 × 240	230 × 285	215 × 440	215 × 485	140 × 150	140 × 195
1350	128 × 143	128 × 198	230 × 245	230 × 300	215 × 445	215 × 500	140 × 155	140 × 210
1600	128 × 168	128 × 218	230 × 270	230 × 320	215 × 470	215 × 520	140 × 180	140 × 230
2000	128 × 203	128 × 258	230 × 305	230 × 360	215 × 505	215 × 560	140 × 215	140 × 270
2500	128 × 263	128 × 308	230 × 365	230 × 410	215 × 565	215 × 610	140 × 275	140 × 320
3150	128 × 340	128 × 460	230 × 442	230 × 562	215 × 642	215 × 762	140 × 352	140 × 472
3800	128 × 390	128 × 550	230 × 492	230 × 652	215 × 692	215 × 852	140 × 402	140 × 562
4000	128 × 410	128 × 590	230 × 512	230 × 692	215 × 712	215 × 892	140 × 422	140 × 602
4500	128 × 500	~	230 × 602	~	215 × 802	~	140 × 512	~
5000	128 × 540	~	230 × 642	~	215 × 842	~	140 × 552	~

table.27-1

# Physical Data

## Expansion Length

Expansion length is the transition section compensating for thermal expansion, it is normally set each 60m in linear distance.

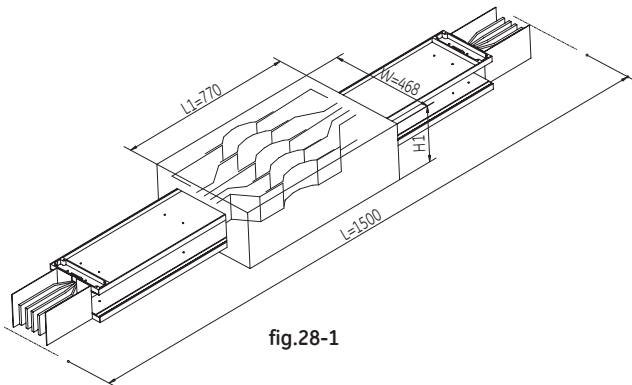


fig.28-1

Note:  $H1=H+67$  (H is bus height)

## Reducer

This transition section is used for reducing busbar size to the final load, it provides users with more economic power transmission and distribution method.

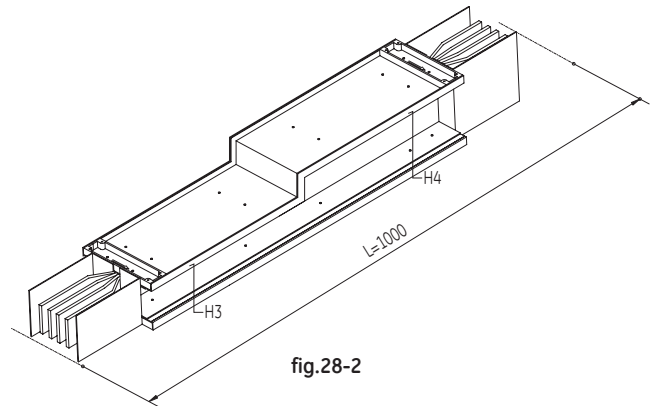


fig.28-2

Note: H3, H4 is the height of the busway, Please refer to table.13-1 and table.13-2.

## Transposition Section

Transposition section is the transition parts used for changing phase sequence of the busbar; its minimum size is 1500mm. The phase sequence of both sides has to be provided by the customer.

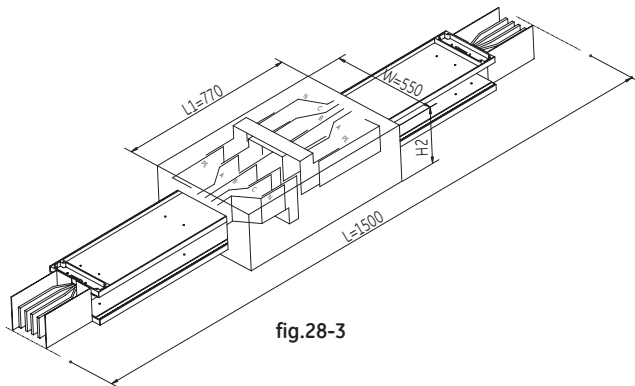


fig.28-3

Note:  $H2=H+200$ mm (H is busbar height)

Note:

- 1.For H dimensions please refer to table.13-1 and table.13-2.
- 2.All the dimensions provided are for standard products. Please contact our engineers for customized products' dimensions.



# Bus Plug

WavePro LT bus plugs are used to apply electrical power directly to the load from the busway system. The protection component in a bus plug can be either a circuit breaker or fuse.

## Circuit Breaker Bus Plugs:

- Circuit breaker protection is available for a current between 16A~1000A.
- GE circuit breakers are provided as standard offering.
- 3-Pole or 4-Pole circuit breakers may be installed in the plug for load protection, including accessories of circuit breakers such as rotary handles, shunt release, thermal magnetic release and leakage-current protection module.

## Fused Bus Plugs:

Fused bus plugs are made specifically per customer's project specifications. Please contact with our local sales office for ordering information.

- Unique fail-safe base pins: the plug is equipped with a positioning device that prevents incorrect installations.
- Base lugs: all the lugs are silver-plated to improve their electrical conductivity.

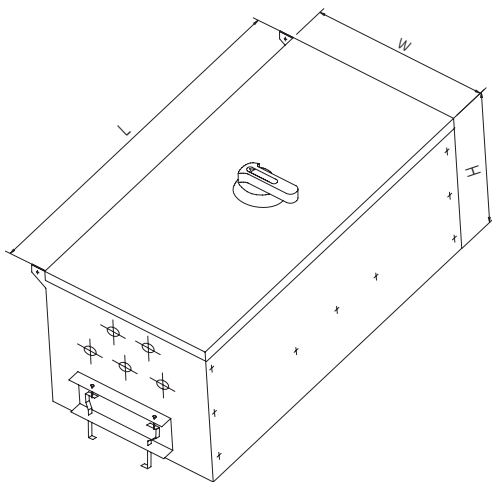


fig.29-1

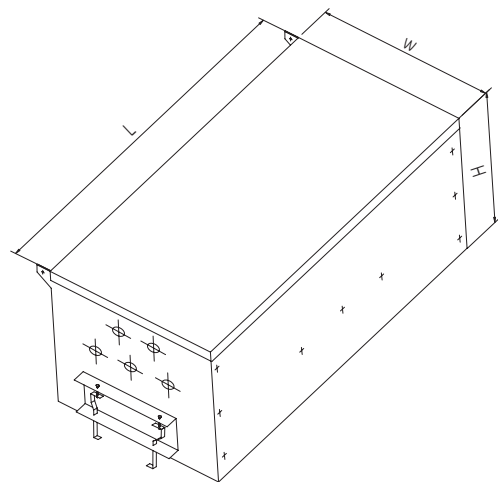


fig.29-2

## Physical data of plug (L × W × H) mm

\*For any nonstandard dimension ,please contact with us.

Operation mode	Rated current (A)	Dimension of plug (L × W × H) mm
Manual operating mechanism	100~160	450 × 240 × 260
	250	550 × 260 × 280
	400	650 × 300 × 300
	630	750 × 340 × 320
	800	1000 × 370 × 340
	1000	1200 × 550 × 400
Rotary operating mechanism	100~160	450 × 240 × (300+70)
	250	550 × 260 × (320+70)
	400	650 × 300 × (340+70)
	630	750 × 340 × (360+70)
	800	1000 × 370 × (380+70)
	1000	1200 × 550 × (400+70)

table.29-1

**NOTE:** The added 70mm is for the rotary handle installation space.

# Physical Data

## GE Record Plus Breakers in the Bus Plug

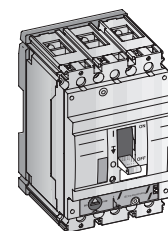
GE's Record Plus Series a full range of breakers offered with WavePro LT Bus Plug.

Application	Frame Type	Trip Range (A)	IC Ratings (kA)			NEMA AB1 IC Ratings (kA)		
			240V	400/415V	690V	240V	480V	600V
Low Breaking Capacity Range	FDE 63/160	16 - 125	40	25	4.5	-	-	-
	FDE 63/160	160	40	25	4.5	-	-	-
	FDS 63/160	16 - 125	50	36	6	50	25	6
	FDS 63/160	160	50	36	6	50	25	6
	FEV 250	125 - 250	65	36	-	65	36	22
	FKV 800	800	-	50	-	-	42	-
	FKV 1250	1000 - 1250	-	50	-	-	50	-
	FKV 1600	1600	-	50	-	-	42	-
Mid Breaking Capacity Range	FDN 63/160	16 - 125	85	50	8	65	36	8
	FDN 63/160	160	85	50	8	65	36	8
	FEN 160	25 - 160	85	50	10	100	50	25
	FEN 250	125 - 250	85	50	10	100	50	25
	FGN 400	160 - 400	85	50	10	100	50	25
	FGN 630	250 - 630	85	50	10	100	50	25
	FKN 800	800	85	50	20	85	42	25
	FKN 1250	1000 - 1250	85	50	20	85	42	25
	FKN 1600	1600	85	50	20	85	42	25
High Breaking Capacity Range	FDH 63/160	16 - 125	100	80	10	100	50	10
	FDH 63/160	160	100	80	10	100	50	10
	FEH 160	25 - 160	100	80	22	150	65	36
	FEH 250	125 - 250	100	80	15	150	65	36
	FGH 400	160 - 400	100	80	22	150	65	36
	FGH 630	250 - 630	100	80	22	150	65	36
	FKH 800	800	100	80	25	-	-	-
	FKH 1250	1000 - 1250	100	80	25	-	-	-
	FKH 1600	1600	100	80	25	-	-	-

table.30-1

# GE Record Plus Breakers

## Low Breaking Capacity Range



Frame D FDE 63/160		3 Pole 3 Trips		4 Pole 4 Trips	
Rating (A)	Breaking Capacity Icu, (kA)	Catalogue Number	Reference Number	Catalogue Number	Reference Number
16	25	FDE36TC016EF	430001	FDE46TC016EF	430008
20	25	FDE36TC020EF	430002	FDE46TC020EF	430009
25	25	FDE36TC025EF	430003	FDE46TC025EF	430010
32	25	FDE36TC032EF	430004	FDE46TC032EF	430011
40	25	FDE36TC040EF	430005	FDE46TC040EF	430012
50	25	FDE36TC050EF	430006	FDE46TC050EF	430013
63	25	FDE36TC063EF	430007	FDE46TC063EF	430014
80	25	FDE36TC080GF	430276	FDE46TC080GF	430299
100	25	FDE36TC100GF	430279	FDE46TC100GF	430302
125	25	FDE36TC125GF	430282	FDE46TC125GF	430305
160	25	FDE36TC160GF	433566	FDE46TC160GF	433669

table.31-1

Frame D FDS 63/160		3 Pole 3 Trips		4 Pole 4 Trips	
Rating (A)	Breaking Capacity Icu, (kA)	Catalogue Number	Reference Number	Catalogue Number	Reference Number
16	36	FDS35TD016ED	430161	FDS46TD016ED	430224
20	36	FDS35TD020ED	430163	FDS46TD020ED	430226
25	36	FDS35TD025ED	430165	FDS46TD025ED	430228
32	36	FDS35TD032ED	430167	FDS46TD032ED	430230
40	36	FDS35TD040ED	430169	FDS46TD040ED	430232
50	36	FDS35TD050ED	430178	FDS46TD050ED	430241
63	36	FDS35TD063ED	432952	FDS46TD063ED	432964
80	36	FDS35TD080GD	432955	FDS46TD080GD	432967
100	36	FDS35TD100GD	432958	FDS46TD100GD	432970
125	36	FDS35TD125GD	432961	FDS46TD125GD	432973
160	36	FDS35TD160GD	433602	FDS46TD160GD	433604

table.31-2

Frame E FEV 250		3 Pole 3 Trips		4 Pole 3 Trips	
Rating (A)	Breaking Capacity Icu, (kA)	Catalogue Number	Reference Number	Catalogue Number	Reference Number
125	36	FEV36TA125KF	432416	FEV46TA125KF	431082
160	36	FEV36TA160KF	436798	FEV46TA160KF	436817
200	36	FEV36TA200KF	431058	FEV46TA200KF	431094
250	36	FEV36TA250KF	431061	FEV46TA250KF	431097

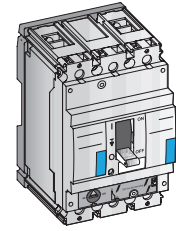
table.31-3

Frame K FKV 800/1600		3 Pole 3 Trips		4 Pole 4 Trips	
Rating (A)	Breaking Capacity Icu, (kA)	Catalogue Number	Reference Number	Catalogue Number	Reference Number
800	50	FKV36NE800PPF	435041	FKV46NE800PPF	435042
1000	50	FKV36NE100SQF	435040	FKV46NE100SQF	435066
1250	50	FKV36NE125SSF	435035	FKV46NE125SSF	435083
1600	50	FKV36NE160TTF	435032	FKV46NE160TTF	435092

table.31-4

# Physical Data

## GE Record Plus Breakers Mid Breaking Capacity Range



Frame D FDN 63/160		3 Pole 3 Trips		4 Pole 4 Trips	
Rating (A)	Breaking Capacity Icu, (kA)	Catalogue Number	Reference Number	Catalogue Number	Reference Number
16	50	FDN36TD016ED	430100	FDN46TD016ED	430131
20	50	FDN36TD020ED	430101	FDN46TD020ED	430132
25	50	FDN36TD025ED	430102	FDN46TD025ED	430133
32	50	FDN36TD032ED	430103	FDN46TD032ED	430134
40	50	FDN36TD040ED	430104	FDN46TD040ED	430135
50	50	FDN36TD050ED	430105	FDN46TD050ED	430136
63	50	FDN36TD063ED	430106	FDN46TD063ED	430137
80	50	FDN36TD080GD	430630	FDN46TD080GD	430752
100	50	FDN36TD100GD	430633	FDN46TD100GD	430755
125	50	FDN36TD125GD	430636	FDN46TD125GD	430758
160	50	FDN36TD160GD	433572	FDN46TD160GD	430790

table.32-1

Frame E FEN 160		3 Pole 3 Trips		4 Pole 4 Trips	
Rating (A)	Breaking Capacity Icu, (kA)	Catalogue Number	Reference Number	Catalogue Number	Reference Number
25	50	FEN36TA025JF	435103	FEN46TA025JF	435214
32	50	FEN36TA032JF	435106	FEN46TA032JF	435217
40	50	FEN36TA040JF	435109	FEN46TA040JF	435220
50	50	FEN36TA050JF	435112	FEN46TA050JF	435223
63	50	FEN36TA063JF	435115	FEN46TA063JF	435226
80	50	FEN36TA080JF	431751	FEN46TA080JF	431949
100	50	FEN36TA100JF	431757	FEN46TA100JF	431955
125	50	FEN36TA125JF	431763	FEN46TA125JF	431961
160	50	FEN36TA160JF	431769	FEN46TA160JF	431967

table.32-2

Frame E FEN 250		3 Pole 3 Trips		4 Pole 4 Trips	
Rating (A)	Breaking Capacity Icu, (kA)	Catalogue Number	Reference Number	Catalogue Number	Reference Number
125	50	FEN36TD125KF	432962	FEN46TD125KF	433070
160	50	FEN36TD160KF	432976	FEN46TD160KF	433076
200	50	FEN36TD200KF	432979	FEN46TD200KF	433079
250	50	FEN36TD250KF	432982	FEN46TD250KF	433082

table.32-3

Frame G FGN 400/630		3 Pole 3 Trips		4 Pole 4 Trips	
Rating (A)	Breaking Capacity Icu, (kA)	Catalogue Number	Reference Number	Catalogue Number	Reference Number
400	50	FGN36AA400LLF + FGRJ3LL0400	431455 + 433151	FGL46AA400LLF + FGRJ4LL0400	431330 + 433187
630	50	FGN36AA630NNF + FGRJ3NN0630	431461 + 433157	FGL46AA630NNF + FGRJ4NN0630	431333 + 433193

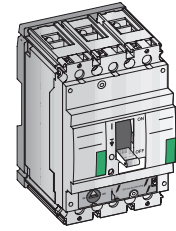
table.32-4

Frame K FKN 800/1600		3 Pole 3 Trips		4 Pole 4 Trips	
Rating (A)	Breaking Capacity Icu, (kA)	Catalogue Number	Reference Number	Catalogue Number	Reference Number
800	50	FKN36NE800PPF	435393	FKN46NE800PPF	435447
1000	50	FKN36NE100SQF	435396	FKN46NE100SQF	435450
1250	50	FKN36NE125SSF	435384	FKN46NE125SSF	435438
1600	50	FKN36NE160TTF	435387	FKN46NE160TTF	435441

table.32-5

# GE Record Plus Breakers

## High Breaking Capacity Range



Frame D FDH 63/160		3 Pole 3 Trips		4 Pole 4 Trips	
Rating (A)	Breaking Capacity Icu, (kA)	Catalogue Number	Reference Number	Catalogue Number	Reference Number
16	80	FDH36TD016ED	430020	FDH46TD016ED	430051
20	80	FDH36TD020ED	430021	FDH46TD020ED	430052
25	80	FDH36TD025ED	430022	FDH46TD025ED	430053
32	80	FDH36TD032ED	430023	FDH46TD032ED	430054
40	80	FDH36TD040ED	430024	FDH46TD040ED	430055
50	80	FDH36TD050ED	430025	FDH46TD050ED	430056
63	80	FDH36TD063ED	430026	FDH46TD063ED	430057
80	80	FDH36TD080GD	430338	FDH46TD080GD	430460
100	80	FDH36TD100GD	430341	FDH46TD100GD	430463
125	80	FDH36TD125GD	430344	FDH46TD125GD	430466
160	80	FDH36TD160GD	435821	FDH46TD160GD	435839

table.33-1

Frame E FEH 160		3 Pole 3 Trips		4 Pole 4 Trips	
Rating (A)	Breaking Capacity Icu, (kA)	Catalogue Number	Reference Number	Catalogue Number	Reference Number
25	80	FEH36TA025JF	434772	FEH46TA025JF	434883
32	80	FEH36TA032JF	434775	FEH46TA032JF	434886
40	80	FEH36TA040JF	434778	FEH46TA040JF	434889
50	80	FEH36TA050JF	434781	FEH46TA050JF	434892
63	80	FEH36TA063JF	434784	FEH46TA063JF	434895
80	80	FEH36TA080JF	431165	FEH46TA080JF	431363
100	80	FEH36TA100JF	431171	FEH46TA100JF	431369
125	80	FEH36TA125JF	431177	FEH46TA125JF	431375
160	80	FEH36TA160JF	431183	FEH46TA160JF	431381

table.33-2

Frame E FEH 250		3 Pole 3 Trips		4 Pole 4 Trips	
Rating (A)	Breaking Capacity Icu, (kA)	Catalogue Number	Reference Number	Catalogue Number	Reference Number
125	80	FEH36TD125KF	431393	FEH46TD125KF	432300
160	80	FEH36TD160KF	431980	FEH46TD160KF	432307
200	80	FEH36TD200KF	432076	FEH46TD200KF	432311
250	80	FEH36TD250KF	432096	FEH46TD250KF	432316

table.33-3

Frame G FGH 400/630		3 Pole 3 Trips		4 Pole 4 Trips	
Rating (A)	Breaking Capacity Icu, (kA)	Catalogue Number	Reference Number	Catalogue Number	Reference Number
400	80	FGH36AA400LLF + FGRJ3LL0400	431032 + 433151	FGH46AA400LKF + FGRJ4LL0400	431106 + 433187
630	80	FGH36AA630NNF + FGRJ3NN0630	431038 + 433157	FGH46AA630HHF + FGRJ4NN0430	431132 + 433193

table.33-4

Frame K FKH 800/1600		3 Pole 3 Trips		4 Pole 4 Trips	
Rating (A)	Breaking Capacity Icu, (kA)	Catalogue Number	Reference Number	Catalogue Number	Reference Number
800	80	FKH36NE800PPF	435285	FKH46NE800PPF	435339
1000	80	FKH36NE100SQF	435288	FKH46NE100SQF	435342
1250	80	FKH36NE125SSF	435276	FKH46NE125SSF	435330
1600	80	FKH36NE160TTF	435279	FKH46NE160TTF	435333

table.33-5

# Accessories

## Edgewise Hanger & Edgewise Installation Beam

The Edgewise Hanger is used when the busway is edgewise installed. It can fit all ampere ratings.

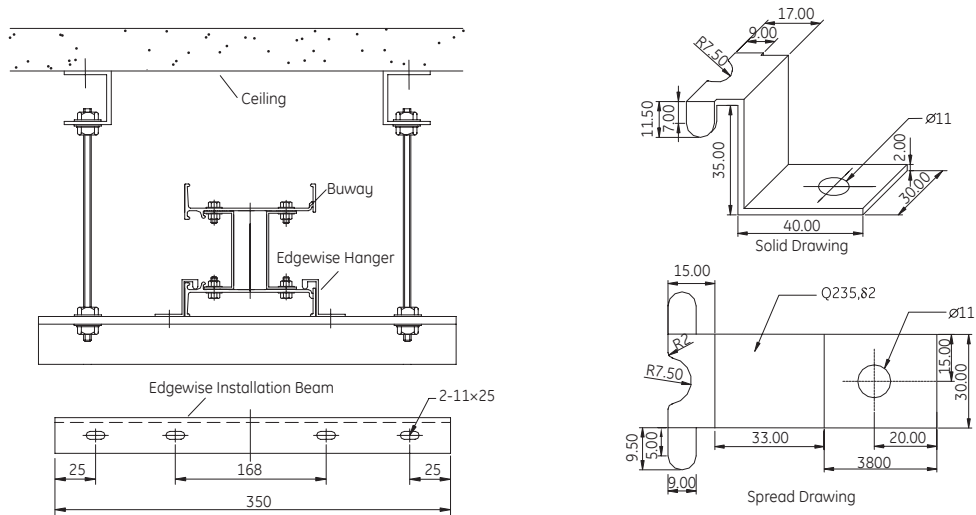


fig.34-1

## Flatwise Hanger & Flatwise Installation Beam

The Flatwise Hanger is used when the busway is flatwise installed. It can fit all Ampere ratings. But the dimension of the Flatwise Installation Beam is related with the Ampere Ratings. In the pic below W is the width of the busway.

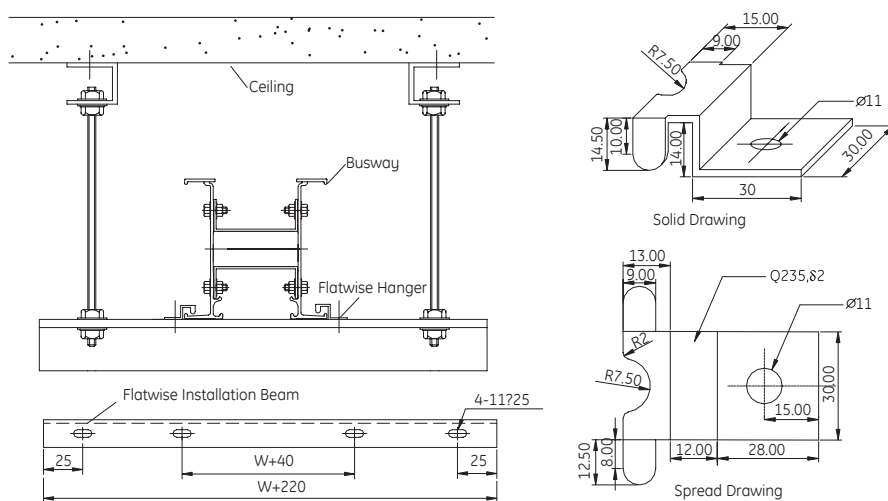


fig.34-2

**Note:**

1. All the dimension's unit is mm.
2. All the dimensions provided are for standard products. Please contact our engineers for customized products' dimensions.
3. The edgewise and flatwise hanger are provided by the factory.
4. The installation beam and steeve are provided by the installation company as a rule. It is charged separately when provided by the factory, and the dimension should be provided.

# Fixed Hanger

The Fixation Hanger is used when the busway is vertically installed. It is installed on the wall between the two floors. It keeps the busway from moving horizontally. It can fit all Ampere ratings. Fixation Hanger has two parts, a pair of “Fixation Hanger Holder” which are perpendicular to the wall and a “Fixation Hanger Beam” which is parallel with the wall.

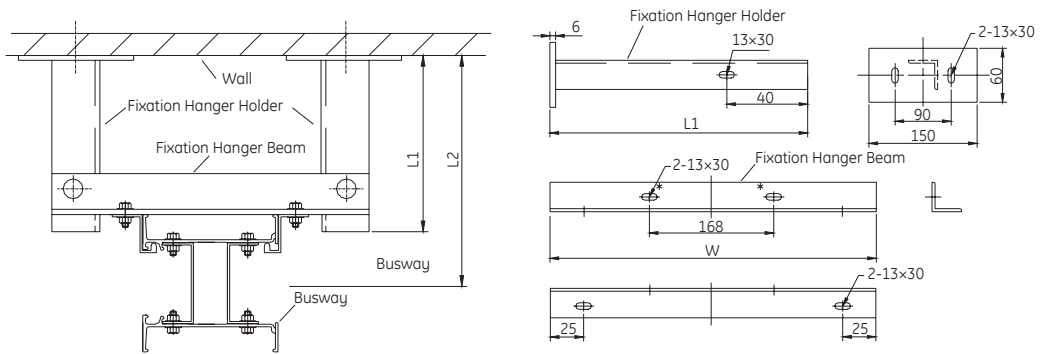


fig.35-1

**Note:**

1. L1 and L2 are customized based on different projects. Other dimensions are for standard products.
2. The fixation hanger are provided by the installation company as a rule. It is charged separately when provided by the factory, and the dimension should be provided.



# Accessories

## Spring Hanger

Spring Hanger is used in each floor to support the vertically installed busway's weight. The Spring Hanger is connected with the busway by bolt.

Spring hangers have different spring quantities for different ampere rating busways. Please refer to table. 36-1.

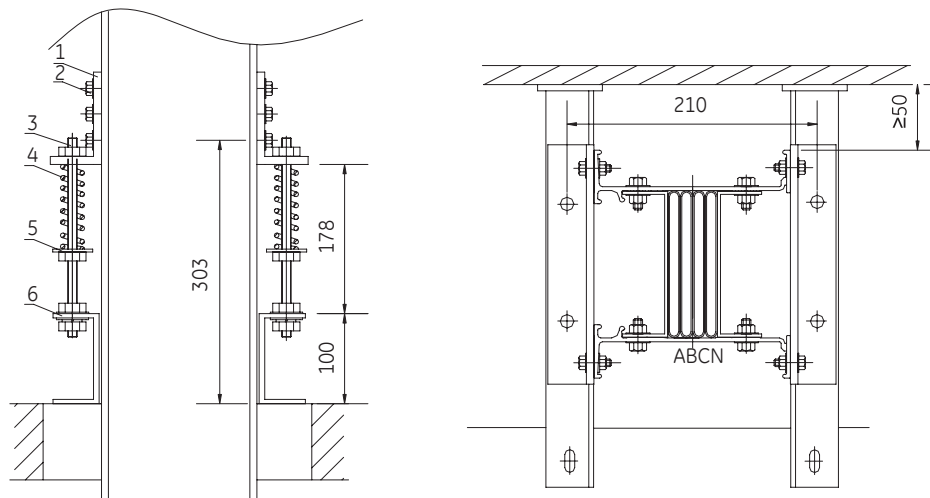


fig.36-1

**Accessories:**

1. Spring Supporter
2. Hex Head Bolt
3. Double-headed Bolt
4. Spring
5. Cushion
6. Channel Steel Base

Rated current	Spring Qty
250-800	2
1000-2500	4
3150-5000	6

table. 36-1

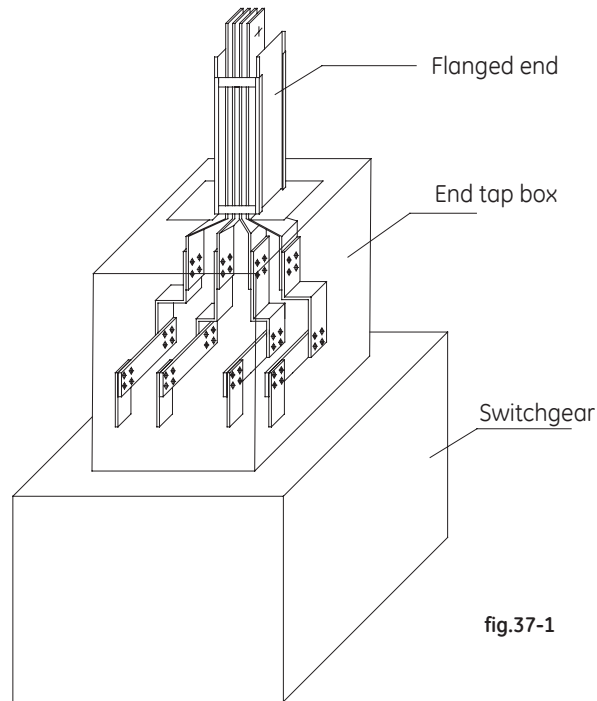
**Note:**

1. All the dimensions' unit is mm.
2. All the dimension provided are for standard products. Please contact our engineers for customized products' dimensions.

# Application

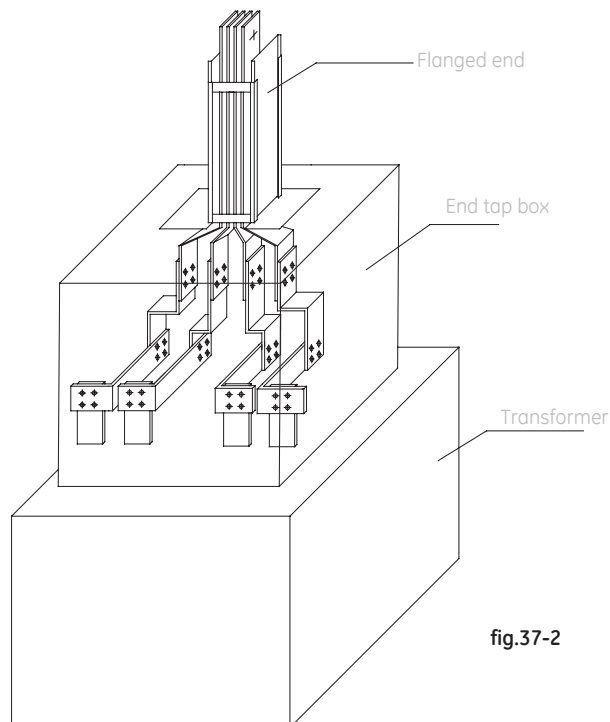
## Connection to Low Voltage Switchgear

WavePro LT busway system provides flanged end/stub units for termination to the switchboard busbars.



## Connection to Transformer

WavePro LT busway system provides flanged end/ stub units for flexible or hard connection. It may be designed according to the LV terminal of the transformers.



Note: Please make clear the connection parts type and provider. We charged it separately when provided by the factory.

# Installation

## Protection Class

GE WavePro LT busway systems are offered with options for indoor, drip proof and outdoor applications.

- IP40 - Protection against dusts.
- IP42 - Protection against dusts and water drops.
- IP54 - Protection against dusts and water sprays.
- IP65 - Protection against dusts and water jets.

## Minimum clearance required for heat dissipation

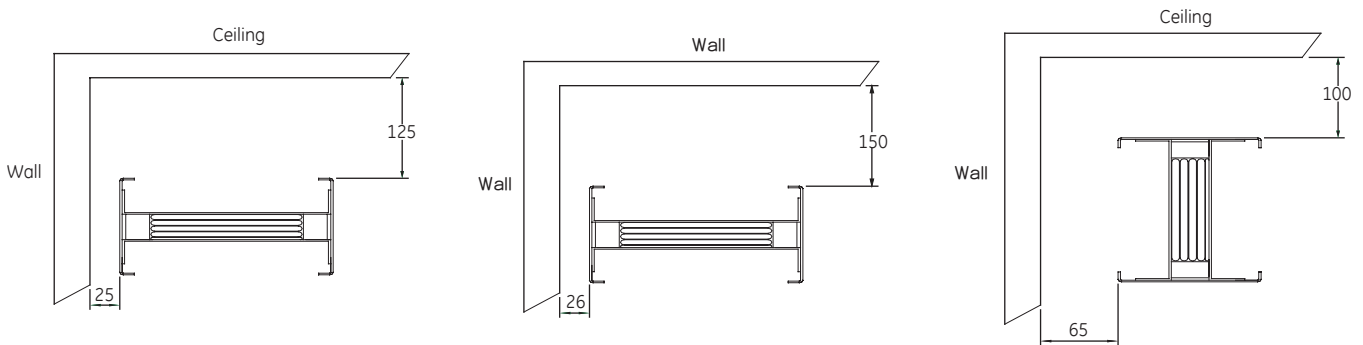
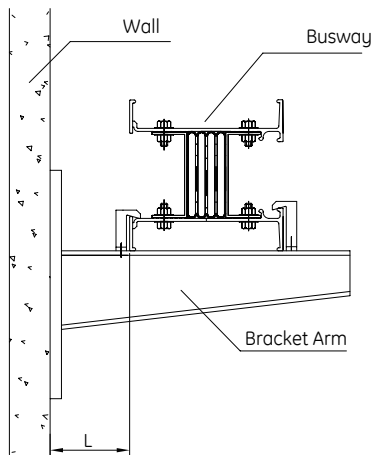


fig.38-1

## Minimum clearance required for Plug-in box installation

When the busway is horizontally or vertically installed near the wall, a minimum clearance is required for plug-in box installation. Pls refer to below table.38-1



Upright Installation

fig.38-2

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

table.38-1

Note: All the dimensions' unit is mm.

# Horizontal installation

## 1. Horizontal through-the-wall installation

For dimensions of through-the-wall installation, please refer to the following figure:

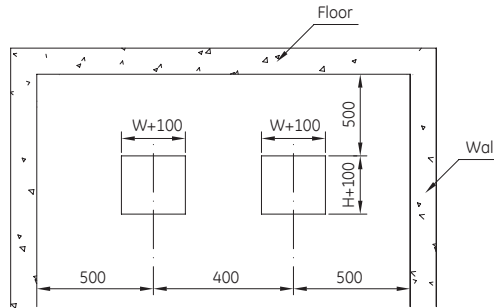


fig.39-1

## 2. Horizontal installation - trapeze hangers Overhead Support

Holes shall be first drilled in the floor so as to inlay steel expansion bolts (holes may also be drilled on the spot for flexible installation) or pre-bury steel U-channel for welding with hangers. The distance between two adjacent hangers shall not exceed 2m. Please specify your special requirements in order.

There are two forms of horizontal installation. Please refer to the following figure:

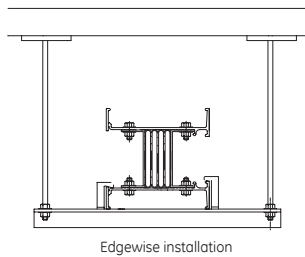


fig.39-2

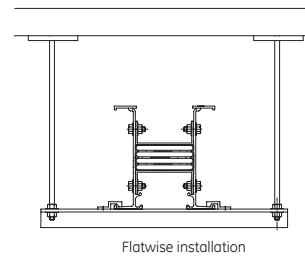


fig.39-3

## 3. Horizontal installation - wall support

Please pay attention to linearity of the installation hole (i.e. the entire run of supports shall be installed at the same level). For installation types, refer to the graphic representation.

Horizontal installation along the wall may also contain vertical and horizontal installation.

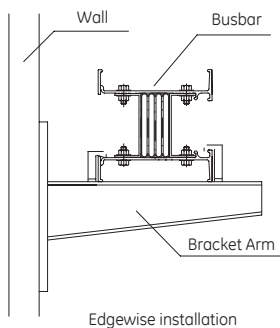


fig.39-4

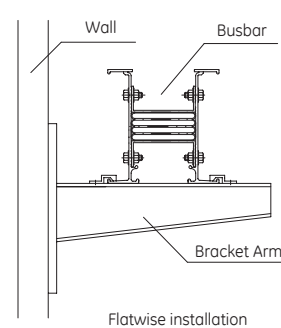


fig.39-5

# Vertical installation

For installing vertical bus run, please refer to the fig. for dimension of cut holes. It shall be ensured that the spacing between every two runs of busway exceeds 400mm if there're two or more than two vertical runs of busway installed in the same riser. Please refer to the fig. below:

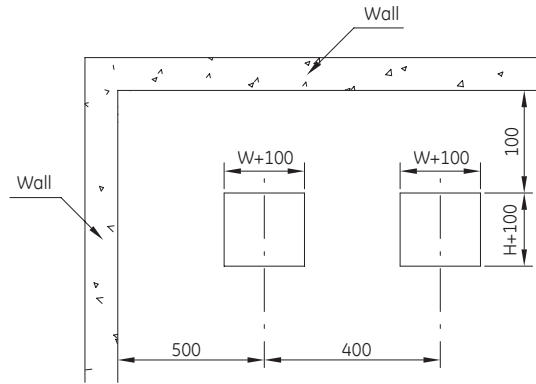
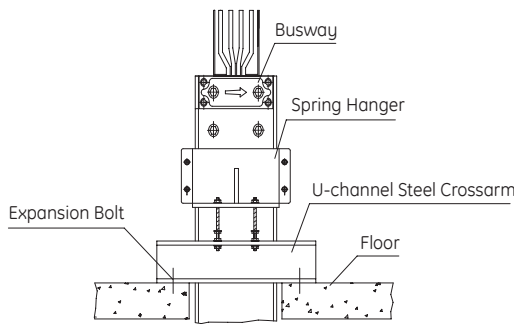


fig.40-1

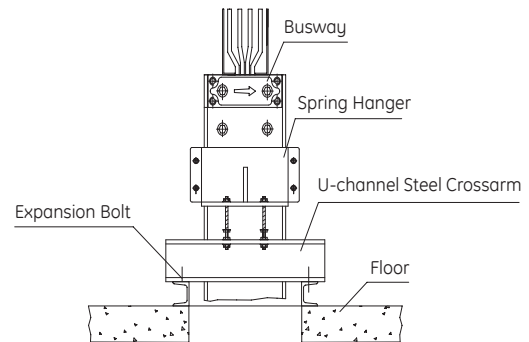
1. When choosing the spring hangers, the elastic force should be adjusted to  $(G+F)$  kilogram ( $G$  is the weight of busbar between each floor while  $F$  is 5~10 kilograms which refer to the on-site condition). We provided a formula to calculate the final spring length, pls refer to the publication WavePro LT Busway Installation Manual. There are mainly two types of installation:

a. Two types for front installation of spring hangers. Please refer to the figure:



Front Installation of Spring hanger with two channel steel crossarms

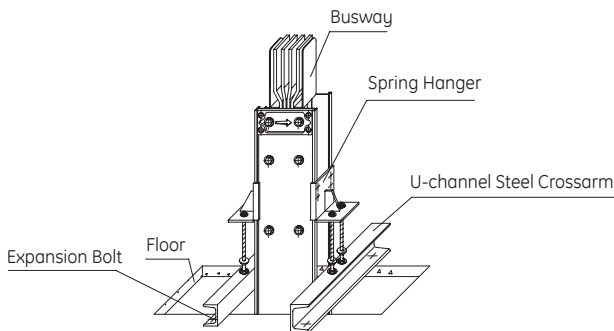
fig.40-2



Front Installation of Spring hanger with four channel steel crossarms

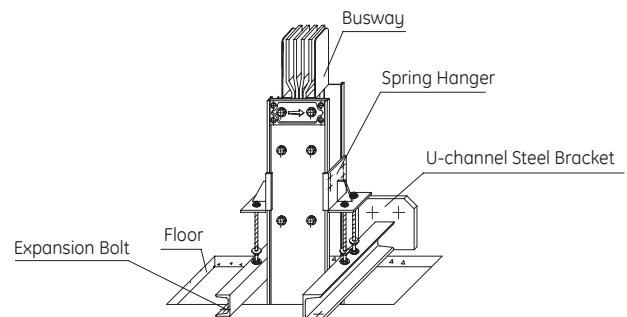
fig.40-3

b. Two types for side installation of spring hangers. Please refer to the figure:



When the hatch is under normal situation

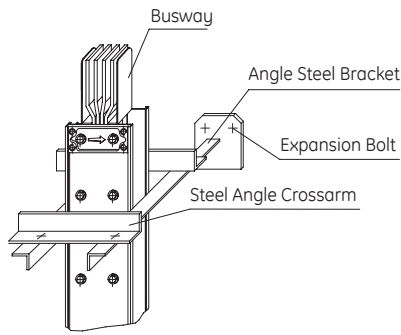
fig.40-4



When one edge of the hatch coincides with the wall

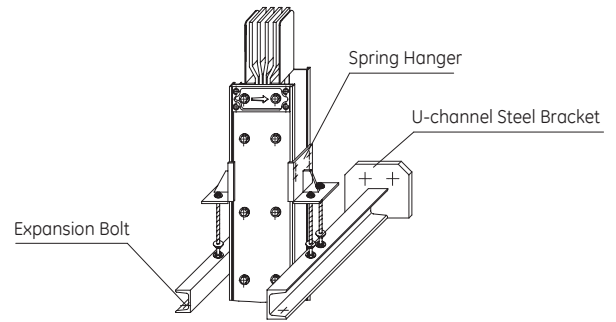
fig.40-5

2. Busway installed in riser should be reinforced in the center (generally when the space between floors exceeds 4m or according to the users' special requirements), which may be carried out referring to the figure. The additional supporters is related with busway rating)



For the Selection of Steel Angle Installation

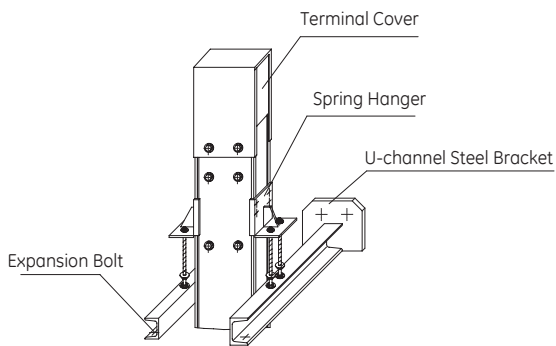
fig.41-1



For the Selection of Spring Hanger Installation

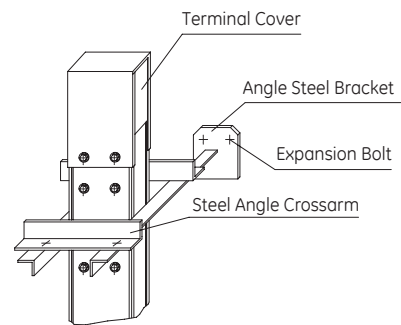
fig.41-2

3. The reinforcement of the end of busway installed vertically in riser may be carried out referring to the figure.



For the Selection of Spring Hanger Installation

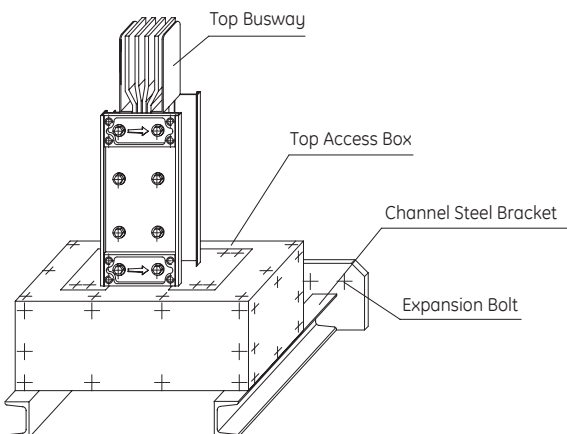
fig.41-3



For the Selection of Steel Angle Installation

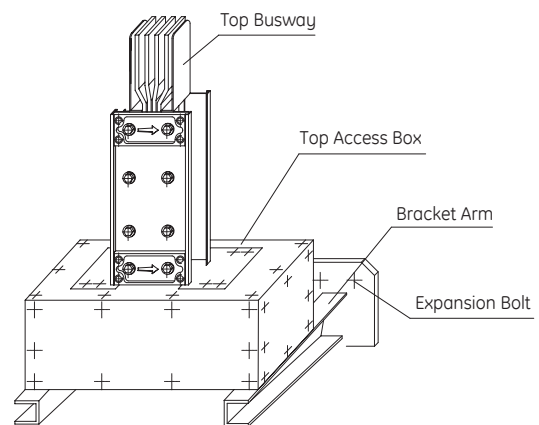
fig.41-4

4. The reinforcement of the end tap box installed in riser may be carried out referring to the figure.



For the Selection of Steel Angle Installation

fig.41-5



Adoption of Bracket Arm

fig.41-6

# Ordering Information

## WavePro LT Purchase Guide

The following information should be noted in building construction drawings and busway arrangement drawings:

- Model, rated current, rated voltage
- Plug-in busway or in feeder busway
- Characteristics of the power supply and protection degree
- All fittings' installation locations and the dimension limits
- Power connecting method
- Surface treatment and color and accessories
- Name, model, specifications, quantity of components and protection degree of the plug

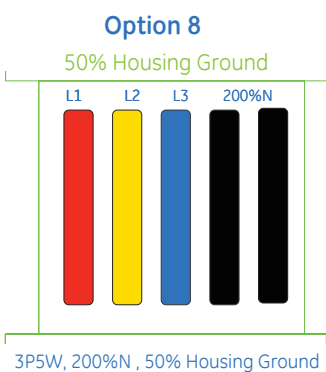
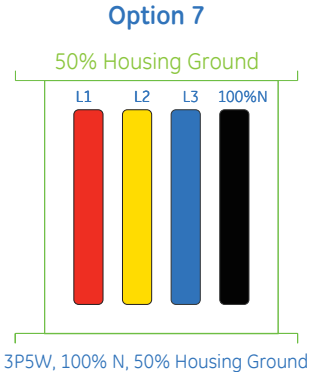
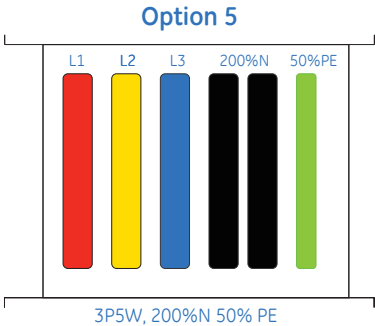
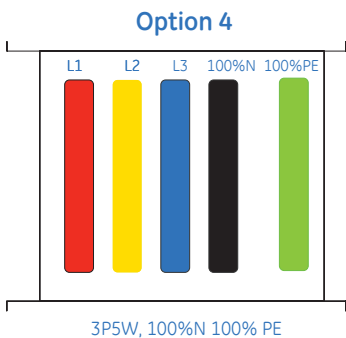
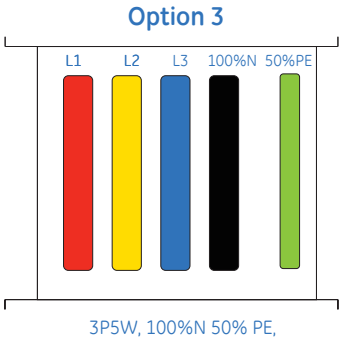
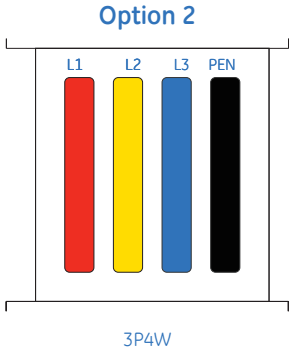
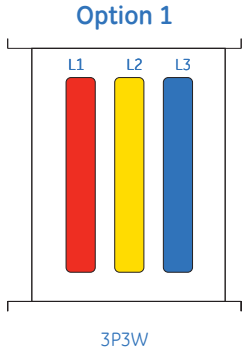
## WavePro LT Busway Quotation Inquiry Form

Item	Details
Conduct type	<input type="checkbox"/> Copper <input type="checkbox"/> Aluminium
Rated capacity	<input type="checkbox"/> 100A <input type="checkbox"/> 160A <input type="checkbox"/> 200A <input type="checkbox"/> 250A <input type="checkbox"/> 400A <input type="checkbox"/> 500A <input type="checkbox"/> 630A <input type="checkbox"/> 800A <input type="checkbox"/> 1000A <input type="checkbox"/> 1250A <input type="checkbox"/> 1350A <input type="checkbox"/> 1600A <input type="checkbox"/> 2000A <input type="checkbox"/> 2500A <input type="checkbox"/> 3150A <input type="checkbox"/> 3800A <input type="checkbox"/> 4000A <input type="checkbox"/> 4500A <input type="checkbox"/> 5000A
Number of phase and wire	<input type="checkbox"/> 3P3W L1,L2,L3 <input type="checkbox"/> 3P4W L1,L2,L3,PEN100% <input type="checkbox"/> 3P5W L1,L2,L3,N100%,PE50% <input type="checkbox"/> 3P5W L1,L2,L3,N100%,PE100% <input type="checkbox"/> 3P5W L1,L2,L3,N200%,PE50% <input type="checkbox"/> 3P5W L1,L2,L3,N200%,PE100% <input type="checkbox"/> Integrated Housing as 50%PE(Should be selected when using housing as PE)
Phase sequence and color	<input type="checkbox"/> Option 1 <input type="checkbox"/> Option 2 <input type="checkbox"/> Option 3 <input type="checkbox"/> Option 4 <input type="checkbox"/> Option 5 <input type="checkbox"/> Option 6 <input type="checkbox"/> Option 7 <input type="checkbox"/> Option 8 <input type="checkbox"/> Other types
Frequency	<input type="checkbox"/> 50Hz <input type="checkbox"/> 60Hz
Voltage	<input type="checkbox"/> 400V <input type="checkbox"/> 690V
Certification	<input type="checkbox"/> GB <input type="checkbox"/> IEC <input type="checkbox"/> Others (consult the manufacturer in advance)
Degree of protection	<input type="checkbox"/> IP40 <input type="checkbox"/> IP42 <input type="checkbox"/> IP54 <input type="checkbox"/> IP65 <input type="checkbox"/> Others
Short withstand current@1s	<input type="checkbox"/> 10KA <input type="checkbox"/> 20KA <input type="checkbox"/> 30KA <input type="checkbox"/> 50KA <input type="checkbox"/> 65KA <input type="checkbox"/> 80KA <input type="checkbox"/> 100KA
Color	<input type="checkbox"/> Grey, GE Standard <input type="checkbox"/> RAL9001 <input type="checkbox"/> Others (please note)
Model	<input type="checkbox"/> Plug-in busway, Qty: _____ meter (s) <input type="checkbox"/> Feed-in busway, Qty: _____ meter (s)
Number of Plug Outlets	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> One side <input type="checkbox"/> Both side
Accessories	<input type="checkbox"/> L type horizontal elbow (inside N phase) , Qty: _____ <input type="checkbox"/> L type horizontal elbow (outside N phase) , Qty: _____
	<input type="checkbox"/> L type vertical elbow (above N phase) , Qty: _____ <input type="checkbox"/> L type vertical elbow (under N phase) , Qty: _____
	<input type="checkbox"/> T type horizontal elbow (inside N phase) , Qty: _____ <input type="checkbox"/> T type horizontal elbow (outside N phase) , Qty: _____
	<input type="checkbox"/> T type vertical elbow (above N phase) , Qty: _____ <input type="checkbox"/> T type vertical elbow (under N phase) , Qty: _____
	<input type="checkbox"/> Terminal, quantity: _____ <input type="checkbox"/> Flanged end, quantity: _____
	<input type="checkbox"/> Reducer, quantity: _____ <input type="checkbox"/> Expansion length, quantity: _____ <input type="checkbox"/> Transposition length, quantity: _____
Plug	<input type="checkbox"/> Isolating switch + fuse <input type="checkbox"/> MCCB <input type="checkbox"/> Rotary handle operation <input type="checkbox"/> Rotating crank operation
	Rated current
	Short-circuit current
Bracket	<input type="checkbox"/> Horizontal, quantity: _____ <input type="checkbox"/> Vertical, quantity: _____
Delivery date	
Mode of shipping	
Packaging requirement	
Address of destination	
Linkman	
Contact	
Special requirement	

table.42-1

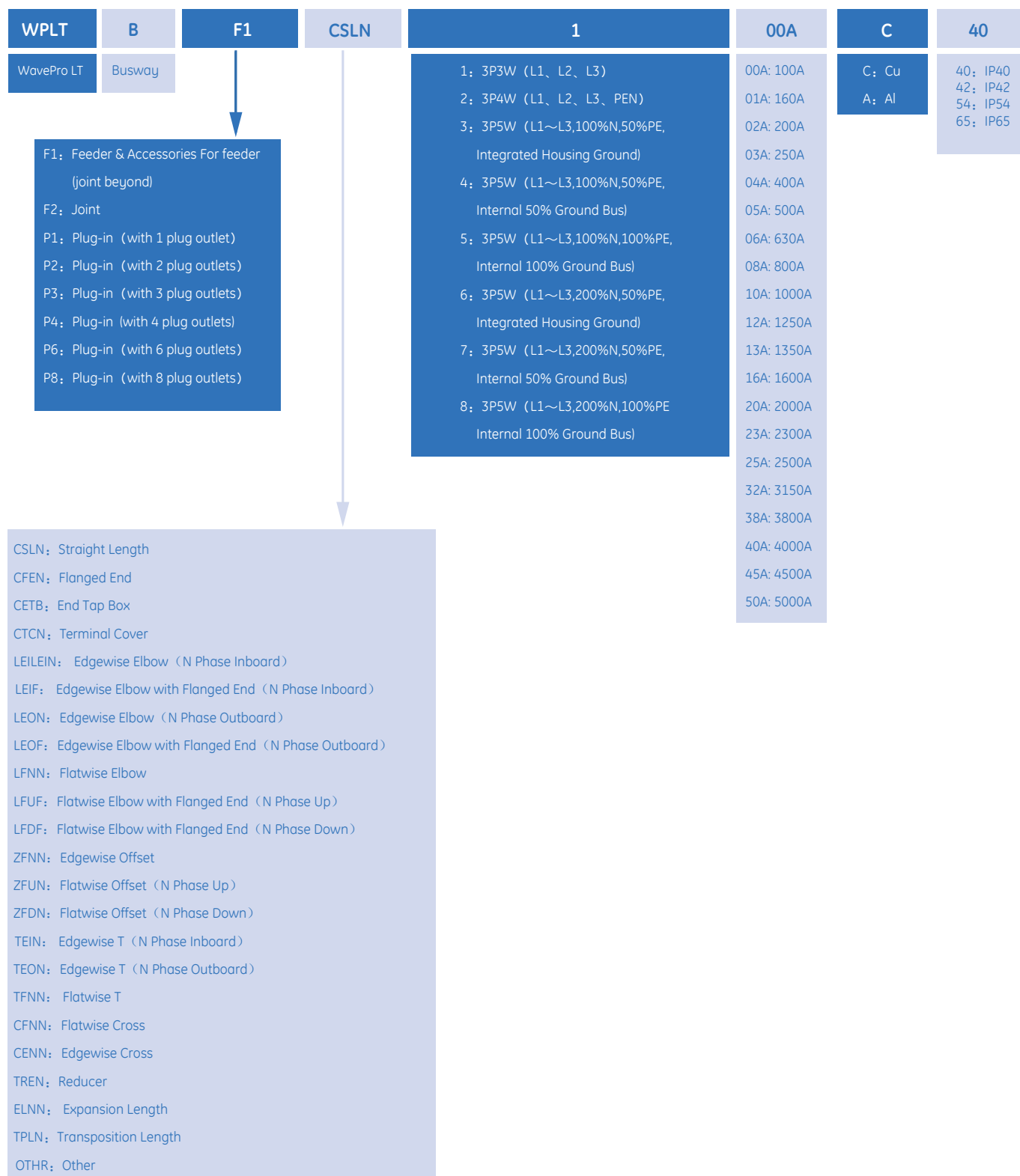


# Busway Phase Sequence and Phase Color



# Wavepro LT Busway System Catalog Ordering Numbers

WavePro LT busway system can be ordered by catalog numbers. Please refer to the following catalog number system and contact with our engineers to place orders.



WPLT	P	R	BP	3P	10	40
WavePro LT	Busway Plug		BP: with Record Plus Breaker BM: with Record MC Breaker BD: with Record D Breaker FU: with Fuse EM: without any breakers and fuses OT: others	3P: without Neutral Line 3N: with Neutral Line 4P: Others	10: Rating Current 100A 13: Rating Current 125A 16: Rating Current 160A 20: Rating Current 200A 25: Rating Current 250A 32: Rating Current 315A 40: Rating Current 400A 63: Rating Current 630A 80: Rating Current 800A 100: Rating Current 1000A	40: IP40 42: IP42 54: IP54
M: Manual Mechanism R: Rotary Mechanism C: Cranking Mechanism						

WPLT	A	C	DRR	A
WavePro LT	Accessory	C: Connecting Accessory I: Installing Accessory	DRR: Drop Rod VP5: Steel Pillar (5#Angle Steel) VP8: Steel Pillar (8#Channel Steel) CB5: Cross Beam (5#Angle Steel) CB8: Cross Beam (8# Channel Steel) BRH: Bracket (Horizontal Installation) BRV: Bracket (Vertical Installtion,Angle Steel) SPH: Spring Hanger HPP: Horizontal Press Plate VPP: Vertical Press Plate FLC: Flexible Connection CNB: Connecting Bar JSH: Joint Shield OTH: Others	00: 100A 01: 160A 02: 200A 03: 250A 04: 400A 05: 500A 06: 630A 08: 800A 10: 1000A 12: 1250A 13: 1350A 16: 1600A 20: 2000A 23: 2300A 25: 2500A 32: 3150A 38: 3800A 40: 4000A 45: 4500A 50: 5000A

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GE imagination at work