



E+I ENGINEERING GROUP

HIGH POWERBAR

ALUMINIUM EDITION



PowerBar

E+I Engineering's High Powerbar (HPB) is a 1000 Volt totally encased, non-ventilated, low impedance sandwich construction. The range is available from 600A - 5000A with multiple bar configurations to suit project requirements.

The busbar is housed in an aluminium casing which acts as an earth. Ingress protection ratings are available from IP55 - IP67.

Features:

- Aluminium conductor's mill, with tin coated finish
- Joint pack construction with double headed shear nuts for quick installation
- Up to 5 tap off points per 3m length
- All tap offs have mechanical/ electrical interlocks with an 'earth first, break last' safety feature
- Pressed out tags for tap off connections
- Mylar and Epoxy insulation available

STANDARDS

Standards

The HPB range is fully ASTA Tested Certified and is CE approved. It is manufactured in a certified management system environment where Quality ISO 9001, Safety ISO 45001 and Environmental ISO 14001 standards are applied to all aspects of the manufacturing and installation processes. It is manufactured in accordance with IEC61439-1 and IEC61439-6.

Type Tests

Verification of:

- 10.2 Strength of Materials and Parts
- 10.3 Degree of Protection of Enclosures
- 10.4 Clearance and Creepage Distances
- 10.5 Protection against Electric Shock and Integrity of Protective Circuits
- 10.9 Dielectric Properties
- 10.10 Temperature Rise Limits
- 10.11 Short-circuit Withstand Strength

ASTA Certificates

E-I Engineering completed extensive testing at ASTA and KEMA accredited laboratories to ensure the product we supply meets the international requirements.

Seismic Compliance

The product has a qualification level - high in accordance to IEEE standard 693-2005.

All certificates available on request



Health and Safety
ISO 45001:2018
No. 0087570

Quality Management
ISO 9001:2015
No.18346

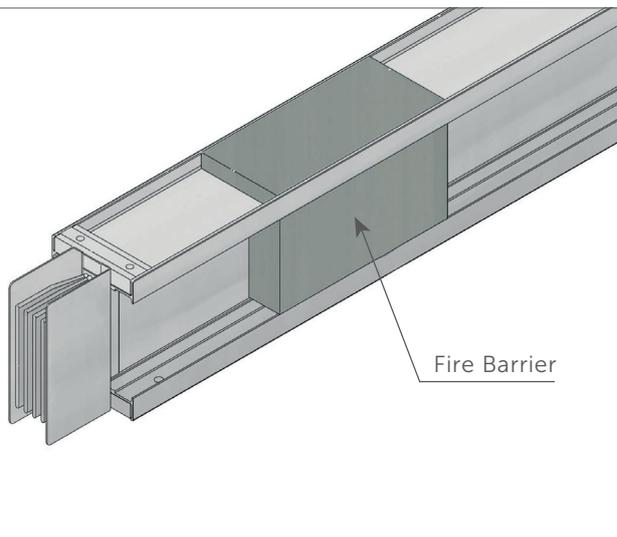
Environmental Management
ISO 14001:2015
No. 18347

TECHNICAL FEATURES

Phase Configurations

Configuration	Phases	Neutral	Earth
TP	100%	0%	Case
TP/N	100%	100%	Case
TP/E	100%	0%	100% or 50%
TP/NE	100%	100%	100% or 50%
TP/DN	100%	200%	Case

Note: Case refers to the Aluminium casing been used as an earth.



- High Powerbar is constructed from high density 55% conductivity aluminium
- The low impedance sandwich design:
 - Improves heat dissipation
 - Improves short circuit rating
 - Reduces voltage drop/ impedance compared to cable
 - Removes potential pathways for flame, smoke and gas to pass through the busbar system
- E+I Engineering's patented process of pressing tabs into the conductor to allow the connection of tap off units ensures that no welding is necessary and protects the integrity of the conductor
- HPB is constructed with an all-aluminium housing which offers numerous advantages:
 - At 2.72g/cm^3 aluminium is a very light metal making the product cheaper to transport and easier to install
 - It is a non-magnetic metal with much lower reactivity than steel. Aluminium is also naturally highly corrosive resistant making the product more durable and easier to maintain
 - Aluminium is an excellent heat and conductivity conductor so the housing can be used as an earth along the length of the busbar
- Powerbar offer a 50% or 100% fully isolated earth for systems where earth isolation is required. Continuity is maintained through the joint pack
- A fully rated 200% neutral option is available for busbar systems with non-linear loads. The additional neutral capacity prevents overloading caused by zero sequence harmonic currents
- Powerbar offer a fully certified fire wall penetration barrier for either a four hour or two hour rating

STRAIGHT LENGTHS

Straight Lengths

Straight lengths can be supplied at any length between 600mm - 3000mm.

Feeder Lengths

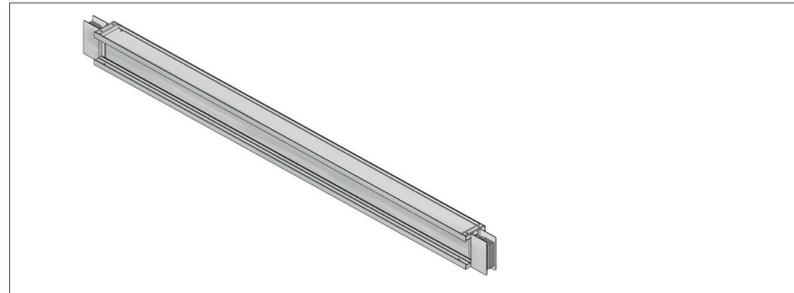
Feeder lengths account for the bulk of a busbar run.

Distribution Lengths

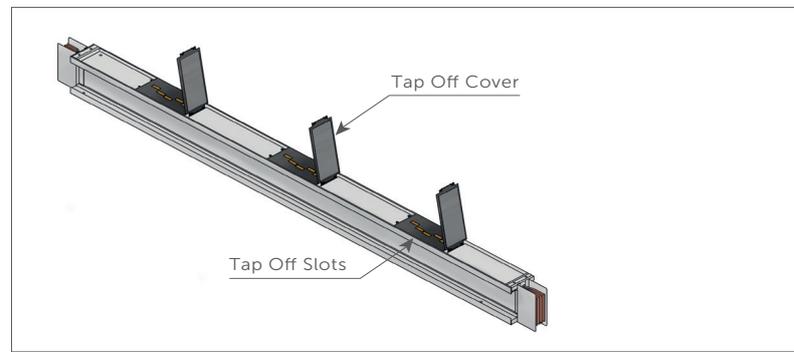
Distribution lengths allow tap off units to be plugged into the busbar run.

The tap off slot outlet and cover are made from a durable, high strength, Class B, 130°C insulation material.

The tap off slot cover prevents access to the contacts behind the cover and protects it from the entry of dirt, dust or moisture. Tap off units are IP55 as standard but higher levels up to IP67 can be achieved upon request.



Feeder Length



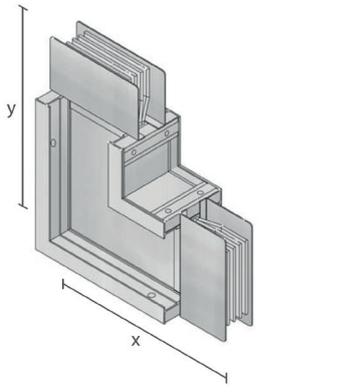
Distribution Length

The different types of build arrangement depending on rating of the required busbar

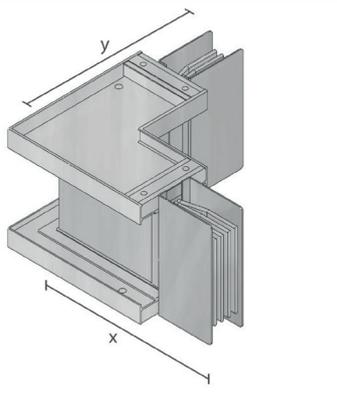
Busbar Rating (Amps)	Construction Type	Busbar Size (mm)	
		Height	Width
600A	Single	95mm	148mm
750A	Single	105mm	148mm
800A	Single	130mm	148mm
900A	Single	120mm	148mm
1000A	Single	140mm	148mm
1150A	Single	140mm	148mm
1250A	Single	170mm	148mm
1400A	Single	185mm	148mm
1600A	Single	205mm	148mm
2000A	Single	260mm	148mm
2500A- S200	Single	260mm	148mm
2500A-D110	Double	363mm	148mm
2750A - D110	Double	363mm	148mm
3200A-D145	Double	433mm	148mm
3500A-D140	Double	423mm	148mm
4000A-D200	Double	543mm	148mm
5000A-T160	Triple	706mm	148mm

Note: The maximum and minimum sizes we recommend are not the limits of what we can produce, but a guideline to help you choose the correct product. Dimensions are taken from the centre of the joint.

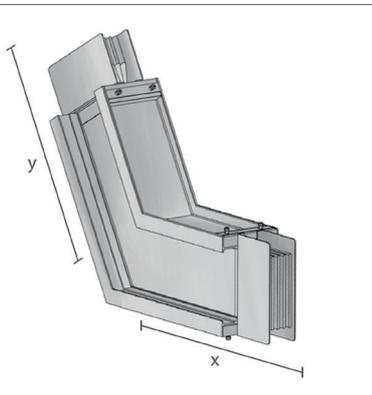
ELBOWS



Flatwise Elbows



Edgewise Elbows



Custom Elbows

Flatwise and Edgewise Elbows

Flatwise and edgewise elbows are used to make 90° changes in the direction of the busbar system. E+I Engineering can also manufacture specially angled elbows for both flatwise and edgewise products.

Flatwise Elbow (Up or Down)

Ratings (Amps)	Minimum Leg Size		Standard Leg Size		Maximum Leg Size	
	X	Y	X	Y	X	Y
600A	231mm	231mm	350mm	350mm	750mm	750mm
750A	236mm	236mm	350mm	350mm	750mm	750mm
800A	249mm	249mm	350mm	350mm	750mm	750mm
900A	244mm	244mm	350mm	350mm	750mm	750mm
1000A	254mm	254mm	350mm	350mm	750mm	750mm
1150A	254mm	254mm	350mm	350mm	750mm	750mm
1250A	269mm	269mm	350mm	350mm	750mm	750mm
1400A	276mm	276mm	350mm	350mm	750mm	750mm
1600A	286mm	286mm	350mm	350mm	750mm	750mm
2000A	314mm	314mm	350mm	350mm	750mm	750mm
2500A- S200	314mm	314mm	350mm	350mm	750mm	750mm
2500A-D110	365mm	365mm	500mm	500mm	750mm	750mm
2750A - D110	365mm	365mm	500mm	500mm	750mm	750mm
3200A-D145	400mm	400mm	500mm	500mm	750mm	750mm
3500A-D140	395mm	395mm	500mm	500mm	750mm	750mm
4000A-D200	455mm	455mm	500mm	500mm	750mm	750mm
5000A-T160	537mm	537mm	650mm	650mm	750mm	750mm

Edgewise Elbow (Left or Right)

Ratings (Amps)	Minimum Leg Size		Standard Leg Size		Maximum Leg Size	
	X	Y	X	Y	X	Y
600A, 750A, 800A, 900A, 1000A, 1150A, 1250A, 1400A, 1600A, 2000A, 2500A-S200, 2500A-D110, 2750A - D110, 3200A-D145, 3500A-D140, 4000A-D200, 5000A-T160	257mm	257mm	350mm	350mm	600mm	600mm

OFFSETS

Offset Sections

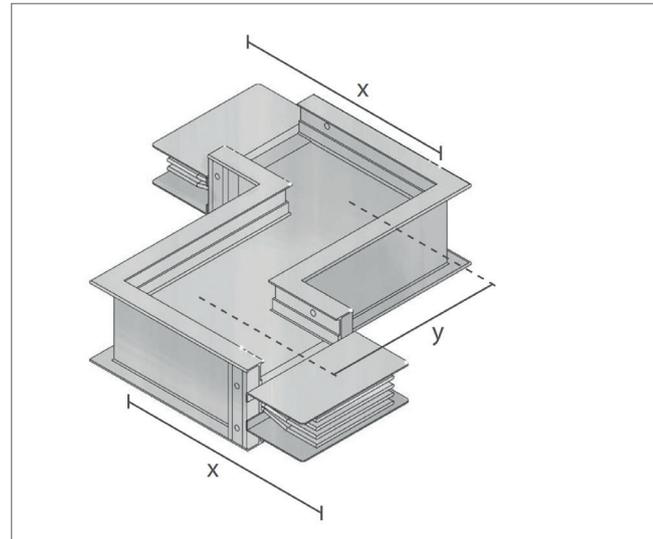
An offset is used to avoid any obstacles eg. pipes or steel columns and to conform to the structure of the building.

Flatwise Offset (Up or Down)

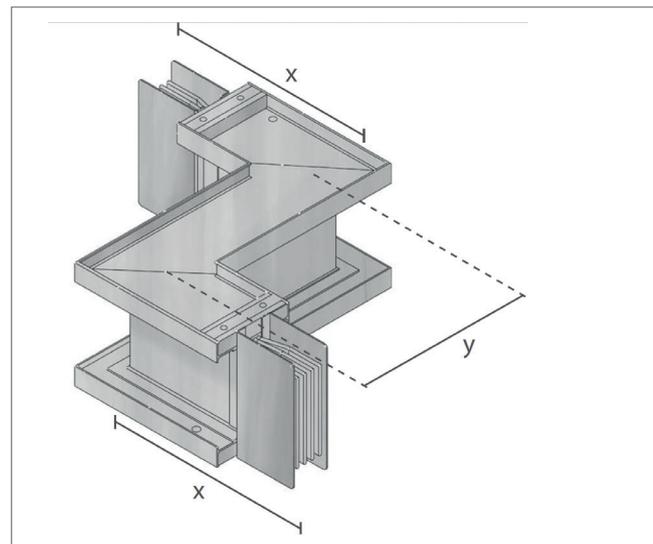
Ratings (Amps)	Minimum Leg Size		Maximum Leg Size	
	X	Y	X	Y
600A	231mm	50mm	650mm	463mm
750A	236mm	50mm	650mm	473mm
800A	249mm	50mm	650mm	498mm
900A	244mm	50mm	650mm	488mm
1000A	254mm	50mm	650mm	508mm
1150A	254mm	50mm	650mm	508mm
1250A	269mm	50mm	650mm	538mm
1400A	276mm	50mm	650mm	553mm
1600A	286mm	50mm	650mm	573mm
2000A	314mm	50mm	650mm	628mm
2500A- S200	314mm	50mm	650mm	628mm
2500A-D110	365mm	50mm	650mm	731mm
2750A - D110	365mm	50mm	650mm	731mm
3200A-D145	400mm	50mm	650mm	801mm
3500A-D140	395mm	50mm	650mm	791mm
4000A-D200	455mm	50mm	650mm	911mm
5000A-T160	537mm	50mm	650mm	1074mm

Edgewise Offset (Left or Right)

Ratings (Amps)	Minimum Leg Size		Maximum Leg Size	
	X	Y	X	Y
600A, 750A, 800A, 900A, 1000A, 1150A, 1250A, 1400A, 1600A, 2000A, 2500A-S200, 2500A-D110, 2750A - D110, 3200A-D145, 3500A-D140, 4000A-D200, 5000A-T160	257mm	80mm	600mm	513mm

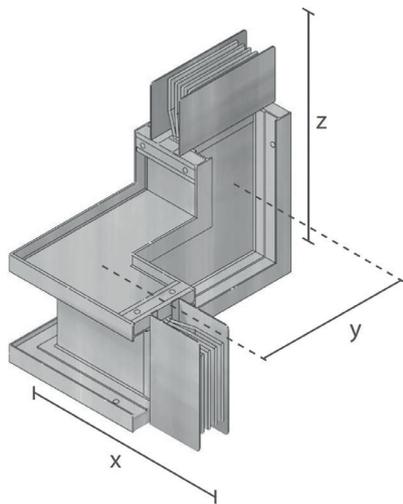


Flatwise Offset

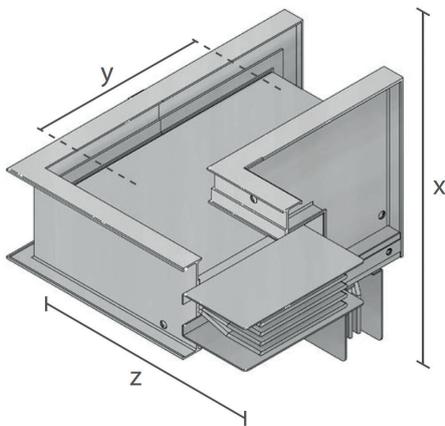


Edgewise Offset

COMBINATIONS



Edge Right Flatwise Up



Flatwise Up Edgewise Right

Combination Elbows

Combination elbows are used to conform to the building's structure and to change the direction of the busbar within a confined space.

Ratings (Amps)	Minimum Leg Size		
	X (Edgewise side)	Y	Z (Flatwise side)
600A	257mm	173mm	231mm
750A	257mm	178mm	236mm
800A	257mm	191mm	249mm
900A	257mm	186mm	244mm
1000A	257mm	196mm	254mm
1150A	257mm	196mm	269mm
1250A	257mm	211mm	276mm
1400A	257mm	218mm	286mm
1600A	257mm	228mm	314mm
2000A	257mm	256mm	314mm
2500A- S200	257mm	256mm	314mm
2500A-D110	257mm	256mm	314mm
2750A - D110	257mm	307mm	365mm
3200A-D145	257mm	342mm	400mm
3500A-D140	257mm	337mm	395mm
4000A-D200	257mm	397mm	455mm
5000A-T160	257mm	479mm	537mm

Ratings (Amps)	Maximum Leg Size		
	X (Edgewise side)	Y	Z (Flatwise side)
600A	600mm	487mm	750mm
750A	600mm	492mm	750mm
800A	600mm	505mm	750mm
900A	600mm	500mm	750mm
1000A	600mm	510mm	750mm
1150A	600mm	510mm	750mm
1250A	600mm	525mm	750mm
1400A	600mm	532mm	750mm
1600A	600mm	542mm	750mm
2000A	600mm	570mm	750mm
2500A- S200	600mm	621mm	750mm
2500A-D110	600mm	621mm	750mm
2750A - D110	600mm	621mm	750mm
3200A-D145	600mm	656mm	750mm
3500A-D140	600mm	651mm	750mm
4000A-D200	600mm	711mm	750mm
5000A-T160	600mm	793mm	750mm

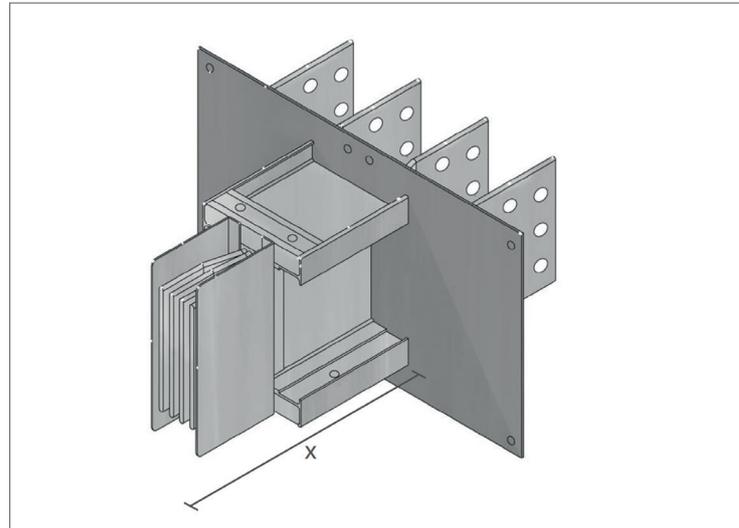
FLANGES

Flange Connections

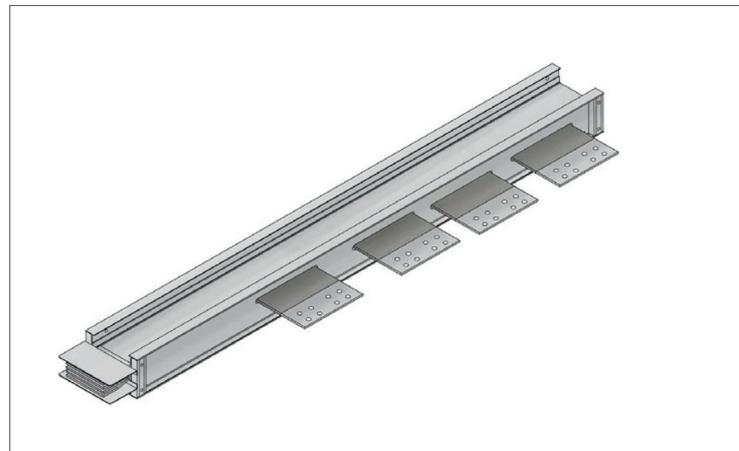
Flange connections provide a direct connection to low voltage switchgear, transformer enclosures and other electrical equipment. Standard flanges can be offset to the left or right of the section as required.

Panel Flange

Ratings (Amps)	Minimum Leg Size	
	X	Y
600A, 750A, 800A, 900A, 1000A, 1150A, 1250A, 1400A, 1600A, 2000A, 2500A-S200, 2500A-D110, 2750A - D110, 3200A- D145, 3500A-D140, 4000A-D200, 5000A-T160	220mm	840mm

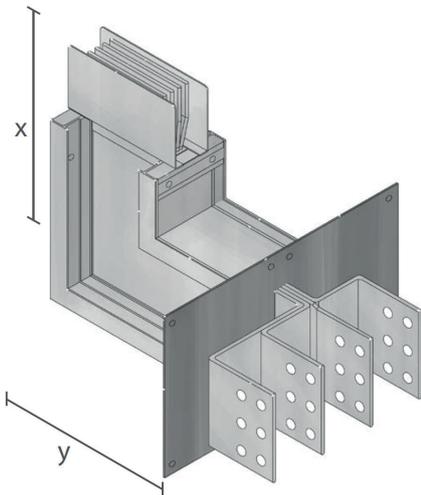


Panel Flange

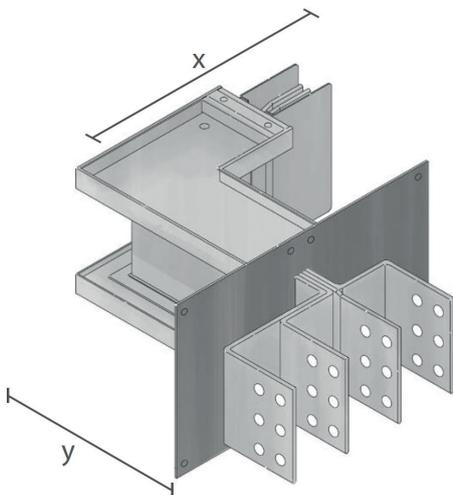


Parallel Flange

FLANGES



Flatwise Elbow Flange



Edgewise Elbow Flange

Combination Flange

A flange combination elbow is used when the minimum leg lengths for either the standard elbow or the standard flange cannot be met.

Flange/Elbows (Flatwise)

Ratings (Amps)	Minimum Leg Size		Maximum Leg Size	
	X	Y	X	Y
600A	231mm	99mm	750mm	471mm
750A	236mm	104mm	750mm	476mm
800A	249mm	117mm	750mm	489mm
900A	244mm	112mm	750mm	484mm
1000A	254mm	122mm	750mm	494mm
1150A	254mm	122mm	750mm	494mm
1250A	269mm	137mm	750mm	509mm
1400A	276mm	144mm	750mm	516mm
1600A	286mm	154mm	750mm	526mm
2000A	314mm	182mm	750mm	554mm
2500A - S200	314mm	182mm	750mm	554mm
2500A-D110	365mm	233mm	750mm	605mm
2750A - D110	365mm	233mm	750mm	605mm
3200A-D145	400mm	268mm	750mm	640mm
3500A -D140	395mm	263mm	750mm	635mm
4000A-D200	455mm	323mm	750mm	695mm
5000A-T160	537mm	405mm	750mm	777mm

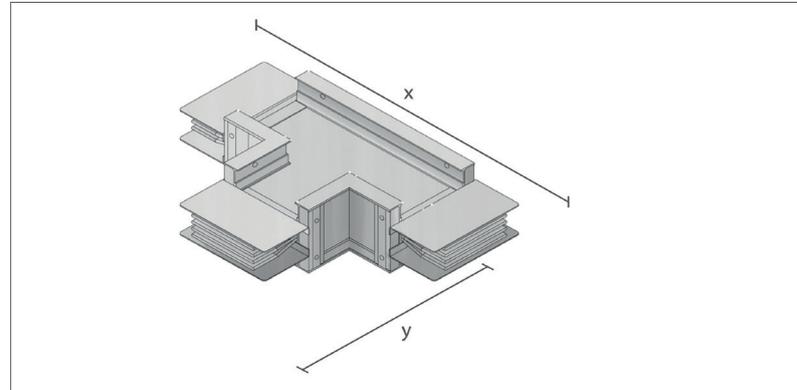
Flange/Elbows (Edgewise)

Ratings (Amps)	Minimum Leg Size		Maximum Leg Size	
	X	Y	X	Y
600A, 750A, 800A, 900A, 1000A, 1150A, 1250A, 1400A, 1600A, 2000A, 2500A-S200, 2500A-D110, 2750A - D110, 3200A-D145, 3500A-D140, 4000A-D200, 5000A-T160	257mm	124mm	600mm	495mm

SPECIALS

Flatwise Tee

Flatwise tee's are used to split one busbar run into two runs going in different directions. This reduces the amount of space needed when supplying two different parts of a building with power.



Flatwise Tee

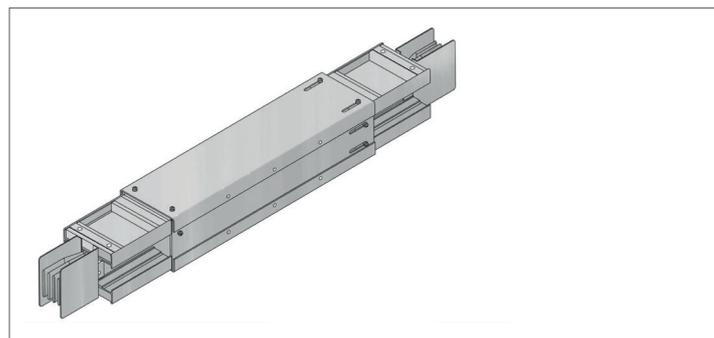
Flatwise Tee

Ratings (Amps)	Minimum Leg Size		Standard Leg Size		Maximum Leg Size	
	X	Y	X	Y	X	Y
600A	463mm	231mm	700mm	350mm	1500mm	650mm
750A	473mm	236mm	700mm	350mm	1500mm	650mm
800A	498mm	249mm	700mm	350mm	1500mm	650mm
900A	488mm	244mm	700mm	350mm	1500mm	650mm
1000A	508mm	254mm	700mm	350mm	1500mm	650mm
1150A	508mm	254mm	700mm	350mm	1500mm	650mm
1250A	538mm	269mm	700mm	350mm	1500mm	650mm
1400A	553mm	276mm	700mm	350mm	1500mm	650mm
1600A	573mm	286mm	700mm	350mm	1500mm	650mm
2000A	628mm	314mm	700mm	350mm	1500mm	650mm
2500A- S200	628mm	314mm	700mm	350mm	1500mm	650mm
2500A-D110	731mm	365mm	1000mm	500mm	1500mm	650mm
2750A - D110	731mm	365mm	1000mm	500mm	1500mm	650mm
3200-D145	801mm	400mm	1000mm	500mm	1500mm	650mm
3500A - D140	791mm	395mm	1000mm	500mm	1500mm	650mm
4000A-D200	911mm	455mm	1000mm	500mm	1500mm	650mm
5000A-T160	1074mm	537mm	1300mm	650mm	4500mm	650mm

Expansion Units

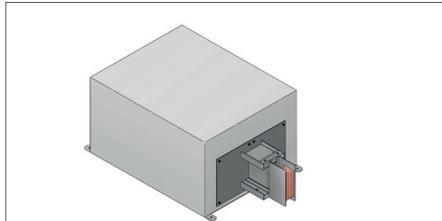
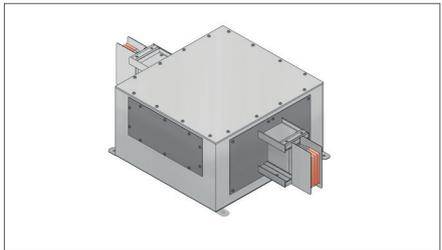
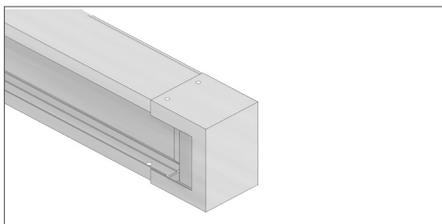
Expansion units are used to accommodate the expansion and contraction of a busbar system as well as allow for building movement. They allow for a 40mm movement along the length of the busbar.

Expansion units are recommended when a straight busbar run exceeds 60m. They are installed in the centre of long busbar runs, or at the beginning of riser runs to minimise the stress on the lower section of the busbar run.



Expansion Unit

FEED UNITS & END CAPS

**End Feed Units****Centre Feed Units****End Feed Units**

Cable Feed Units

End feed units are used on the ends of busbar risers which are cable fed. They can be on top or the bottom of the busbar. Centre feed units are used in the middle of busbar risers which are cable fed.

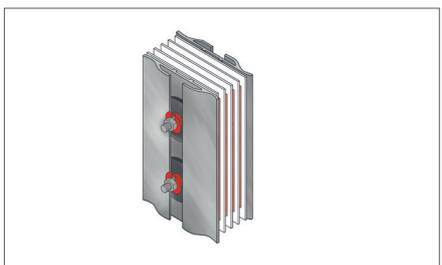
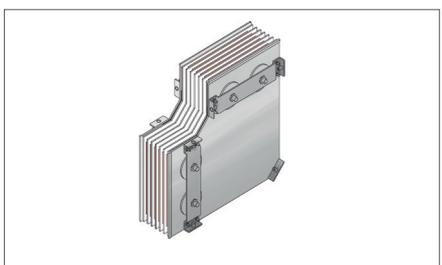
The size of end feed required depends on a number of factors:

- rating of busbar
- size of cable
- number of cables
- use of a protective device or isolator

End Caps

End caps are used to safely cap off the end of a busbar run. The end cap units are factory fitted but can be easily removed to allow for the extension of the system.

JOINT PACKS

**Joint Packs****Flatwise Elbow Joint Packs**

Joint Packs

The joint pack is a compression joint design which uses a specially designed Belleville washer to distribute the pressure evenly over the joint pack. Joint packs are used to connect all the components in a busbar system together. The earth is maintained through the joint by both the joint pack cover and the earth side plate. The joint pack is supplied in specific sizes depending on the rating of busbar required.

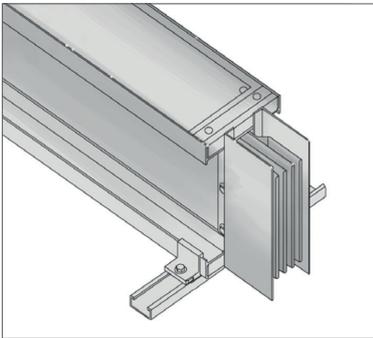
Flatwise Elbow Joint Packs

Flatwise elbow joint packs can be used to make 90° changes in the direction of the busbar system.

INSTALLATION

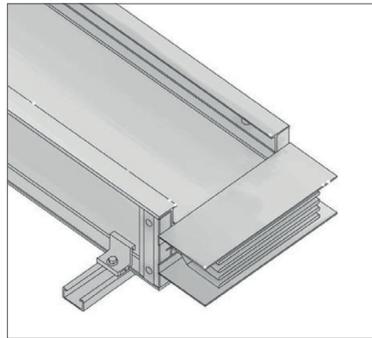
The modular design of HPB allows it to be installed flat or on its edge. The installation is determined by:

- Busbar route
- Type of installation
- Available space
- Size of busbar



Edge Installation

Edge installation is the preferred method of installation for a smaller rated busbar system. It is also the main method used to install distribution busbar in building risers as tap off units can be connected easily.



Flat Installation

Flat installation is the preferred method of installation for a higher rated, multistack busbar system. When installed on its flat all busbar rating has a height of 145mm.



Spring Hanger

Spring hangers are used to support vertical busbar runs on each floor. They compensate for building movement and thermal expansion.

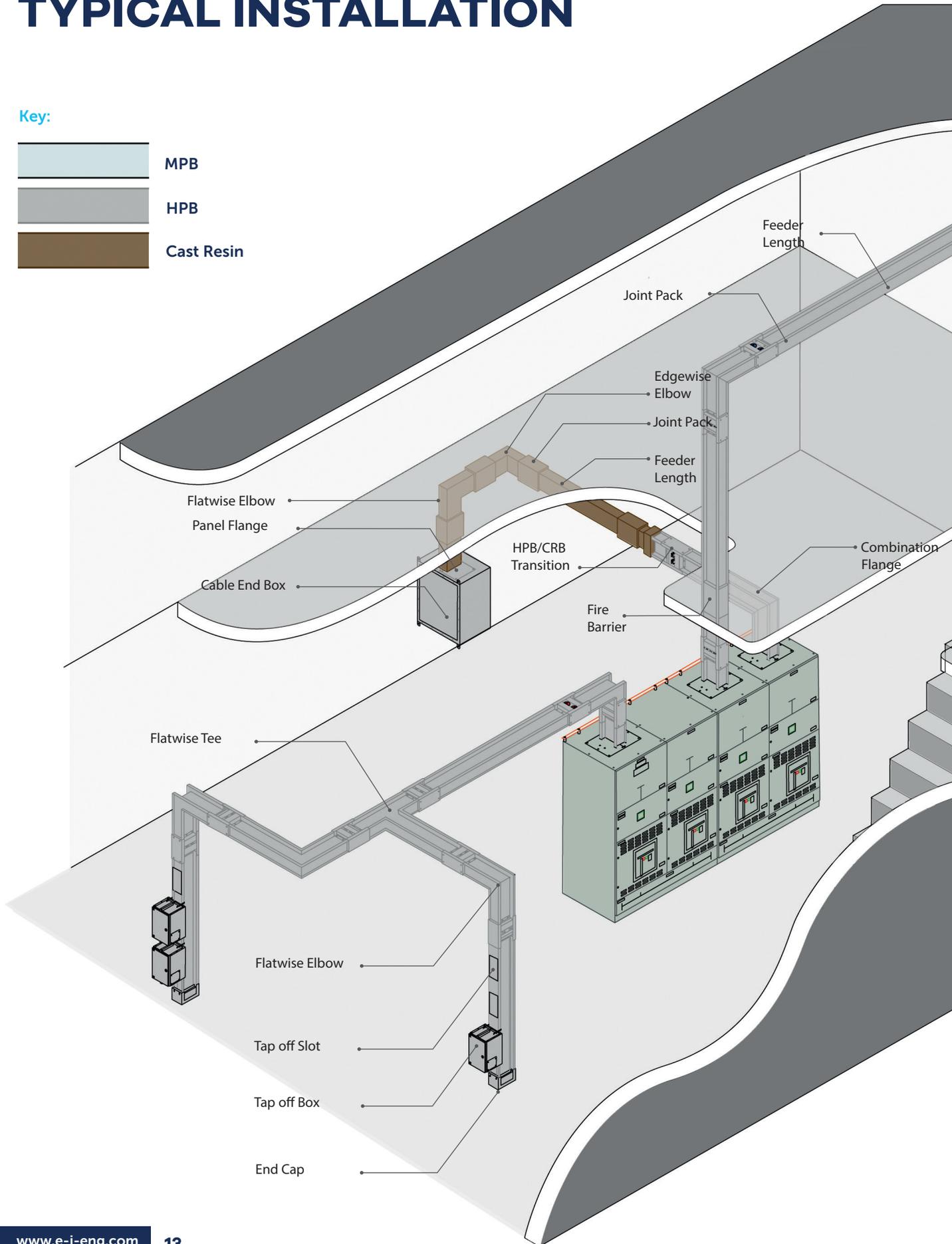
Special Sections

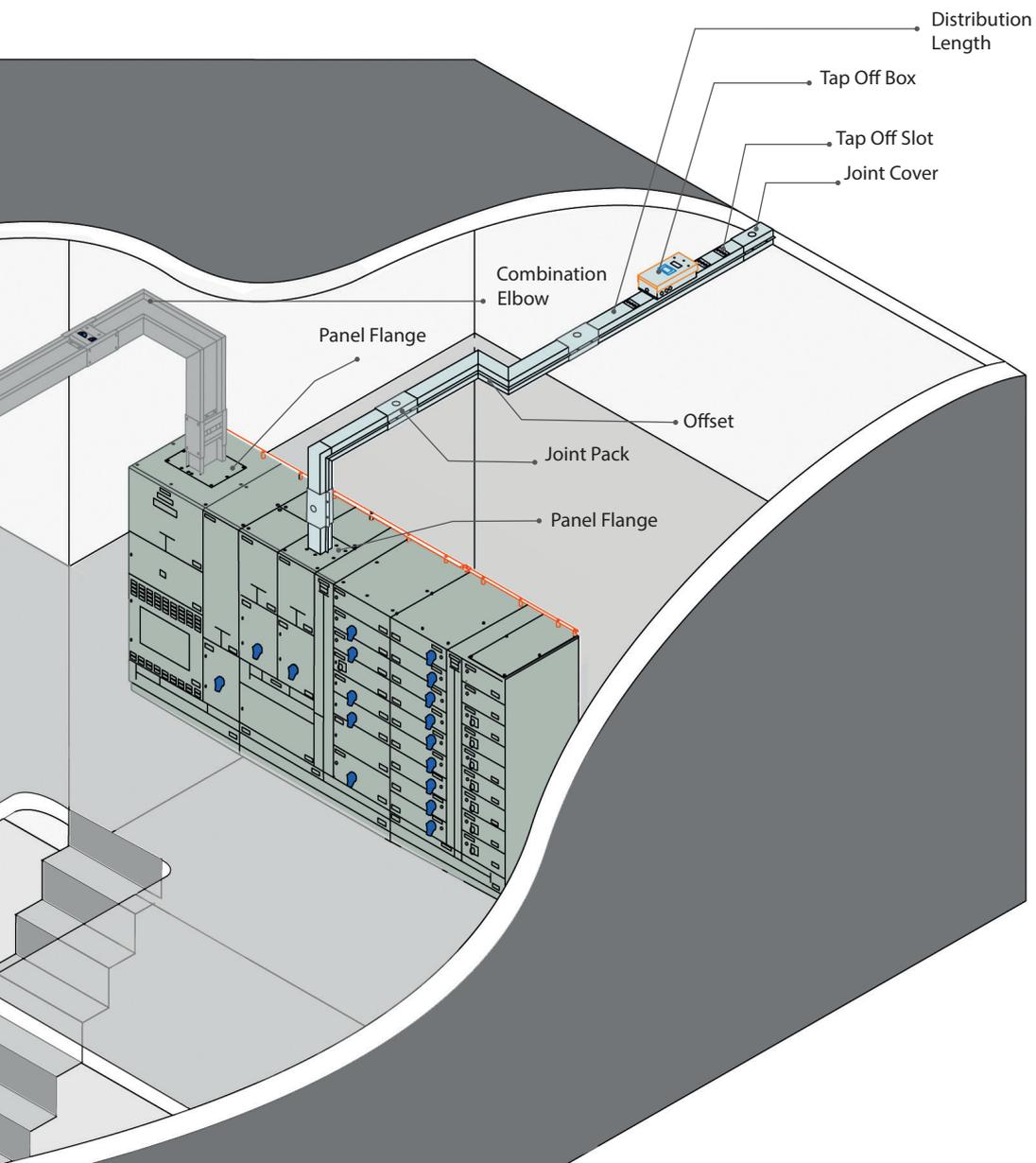
E+I Engineering manufacture a variety of more specialised units and components to meet unique system requirements. These include: edgewise tee's, flatwise cross, step up/ step down reducers, phase rotation units, in-line disconnect cubicles, in-line tap off units, custom built busbar connection units.

TYPICAL INSTALLATION

Key:

-  MPB
-  HPB
-  Cast Resin





E-I Engineering provide a complete power distribution solution.

The Powerbar range includes the following products:

MPB - Medium Powerbar

Air insulated range covering 160 - 1250 Amps

HPB - High Powerbar

Sandwich construction range covering 600 - 5000 Amps

CRB - Cast Resin Powerbar

IP68 rate polymer concrete product for use in extreme conditions covering 800 - 6300 Amps. CRPB can be directly connected to HPB through a special jointing system.

All products are available with both copper and aluminium conductors.

HPB SE - High Powerbar Skin Effect

Sandwich construction range covering 630 - 3200 Amps.

TECHNICAL DATA

Technical Data									
Rated Current (A)	600	750	800	900	1000	1150	1250	1400	1600
Rated Operational Voltage (V)	1000	1000	1000	1000	1000	1000	1000	1000	1000
Rated Insulation Voltage (V)	1000	1000	1000	1000	1000	1000	1000	1000	1000
Short Circuit									
1 Second (kA rms)	16	22.5	25	32.5	50	50	65	65	65
Peak Value (kA)	32	47.25	52.5	69.3	105	105	143	143	143
Phase Conductor									
Cross Sectional Area (mm ²)	210	270	420	360	480	480	660	750	870
Neutral Conductor									
Cross Sectional Area (mm ²)	210	270	420	360	480	480	660	750	870
Isolated Earth Conductor									
100% Earth Cross Sectional Area (mm ²)	210	270	420	360	480	480	660	750	870
50% Earth Cross Sectional Area (mm ²)	105	135	210	180	240	240	330	375	435
Overall Dimensions									
Height x Width of 4 Bar System (mm)	95x148	105x148	130x145	120x148	140x148	140x148	170x148	185x145	205x148
Weight									
Weight of 4 Bar System (kg/m)	7.14	8.06	10.3	9.4	11.1	11.1	13.8	15.1	16.8
Resistance									
Resistance (mΩ/m) at 20°C	0.147	0.115	0.0753	0.0937	0.0659	0.0581	0.0504	0.0444	0.0382
Resistance (mΩ/m) at 80°C	0.182	0.143	0.0934	0.1162	0.0817	0.0720	0.0625	0.0551	0.0474
Reactance									
Reactance (mΩ/m) at 50Hz	0.043	0.035	0.0157	0.0262	0.0141	0.0187	0.0111	0.0099	0.0087
Reactance (mΩ/m) at 60Hz	0.0516	0.042	0.01884	0.03144	0.01692	0.02244	0.01332	0.01188	0.01044
Impedance									
Impedance (mΩ/m) at 80°C	0.187	0.147	0.0947	0.1191	0.0829	0.0744	0.0635	0.0559	0.0482
Voltage Drop at Full Load 50Hz									
Power Factor = 0.7 (V/m) at 80°C	0.164	0.162	0.106	0.156	0.117	0.127	0.112	0.111	0.109
Power Factor = 0.8 (V/m) at 80°C	0.178	0.175	0.117	0.169	0.128	0.137	0.123	0.121	0.119
Power Factor = 0.9 (V/m) at 80°C	0.189	0.187	0.126	0.181	0.138	0.145	0.132	0.131	0.129
Power Factor = 1.0 (V/m) at 80°C	0.189	0.185	0.129	0.181	0.142	0.143	0.135	0.133	0.131
Voltage Drop Full Load 60Hz									
Power Factor = 0.7 (V/m) at 80°C	0.171	0.169	0.109	0.162	0.120	0.132	0.115	0.114	0.113
Power Factor = 0.8 (V/m) at 80°C	0.183	0.181	0.119	0.174	0.131	0.142	0.126	0.124	0.122
Power Factor = 0.9 (V/m) at 80°C	0.193	0.190	0.128	0.184	0.140	0.149	0.134	0.133	0.131
Power Factor = 1.0 (V/m) at 80°C	0.189	0.185	0.129	0.181	0.142	0.143	0.135	0.133	0.131

Technical Data								
Rated Current (A)	2000	2500-S200	2500-D110	2750-D110	3200-D145	3500-D140	4000-D200	5000-T160
Rated Operational Voltage (V)	1000	1000	1000	1000	1000	1000	1000	1000
Rated Insulation Voltage (V)	1000	1000	1000	1000	1000	1000	1000	1000
Short Circuit								
1 Second (kA rms)	100	85	80	100	100	100	120	120
Peak Value (kA)	176	187	176	220	220	220	264	220
Phase Conductor								
Cross Sectional Area (mm ²)	1200	1200	1320	1320	1740	1680	2400	2880
Neutral Conductor								
Cross Sectional Area (mm ²)	1200	1200	1320	1320	1740	1680	2400	2880
Isolated Earth Conductor								
100% Earth Cross Sectional Area (mm ²)	1200	1200	1320	1320	1740	1680	2400	2880
50% Earth Cross Sectional Area (mm ²)	600	600	660	660	870	840	1200	1440
Overall Dimensions								
Height x Width of 4 Bar System (mm)	260x148	260x148	363x148	363x148	433x148	423x148	543x148	706x148
Weight								
Weight of 4 Bar System (kg/m)	21.6	23.5	27.7	27.7	33.8	32.9	43.5	54.7
Resistance								
Resistance (mΩ/m) at 20°C	0.0277	0.0277	0.0254	0.0254	0.0173	0.182	0.0139	0.0111
Resistance (mΩ/m) at 80°C	0.0343	0.0343	0.0315	0.0315	0.0214	0.0225	0.0172	0.0138
Reactance								
Reactance (mΩ/m) at 50Hz	0.0066	0.0066	0.0055	0.0055	0.005	0.0044	0.0033	0.0025
Reactance (mΩ/m) at 60Hz	0.00792	0.00792	0.0066	0.0066	0.006	0.00528	0.00396	0.003
Impedance								
Impedance (mΩ/m) at 80°C	0.0350	0.0350	0.0320	0.0320	0.0220	0.0230	0.0175	0.0140
Voltage Drop at Full Load 50Hz								
Power Factor = 0.7 (V/m) at 80°C	0.100	0.125	0.112	0.124	0.103	0.114	0.100	0.099
Power Factor = 0.8 (V/m) at 80°C	0.109	0.136	0.123	0.136	0.112	0.125	0.109	0.108
Power Factor = 0.9 (V/m) at 80°C	0.117	0.146	0.133	0.146	0.119	0.134	0.117	0.117
Power Factor = 1.0 (V/m) at 80°C	0.119	0.149	0.136	0.150	0.119	0.137	0.119	0.119
Voltage Drop Full Load 60Hz								
Power Factor = 0.7 (V/m) at 80°C	0.103	0.129	0.116	0.127	0.107	0.118	0.103	0.102
Power Factor = 0.8 (V/m) at 80°C	0.112	0.140	0.126	0.139	0.115	0.128	0.112	0.111
Power Factor = 0.9 (V/m) at 80°C	0.119	0.149	0.135	0.149	0.121	0.137	0.119	0.119
Power Factor = 1.0 (V/m) at 80°C	0.119	0.149	0.136	0.150	0.119	0.137	0.119	0.119

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Critical Dimensions

- The distance from the centre of a joint to the wall, ceiling or floor must be at least 190mm.
- All joints must be accessible for maintenance. Joints should not be located inside a wall, ceiling or floor.
- There must be a minimum distance of 50mm between the busbar and any wall/ ceiling/ other busbar.
- Allow adequate space for tap off units to be installed easily and safely.
- Busbar lengths are available from 600mm - 3000mm.
- Distribution busbar lengths are available from 600mm - 3000mm.
- Edgewise elbow sections are available with leg lengths from 255mm - 600mm.
- Flatwise elbow sections are available with a maximum leg length of 750mm. The minimum leg length varies depending on the busbar.

Operating Conditions

- Ambient temperature from -5°C to +55°C
- Relative humidity of 95% or below.
- This product designed for indoor use and can be installed horizontally or vertically.

Critical Details

- Busbar drawings must include all relevant dimensions. Centre-line dimensions are expected. Please highlight any dimensions that are not centre-line.
- Walls and floors must be indicated and the relevant dimensions provided.
- The phasing and location of all switchboards must be provided.
- Full details are required for any transformer connections.
- Horizontal busbar must be installed with the neutral phase to the top. Please indicate the phase orientation for vertically installed busbar.



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