

> IP55 - SANDWICH



ENTRACO BKS
BUS DUCTS PVT. LTD.

An Indo-Swiss Venture



>IP55

Sandwich Bus Duct & Rising Mains Salient Features

- Standard: IEC 60439 Part II.
- Extruded Aluminum Enclosure.
- Polyester Powder Coat
- Single Bolt Contact Joint.
- Ingress Protection – IP 55
- Modular Design.
- Easy For Installation.
- Fix & Plug in Type Tap-off Point.
- Very Compact Overall Dimensions
- Available With Aluminum Conductor & Copper Conductor.



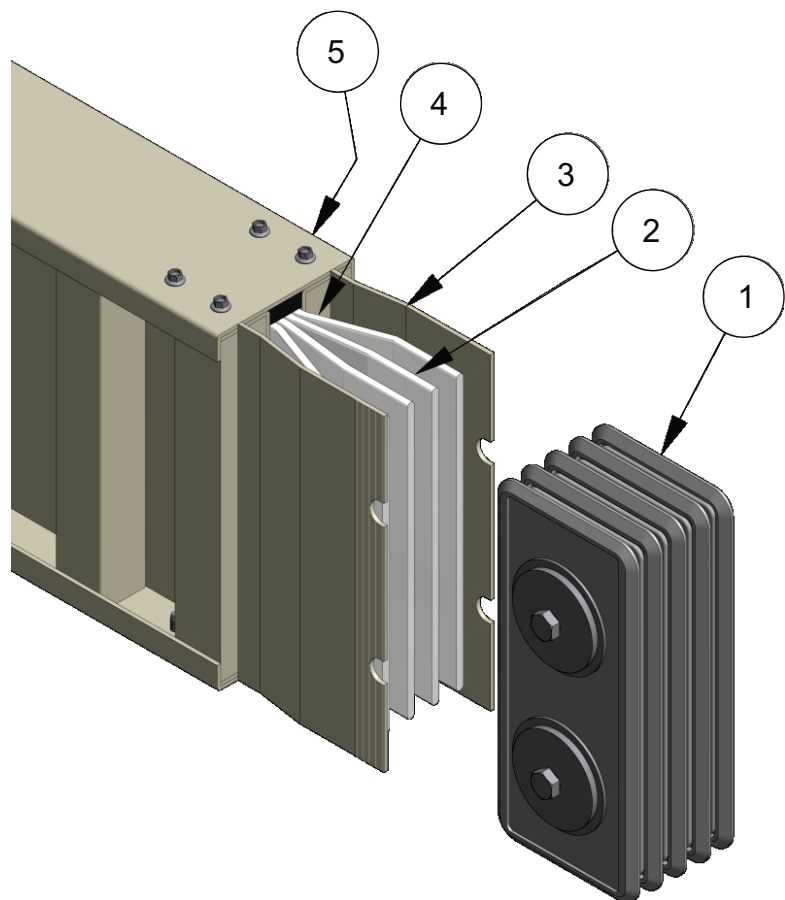
- ITS THE LIFELINE FOR YOUR PROJECTS

EntracoBKS bus ducts are proud to present the cutting edge Swiss technology bus duct that is second to none in the world. Our approach to design is revealed in the beautiful simplicity of our products.

EntracoBKS bus ducts are the lifeline for every major project from Residential towers to Nuclear plants, IT Parks to Chemical factories, Manufacturing units to Oil refineries, Airports to Seaports, Hospitals to Commercial Malls and much more.

EntracoBKS team and its bus ducts work with the stakeholders to make these projects successful to its fullest potential. Our approach is revealed in the beautiful simplicity of our products that are smart, easy to install and maintenance free.

Let us know how we can help you.



- 1) Mono block Joint
- 2) Conductor (Copper / Aluminum)
- 3) Earth Terminal
- 4) Film Insulation
- 5) Powder Coated Extruded Aluminum Enclosure

Joins

The electrical connection is achieved by mono-block joint system. To check for tightness without de-energizing the busduct system, the joints shall be of maintenance-free system Tighten with one or more bolts (depending of the busbar trunkings rated current) guarantying the electrical continuity between the units of the run. The high strength bolt is insulated by a high quality insulation material for heat and impact forces. For uniformed distribution of the clamping force over the joints, all bolted connections are equipped with Belleville washers. It shall have an adjustability of $\pm 5\text{mm}$ for a precise alignment and to facilitate an easy field installation. Furthermore the standard version is the right solution in extreme atmospheric conditions or where the induced magnetic field values prescribed are very low as in the high value added service industries buildings. The LV-S bus bar trunking system meets the requirements of IEC 60 439-2 and is manufactured in an ISO-9001 certified facility.

GENERAL

The LV-S bus bar trunking system used for power transmission and distribution for industrial, Commercial and service industry. Its unique design provide a neat and attractive alternative to cable, its Hybrid option (Cast resin-extruded Aluminium profile) also offers flexibility to site requirements and ease of installation in terms of jointing and fitting with no requirement for cable trays and complicated terminations. An entire building can be fed from a single riser with no need for expensive and complicated cable runs to each floor. The LV-S bus bar trunking system is offered in rated current from 400A – 5000A with aluminium conductors While in rated current from 630A – 6300A with copper conductors.

Enclosure Details

The LV-S bus bar trunking system is made with sandwich technology (compact); the conductor bars are compacted without any space inside the enclosure. This technology guarantee to the product high performances concerning the voltage drop values even in high current and long distances extreme conditions. The enclosure is made by aluminium alloy 3mm thick extruded profile giving significant reduction to the product in impedance, reactance and magnetic flux leakage it also facilitate non-ventilated, naturally cooling and totally enclosed for protection against mechanical damages, dust accumulation in compact and sandwich type and a great save on weight. The enclosure is bolted along the bottom & Top sides with high tensile strength hardware,. No fastening bolts or screws penetrate the enclosure or enter the bus bar package. The LV-S bus bar trunking system is offered in the standard version is applied pure polyester powder paint with finish of RAL 7035 by an automated electrostatic process. The standard protection degree is IP55.

Earth System

The Aluminium alloy enclosure would also give integral ground as standard requirement. Additional external earth tape can be fixed to the outer part of the enclosure as per requirement.

Busbars

The standard product is offered in the 3p+n+pe with the neutral and the phase of the same cross section and the earthing (enclosure) cross-section more than 100% of the phase one. Phase and neutral conductors are made by one or two bars depending of the rated current. 55% conductivity aluminium conductors are galvanically tin-plated along their entire length while on request, 98% conductivity copper conductors can be galvanically tin- or silver-plated along their entire length and are fully insulated using a halogen free polyester sheath (thermic class f 150°C). The LV-S busbar trunking conductor bars have full rounded edges. This makes for a smooth and easy connection between the bus trunking .

TECHNICAL DATA

ALUMINIUM

Type	In	Conductor	I _k (1sec.)	I _k (dyn.)	R ₂₀	R _t	X _t	Z _t	H	Area	Weight
SB	A	mm	kA	kA	μΩ	μΩ	μΩ	μΩ	mm	mm ²	Kg/M
LV-S SB 060 A 03	400	03x60	12	24	106.11	126.43	49.9	133.27	90	178	8.5
LV-S SB 060 A 04	630	04x60	12	24	92.64	110.27	28.29	115.89	90	237	10.5
LV-S SB 060 A 06	800	06x60	27	56	80.56	95.89	24.6	100.77	90	352	12
LV-S SB 080 A	1000	06x80	53	117	60.42	73.8	53.6	92.9	110	472	14
LV-S SB 100 A	1250	06x100	53	117	81.97	96.1	139.9	169.7	130	592	16
LV-S SB 120 A	1400	06x120	65	143	40.28	48.8	40.88	64.3	150	712	18
LV-S SB 160 A	1600	06x160	65	143	30.21	61.2	15	63	190	952	21
LV-S SB 200 A	2000	06x200	65	143	62.6	73.4	35.4	81.5	230	1192	25
LV-S SB 240 A	2500	06x240	65	143	20.14	24.55	28.44	36.42	270	1432	28

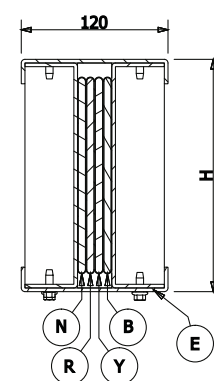
Type	In	Conductor	I _k (1sec.)	I _k (dyn.)	R ₂₀	R _t	X _t	Z _t	H	Area	Weight
DB	A	mm	kA	kA	μΩ	μΩ	μΩ	μΩ	mm	mm ²	Kg/M
LV-S DB 160 A	3200	06x160	80	176	41.66	48.84	11.47	50.18	420	1904	43
LV-S DB 200 A	4000	06x200	80	176	12.08	14.87	24.76	28.38	500	2384	51
LV-S DB 240 A	5000	06x240	80	176	19.39	22.73	13.86	26.47	580	2864	57

COPPER

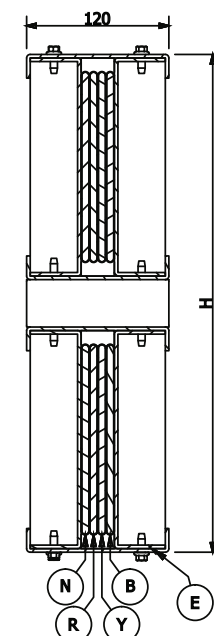
Type	In	Conductor	I _k (1sec.)	I _k (dyn.)	R ₂₀	R _t	X _t	Z _t	H	Area	Weight
SB	A	mm	kA	kA	μΩ	μΩ	μΩ	μΩ	mm	mm ²	Kg/M
LV-S SB 060 C 03	600	03x60	23	48	99	117.89	104.78	155.1	90	178	13
LV-S SB 060 C 04	800	04x60	23	48	74	92.82	83.7	124.9	90	237	16
LV-S SB 060 C 06	1000	06x60	36	80	49	60.72	67.35	90.9	90	352	19
LV-S SB 080 C	1250	06x80	53	117	36.46	47.80	66.36	76.13	110	472	25
LV-S SB 100 C	1400	06x100	53	117	32.3	40.12	61.12	75.16	130	592	31
LV-S SB 120 C	1600	06x120	65	143	29.17	34.29	56.7	67.34	150	712	37
LV-S SB 160 C	2000	06x160	65	143	18.23	20.95	27.3	34.82	190	952	47
LV-S SB 200 C	2500	06x200	80	176	14.58	16.1	23.55	28.37	230	1192	56
LV-S SB 240 C	3200	06x240	80	176	12.15	14.61	16.64	22.22	270	1432	66

Type	In	Conductor	I _k (1sec.)	I _k (dyn.)	R ₂₀	R _t	X _t	Z _t	H	Area	Weight
DB	A	mm	kA	kA	μΩ	μΩ	μΩ	μΩ	mm	mm ²	Kg/M
LV-S DB 160 C	4000	06x160	80	176	9.11	10.99	15.71	21.19	420	1904	96
LV-S DB 200 C	5000	06x200	80	176	7.29	7.77	16.39	19.19	500	2384	114
LV-S DB 240 C	6300	06x240	80	176	6.08	6.79	16.02	18.13	580	2864	134

SINGLE BAR



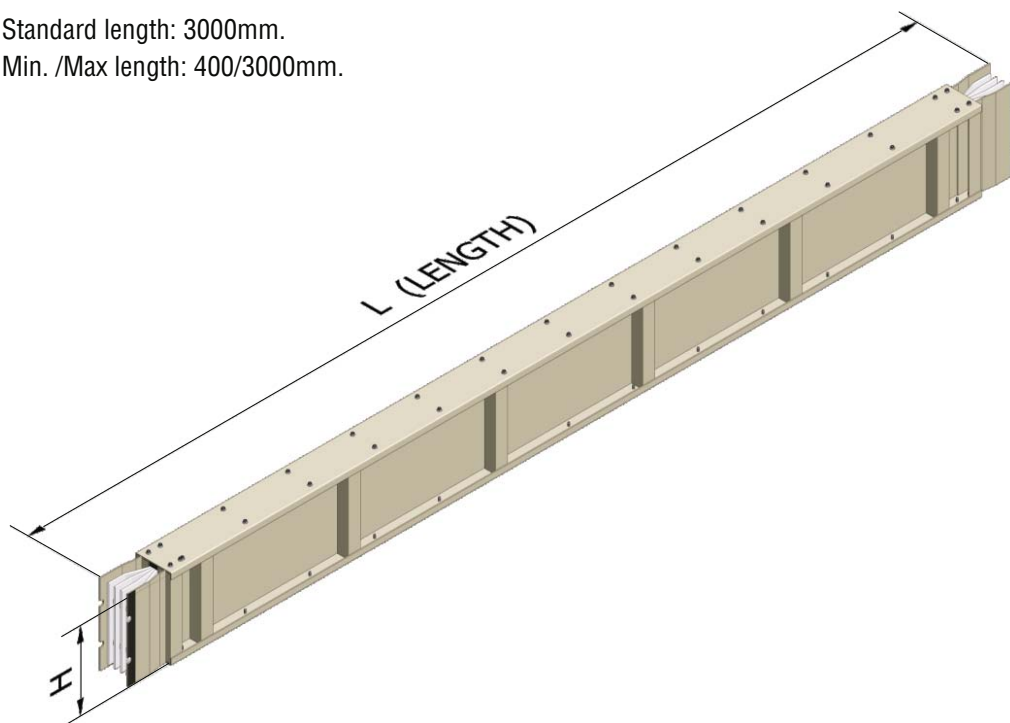
DOUBLE BAR



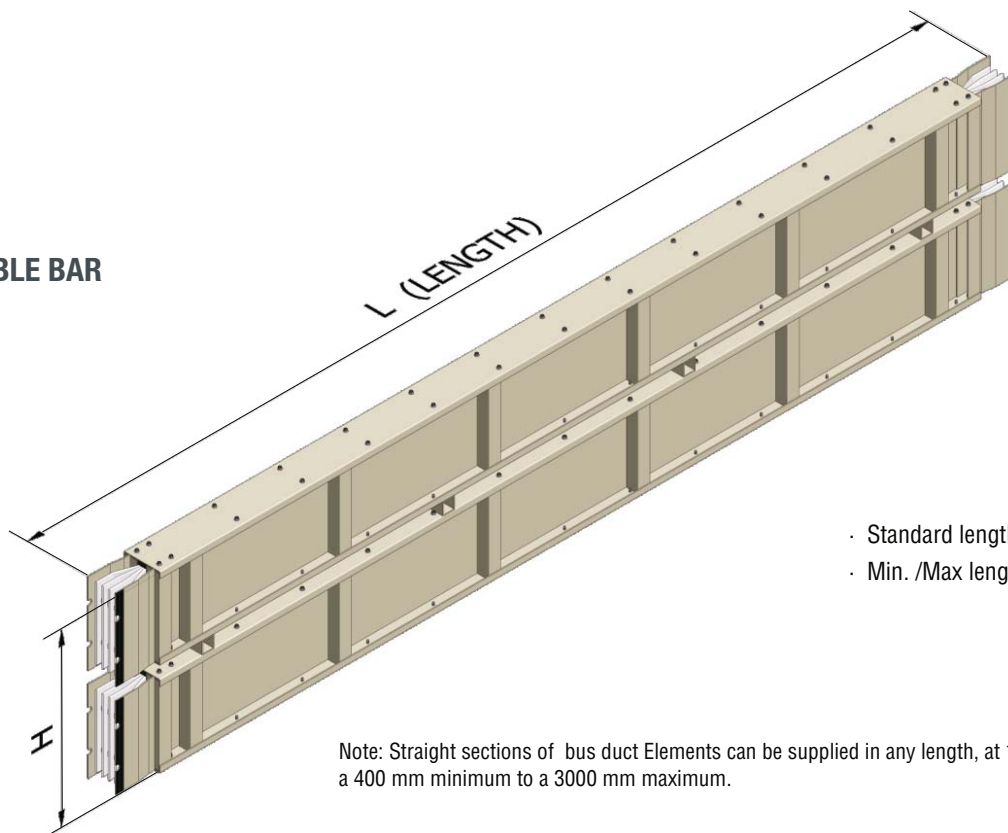
STRAIGHT ELEMENT

SINGLE BAR

- Standard length: 3000mm.
- Min. /Max length: 400/3000mm.



DOUBLE BAR



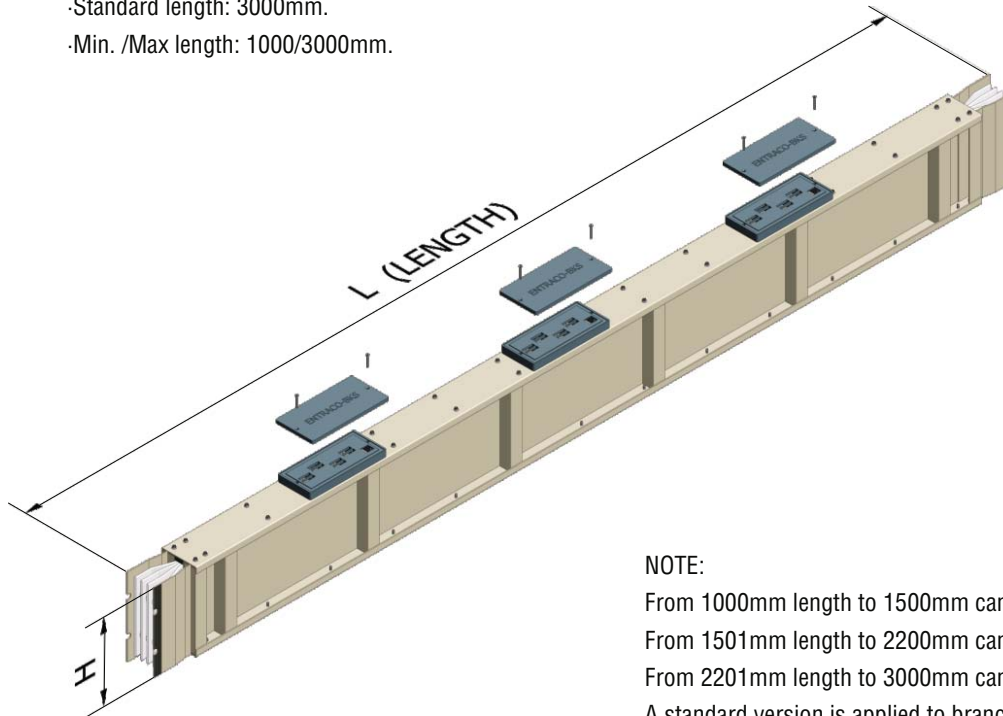
- Standard length: 3000mm.
- Min. /Max length: 400/3000mm.

Note: Straight sections of bus duct Elements can be supplied in any length, at 1mm increments, from a 400 mm minimum to a 3000 mm maximum.

STRAIGHT ELEMENT WITH PROVISION FOR PLUG-IN BOX

The plug-in outlet and cover are made from a durable, high strength, polycarbonate material and The plug-in cover is designed to protect the contact from live parts and prevent the ingress of dirt, dust or moisture.

- Standard length: 3000mm.
- Min. /Max length: 1000/3000mm.

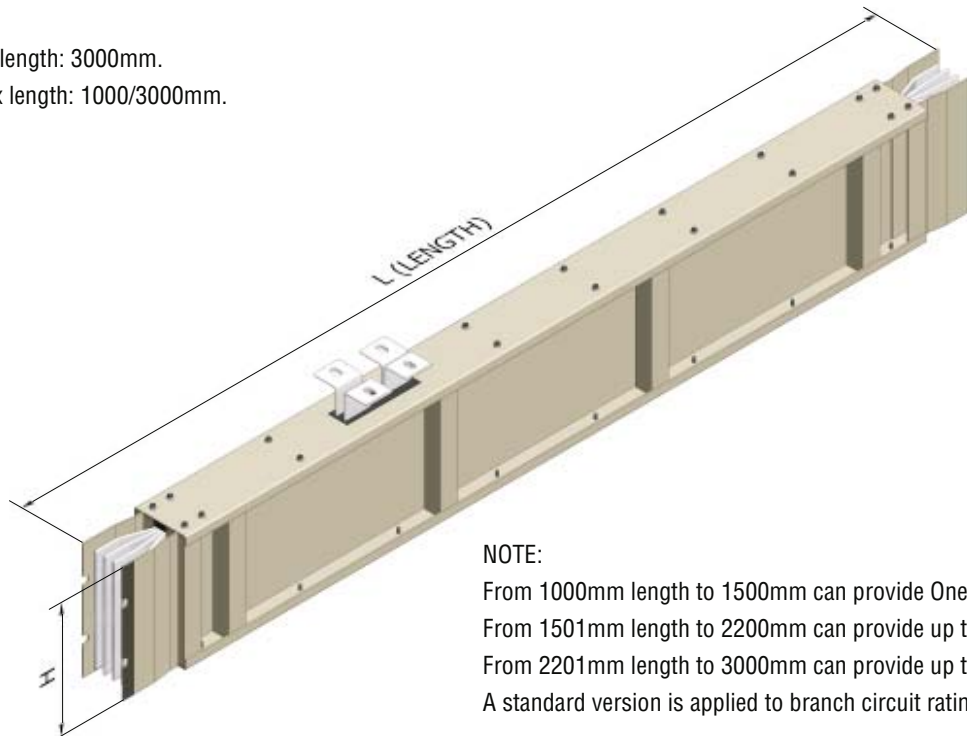


NOTE:

From 1000mm length to 1500mm can provide One Plug-In Box
 From 1501mm length to 2200mm can provide up to Two Plug-In Box
 From 2201mm length to 3000mm can provide up to Three Plug-In Box
 A standard version is applied to branch circuit rating of 630 A and below.

STRAIGHT ELEMENT WITH FIX TYPE TAP-OFF

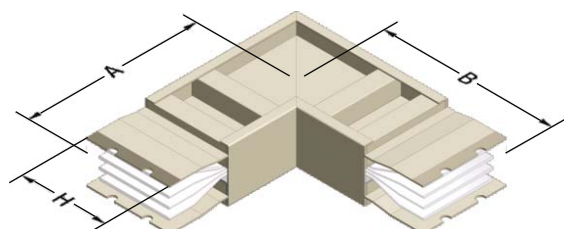
- Standard length: 3000mm.
- Min. /Max length: 1000/3000mm.



NOTE:

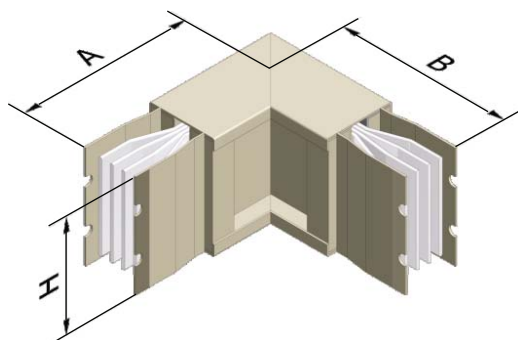
From 1000mm length to 1500mm can provide One Tap-off
 From 1501mm length to 2200mm can provide up to Two Tap-off
 From 2201mm length to 3000mm can provide up to Three Tap-off
 A standard version is applied to branch circuit rating of 630A and below.

FLAT ELBOW



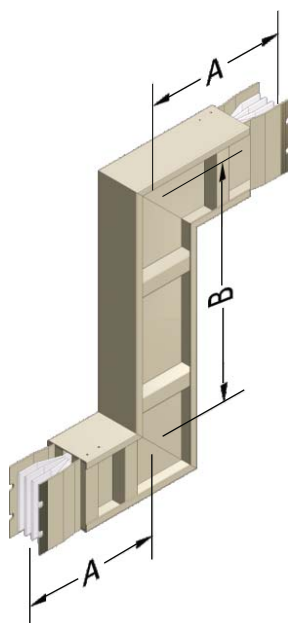
ALUMINIUM						COPPER				
In A	HEIGHT H	STANDARD		MINIMUM		HEIGHT H	STANDARD		MINIMUM	
		A	B	A	B		A	B	A	B
400	90	350	350	260	260					
630	90	350	350	260	260	90	350	350	260	260
800	90	350	350	260	260	90	350	350	260	260
1000	110	350	350	270	270	90	350	350	260	260
1250	130	350	350	280	280	110	350	350	270	270
1400	150	350	350	290	290	130	350	350	280	280
1600	190	350	350	310	310	150	350	350	290	290
2000	230	350	350	330	330	190	350	350	310	310
2500	270	350	350	350	350	230	350	350	330	330
3200	420	500	500	415	415	270	350	350	350	350
4000	500	500	500	455	455	420	500	500	415	415
5000	580	500	500	495	495	500	500	500	455	455
6300						580	500	500	495	495

DIHEDRAL ELBOW



ALUMINIUM						COPPER				
In A	HEIGHT H	STANDARD		MINIMUM		HEIGHT H	STANDARD		MINIMUM	
		A	B	A	B		A	B	A	B
400	90	300	300	285	285					
630	90	300	300	285	285	90	300	300	285	285
800	90	300	300	285	285	90	300	300	285	285
1000	110	300	300	285	285	90	300	300	285	285
1250	130	300	300	285	285	110	300	300	285	285
1400	150	300	300	285	285	130	300	300	285	285
1600	190	300	300	285	285	150	300	300	285	285
2000	230	300	300	285	285	190	300	300	285	285
2500	270	300	300	285	285	230	300	300	285	285
3200	420	300	300	285	285	270	300	300	285	285
4000	500	300	300	285	285	420	300	300	285	285
5000	580	300	300	285	285	500	300	300	285	285
6300						580	300	300	285	285

DOUBLE FLAT ELBOW



ALUMINIUM						COPPER				
In A	HEIGHT H	STANDARD		MINIMUM		HEIGHT H	STANDARD		MINIMUM	
		A	B	A	B		A	B	A	B
400	90	500	500	260	125					
630	90	500	500	260	125	90	500	500	260	125
800	90	500	500	260	125	90	500	500	260	125
1000	110	500	500	270	135	90	500	500	260	125
1250	130	500	500	280	145	110	500	500	270	135
1400	150	500	500	290	155	130	500	500	280	145
1600	190	500	500	310	175	150	500	500	290	155
2000	230	500	500	330	195	190	500	500	310	175
2500	270	500	500	350	215	230	500	500	330	195
3200	420	500	500	415	280	270	500	500	350	215
4000	500	500	500	455	320	420	500	500	415	280
5000	580	500	500	495	360	500	500	500	455	320
6300						580	500	500	495	360

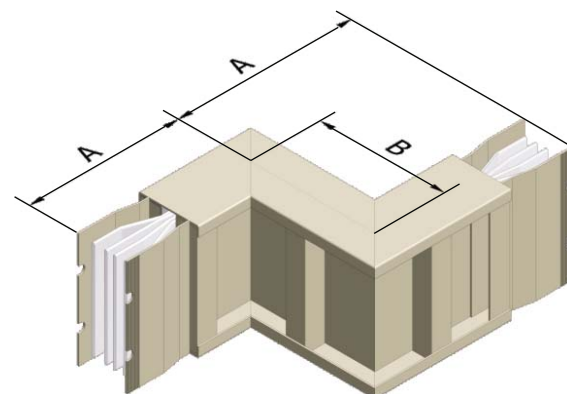
Note :

When making field measurements and layouts, it should be remembered that the dimensions are given from the centre line.

all dimensions are in mm

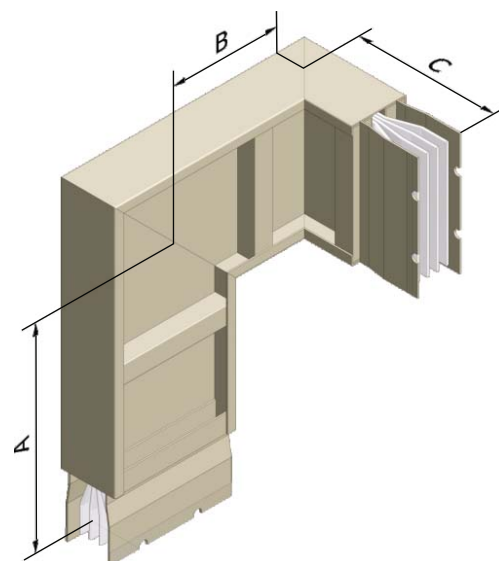
DOUBLE DIHEDRAL ELBOW

ALUMINIUM						COPPER				
In A	HEIGHT H	STANDARD		MINIMUM		HEIGHT H	STANDARD		MINIMUM	
		A	B	A	B		A	B	A	B
400	90	500	500	285	100					
630	90	500	500	285	100	90	500	500	285	100
800	90	500	500	285	100	90	500	500	285	100
1000	110	500	500	285	100	90	500	500	285	100
1250	130	500	500	285	100	110	500	500	285	100
1400	150	500	500	285	100	130	500	500	285	100
1600	190	500	500	285	100	150	500	500	285	100
2000	230	500	500	285	100	190	500	500	285	100
2500	270	500	500	285	100	230	500	500	285	100
3200	420	500	500	285	100	270	500	500	285	100
4000	500	500	500	285	100	420	500	500	285	100
5000	580	500	500	285	100	500	500	500	285	100
6300						580	500	500	285	100



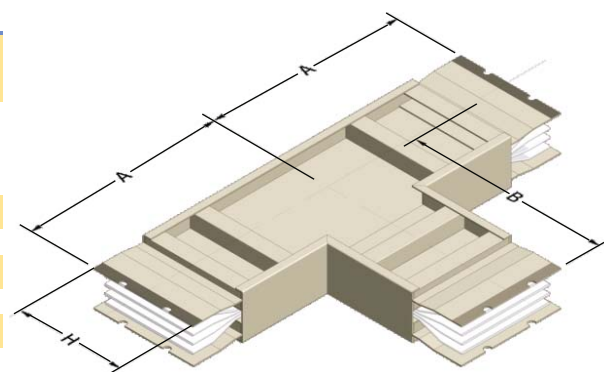
COMBINATION ELBOW (FLAT+DIHEDRAL)

ALUMINIUM								COPPER							
In	HEIGHT	STANDARD			MINIMUM			HEIGHT	STANDARD			MINIMUM			
A	H	A	B	C	A	B	C	H	A	B	C	A	B	C	
400	90	500	500	500	260	125	285								
630	90	500	500	500	260	125	285	90	500	500	500	260	125	285	
800	90	500	500	500	260	125	285	90	500	500	500	260	125	285	
1000	110	500	500	500	270	135	285	90	500	500	500	260	125	285	
1250	130	500	500	500	280	145	285	110	500	500	500	270	135	285	
1400	150	500	500	500	290	155	285	130	500	500	500	280	145	285	
1600	190	500	500	500	310	175	285	150	500	500	500	290	155	285	
2000	230	500	500	500	330	195	285	190	500	500	500	310	175	285	
2500	270	500	500	500	350	215	285	230	500	500	500	330	195	285	
3200	420	500	500	500	415	280	400	270	500	500	500	350	215	285	
4000	500	500	500	500	455	320	420	420	500	500	500	415	280	400	
5000	580	500	500	500	495	360	440	500	500	500	500	455	320	420	
6300								580	500	500	500	495	360	440	



FLAT 'T'

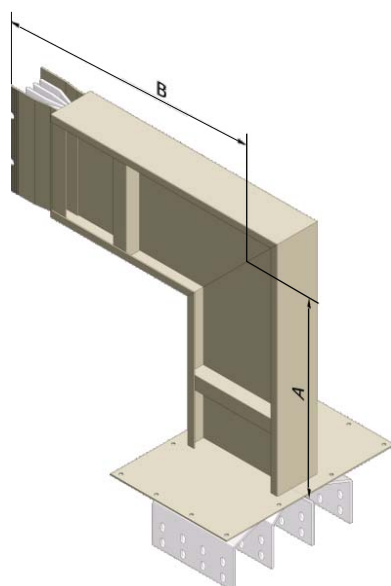
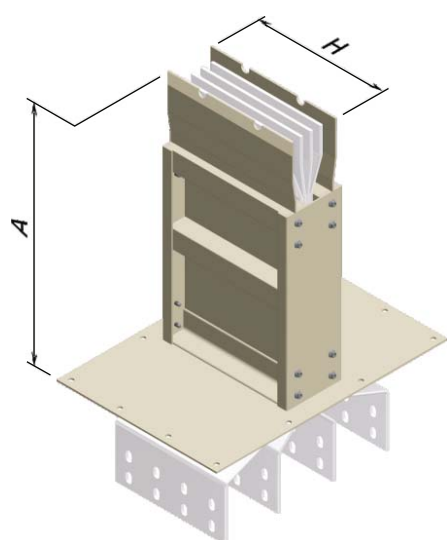
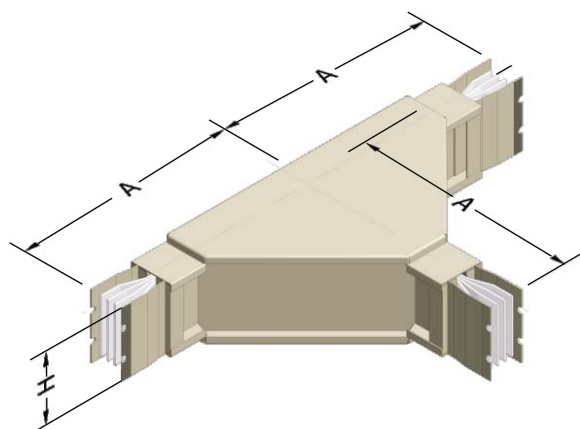
ALUMINIUM						COPPER				
In A	HEIGHT H	STANDARD		MINIMUM		HEIGHT H	STANDARD		MINIMUM	
		A	B	A	B		A	B	A	B
400	90	350	350	260	260					
630	90	350	350	260	260	90	350	350	260	260
800	90	350	350	260	260	90	350	350	260	260
1000	110	350	350	270	270	90	350	350	260	260
1250	130	350	350	280	280	110	350	350	270	270
1400	150	350	350	290	290	130	350	350	280	280
1600	190	350	350	310	310	150	350	350	290	290
2000	230	350	350	330	330	190	350	350	310	310
2500	270	350	350	350	350	230	350	350	330	330
3200	420	500	500	415	415	270	350	350	350	350
4000	500	500	500	455	455	420	500	500	415	415
5000	580	500	500	495	495	500	500	500	455	455
6300						580	500	500	495	495



Note :

When making field measurements and layouts, it should be remembered that the dimensions are given from the centre line.

all dimensions are in mm



DIHEDRAL 'T'

ALUMINIUM				COPPER		
In A	HEIGHT H	STANDARD A	MINIMUM A	HEIGHT H	STANDARD A	MINIMUM A
400	90	600	550			
630	90	600	550	90	600	550
800	90	600	550	90	600	550
1000	110	600	550	90	600	550
1250	130	600	550	110	600	550
1400	150	600	550	130	600	550
1600	190	600	550	150	600	550
2000	230	600	550	190	600	550
2500	270	600	550	230	600	550
3200	420	600	550	270	600	550
4000	500	600	550	420	600	550
5000	580	600	550	500	600	550
6300				580	600	550

STRAIGHT TERMINAL ELEMENT

ALUMINIUM				COPPER		
In A	HEIGHT H	STANDARD A	MINIMUM A	HEIGHT H	STANDARD A	MINIMUM A
400	90	300	260			
630	90	300	260	90	300	260
800	90	300	260	90	300	260
1000	110	300	260	90	300	260
1250	130	300	260	110	300	260
1400	150	300	260	130	300	260
1600	190	300	260	150	300	260
2000	230	300	260	190	300	260
2500	270	300	260	230	300	260
3200	420	300	260	270	300	260
4000	500	300	260	420	300	260
5000	580	300	260	500	300	260
6300				580	300	260

FLAT ELBOW + TERMINAL ELEMENT

ALUMINIUM						COPPER				
In A	HEIGHT H	STANDARD A	B	MINIMUM A	B	HEIGHT H	STANDARD A	B	MINIMUM A	B
400	90	350	350	125	260					
630	90	350	350	125	260	90	350	350	125	260
800	90	350	350	125	260	90	350	350	125	260
1000	110	350	350	135	270	90	350	350	125	260
1250	130	350	350	145	280	110	350	350	135	270
1400	150	350	350	155	290	130	350	350	145	280
1600	190	350	350	175	310	150	350	350	155	290
2000	230	350	350	195	330	190	350	350	175	310
2500	270	350	350	215	350	230	350	350	195	330
3200	420	500	500	280	415	270	350	350	215	350
4000	500	500	500	320	455	420	500	500	280	415
5000	580	500	500	360	495	500	500	500	320	455
6300						580	500	500	360	495

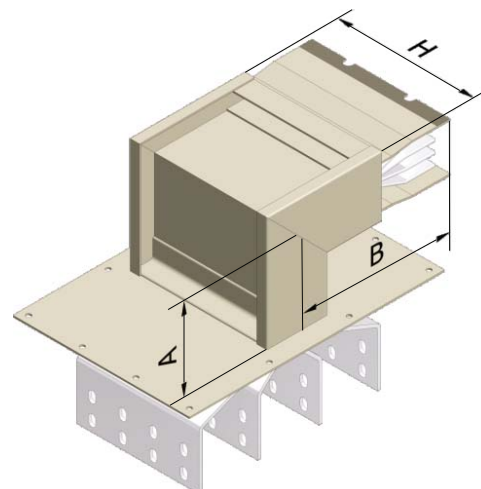
Note :

When making field measurements and layouts, it should be remembered that the dimensions are given from the centre line.

all dimensions are in mm

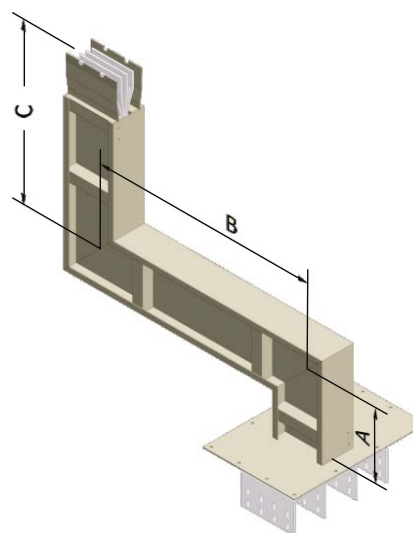
DIHEDRAL ELBOW + TERMINAL ELEMENT

ALUMINIUM						COPPER				
In	HEIGHT	STANDARD		MINIMUM		HEIGHT	STANDARD		MINIMUM	
A	H	A	B	A	B	H	A	B	A	B
400	90	300	300	100	285					
630	90	300	300	100	285	90	300	300	100	285
800	90	300	300	100	285	90	300	300	100	285
1000	110	300	300	100	285	90	300	300	100	285
1250	130	300	300	100	285	110	300	300	100	285
1400	150	300	300	100	285	130	300	300	100	285
1600	190	300	300	100	285	150	300	300	100	285
2000	230	300	300	100	285	190	300	300	100	285
2500	270	300	300	100	285	230	300	300	100	285
3200	420	300	300	100	285	270	300	300	100	285
4000	500	300	300	100	285	420	300	300	100	285
5000	580	300	300	100	285	500	300	300	100	285
6300						580	300	300	100	285



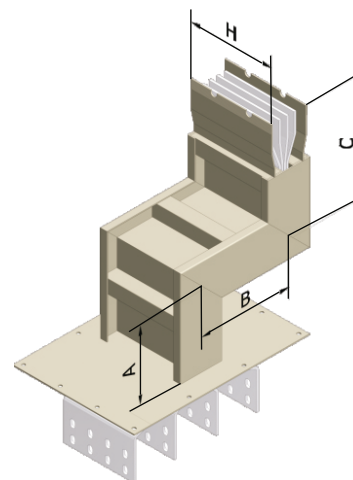
DOUBLE FLAT ELBOW + TERMINAL ELEMENT

ALUMINIUM								COPPER							
In	HEIGHT	STANDARD			MINIMUM			HEIGHT	STANDARD			MINIMUM			
A	mm	A	B	C	A	B	C	mm	A	B	C	A	B	C	
400	90	500	500	500	125	125	260								
630	90	500	500	500	125	125	260	90	500	500	500	125	125	260	
800	90	500	500	500	125	125	260	90	500	500	500	125	125	260	
1000	110	500	500	500	135	135	270	90	500	500	500	125	125	260	
1250	130	500	500	500	145	145	280	110	500	500	500	135	135	270	
1400	150	500	500	500	155	155	290	130	500	500	500	145	145	280	
1600	190	500	500	500	175	175	310	150	500	500	500	155	155	290	
2000	230	500	500	500	195	195	330	190	500	500	500	175	175	310	
2500	270	500	500	500	215	215	350	230	500	500	500	195	195	330	
3200	420	500	500	500	280	280	415	270	500	500	500	215	215	350	
4000	500	500	500	500	320	320	455	420	500	500	500	280	280	415	
5000	580	500	500	500	360	360	495	500	500	500	500	320	320	455	
6300								580	500	500	500	360	360	495	



DOUBLE DIHEDRAL ELBOW + TERMINAL ELEMENT

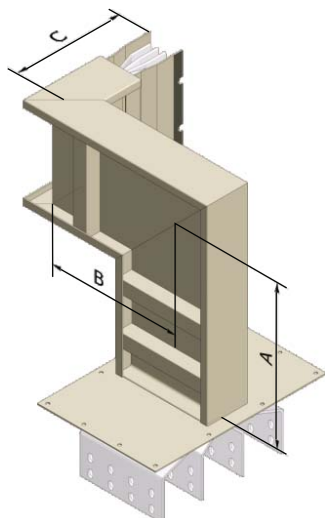
ALUMINIUM								COPPER							
In	HEIGHT	STANDARD			MINIMUM			HEIGHT	STANDARD			MINIMUM			
A	mm	A	B	C	A	B	C	mm	A	B	C	A	B	C	
400	90	500	500	500	100	100	285								
630	90	500	500	500	100	100	285	90	500	500	500	100	100	285	
800	90	500	500	500	100	100	285	90	500	500	500	100	100	285	
1000	110	500	500	500	100	100	285	90	500	500	500	100	100	285	
1250	130	500	500	500	100	100	285	110	500	500	500	100	100	285	
1400	150	500	500	500	100	100	285	130	500	500	500	100	100	285	
1600	190	500	500	500	100	100	285	150	500	500	500	100	100	285	
2000	230	500	500	500	100	100	285	190	500	500	500	100	100	285	
2500	270	500	500	500	100	100	285	230	500	500	500	100	100	285	
3200	420	500	500	500	100	100	285	270	500	500	500	100	100	285	
4000	500	500	500	500	100	100	285	420	500	500	500	100	100	285	
5000	580	500	500	500	100	100	285	500	500	500	500	100	100	285	
6300								580	500	500	500	100	100	285	



Note :

When making field measurements and layouts, it should be remembered that the dimensions are given from the centre line.

all dimensions are in mm



COMBINATION ELBOW + TERMINAL ELEMENT

ALUMINIUM									COPPER						
In	HEIGHT	STANDARD			MINIMUM				HEIGHT	STANDARD			MINIMUM		
A	mm	A	B	C	A	B	C		mm	A	B	C	A	B	C
400	90	500	500	500	125	125	285								
630	90	500	500	500	125	125	285	90	500	500	500	125	125	285	
800	90	500	500	500	125	125	285	90	500	500	500	125	125	285	
1000	110	500	500	500	135	135	285	90	500	500	500	125	125	285	
1250	130	500	500	500	145	145	285	110	500	500	500	135	135	285	
1400	150	500	500	500	155	155	285	130	500	500	500	145	145	285	
1600	190	500	500	500	175	175	285	150	500	500	500	155	155	285	
2000	230	500	500	500	195	195	285	190	500	500	500	175	175	285	
2500	270	500	500	500	215	215	285	230	500	500	500	195	195	285	
3200	420	500	500	500	280	280	400	270	500	500	500	215	215	285	
4000	500	500	500	500	320	320	420	420	500	500	500	280	280	400	
5000	580	500	500	500	360	360	440	500	500	500	500	320	320	420	
6300								580	500	500	500	360	360	440	

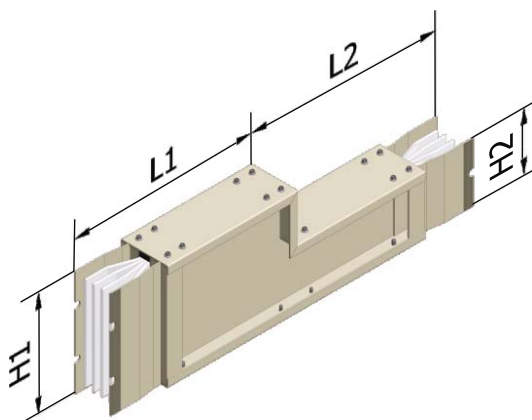
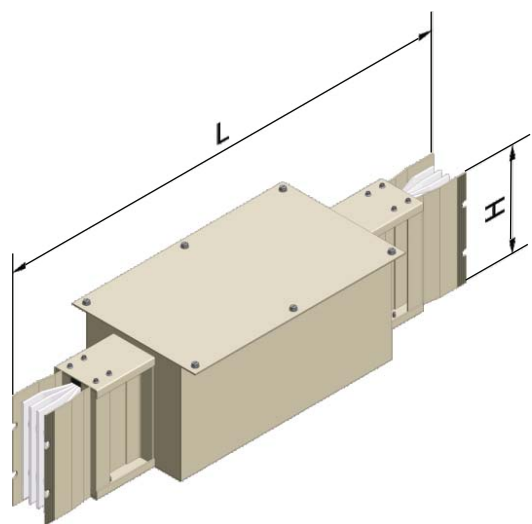
EXPANSION ELEMENT

- Standard length: 1000mm.
- Min. /Max length: 1000/3000mm.

Expansion joints must be used wherever a run of bus duct crosses an expansion joint of a building. It is recommended They should also be installed in the center of extremely long straight runs of bus duct one every 60 m for copper or one every 40 m for aluminum. The use of expansion joints should be engineered for individual installations.

RATING REDUCER ELEMENT

- Standard length: 1000mm.
- Min. /Max length: 600/3000mm.

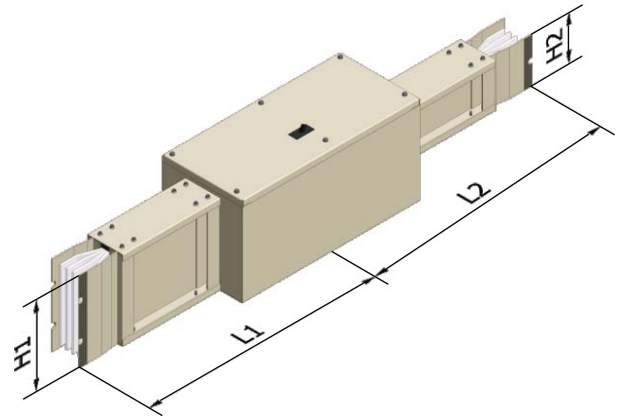


Note :
When making field measurements and layouts, it should be remembered that the dimensions are given from the centre line.

all dimensions are in mm

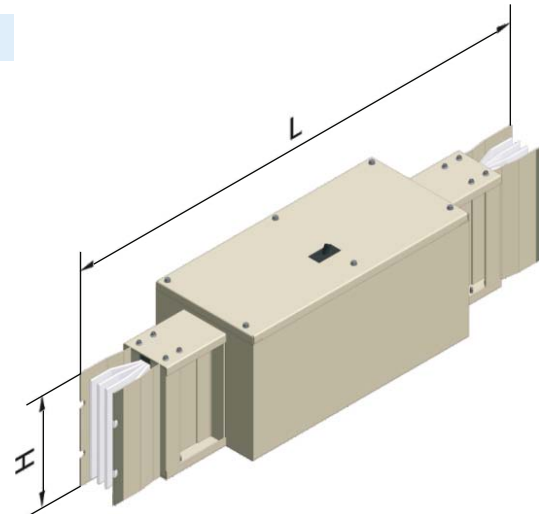
RATING REDUCER ELEMENT WITH DISCONNECTING SWITCH

- Standard length: 1000mm.
- Min. /Max length: 1000/3000mm.



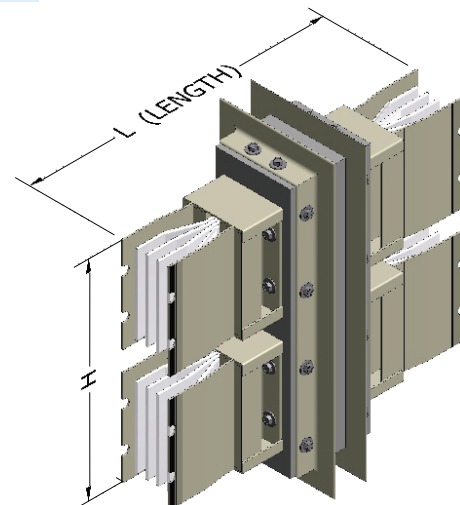
ISOLATOR ELEMENT

- Standard length: 1000mm.
- Min. /Max length: 1000/3000mm.



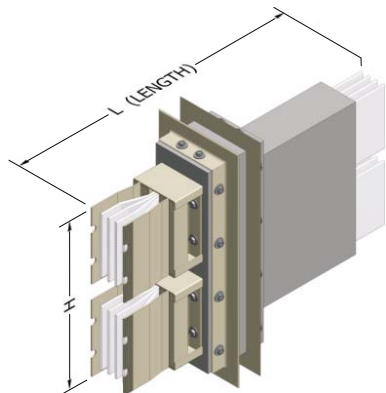
WALL/ROOF FLANGE ELEMENT

- Min. /Max length: 600/3000mm.
- Facilitate fire barrier as well as wall/floor flange.



Note :
When making field measurements and layouts, it should be remembered that the dimensions are given from the centre line.

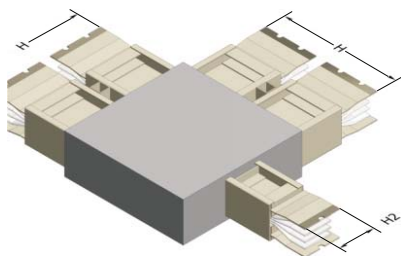
Unique Elements Available Only With Entraco Bks



WALL FLANGE ELEMENT (IP68 to IP55)

- Min. /Max length: 600/3000mm.

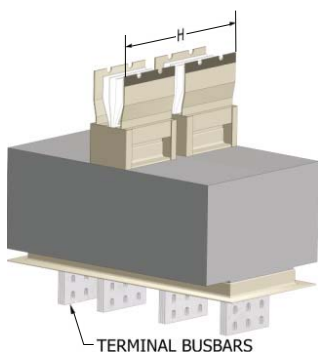
Used to convert IP68 out door type to IP55 indoor type
 hence can deduct on unnecessary project coast
 Facilitate fire barrier as well as wall/floor flange.



'T' ELEMENT + RATING REDUCER

Length at each axis min: 600 & max: 1000

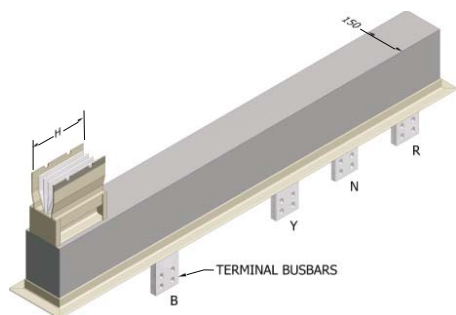
Compact Type 'T' element can use where the power requirements are reducing onwards



COMPACT TYPE TERMINAL ELEMENT

- Min. /Max length: 300/600mm.

Can easily accommodate on compact type equipment flange
 Facilitate fire barrier as well as floor flange at terminal end of bottom entry type of equipments
 Can use at terminal end of liquid type substation transformer

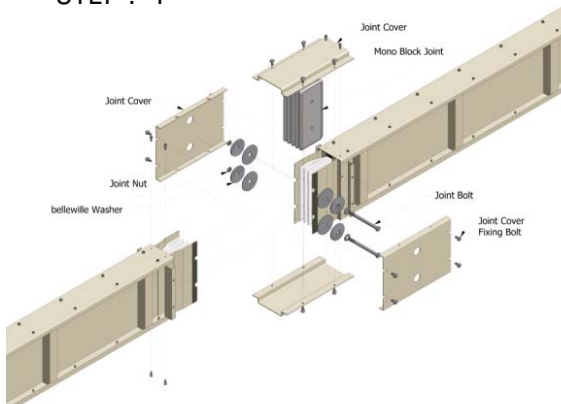


DRY TYPE TRANSFORMER TERMINAL ELEMENT

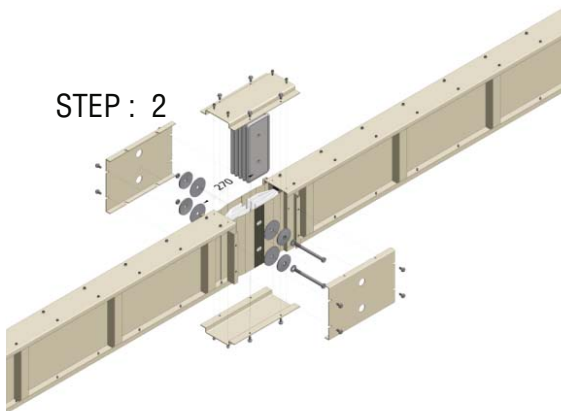
Best solution for connecting dry type transformer to our Busduct

MONO-BLOCK JOINT INSTALLATION PROCEDURE

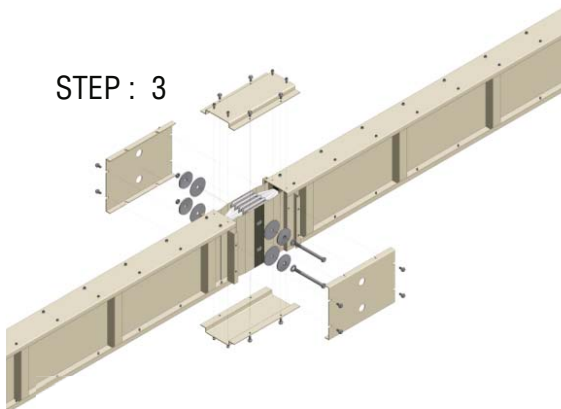
STEP : 1



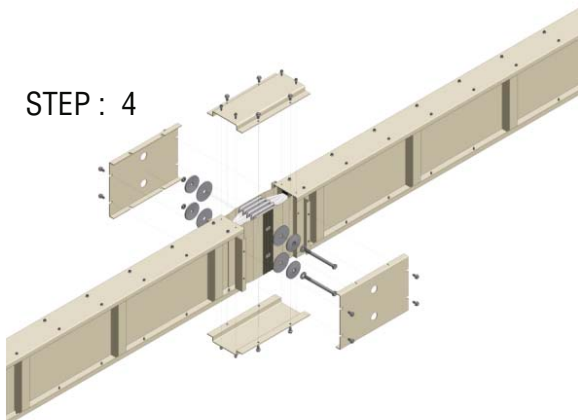
STEP : 2



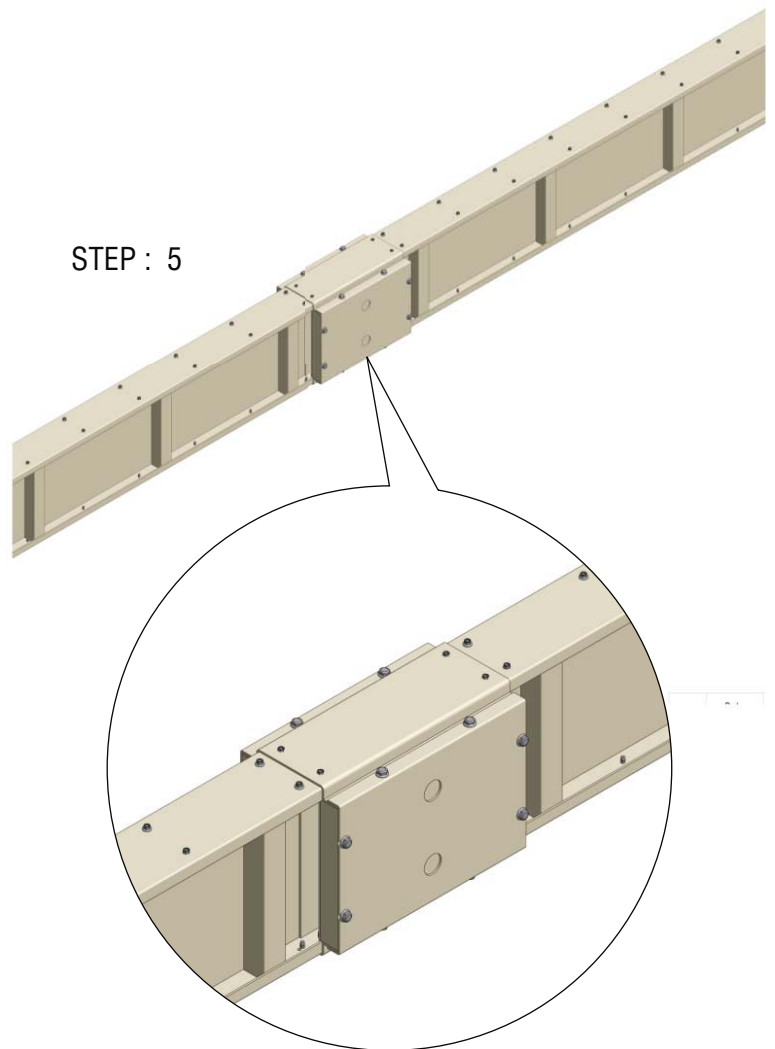
STEP : 3



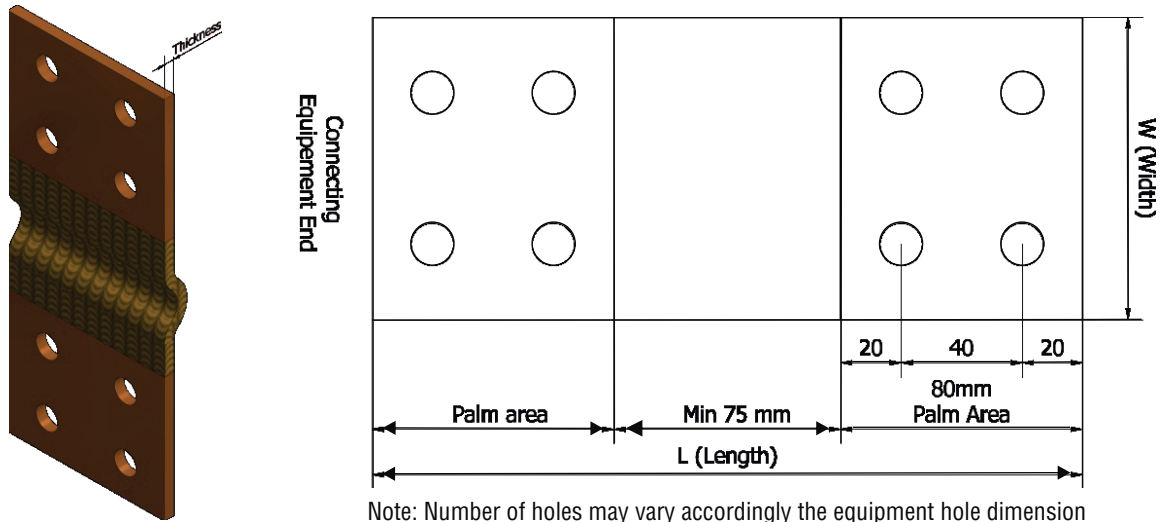
STEP : 4



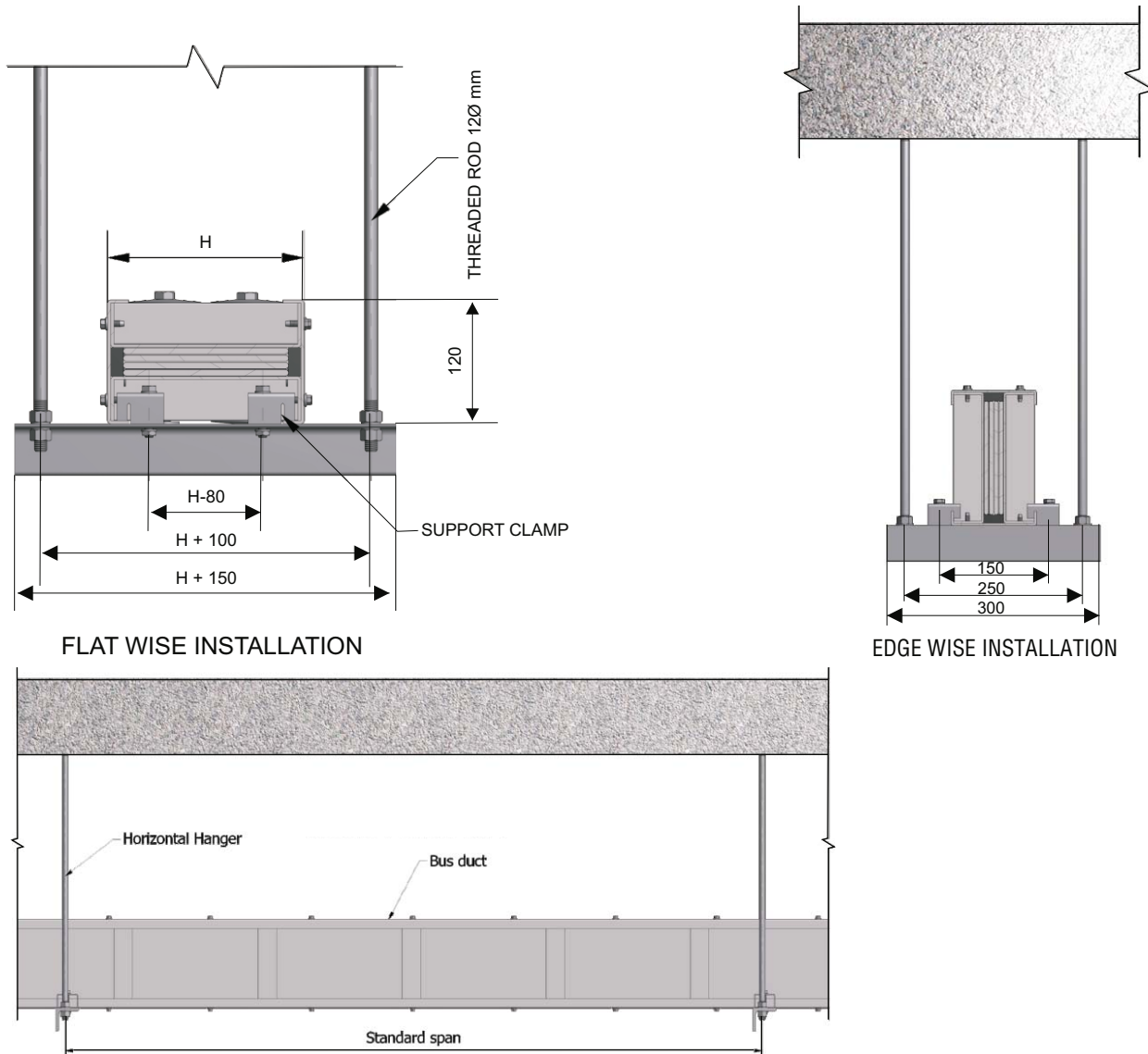
STEP : 5

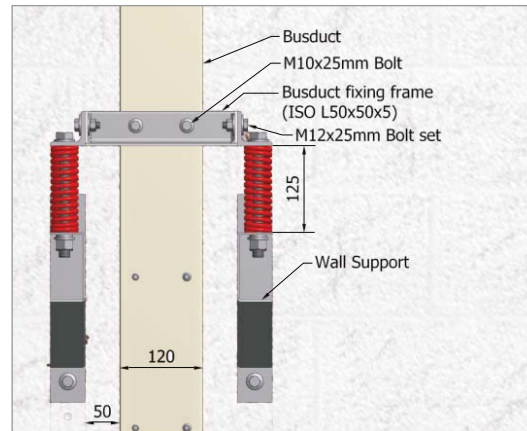
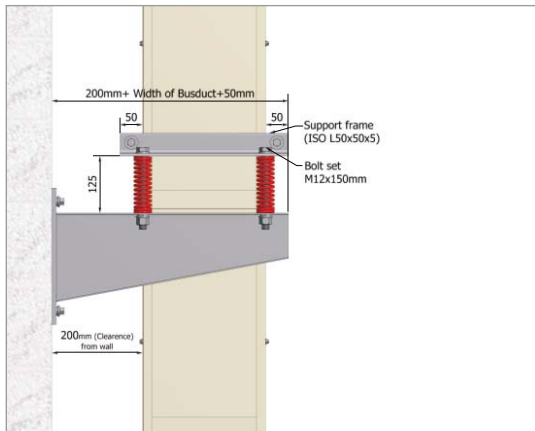


FLEXIBLE CONNECTORS

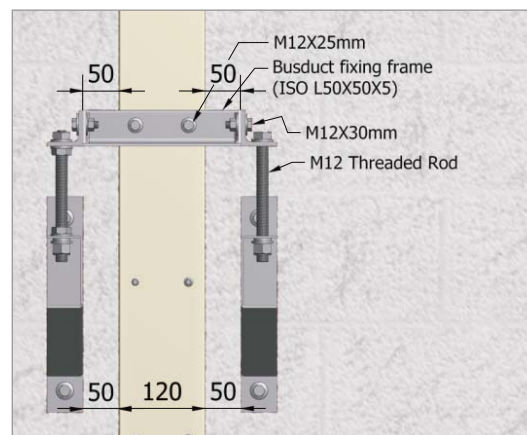
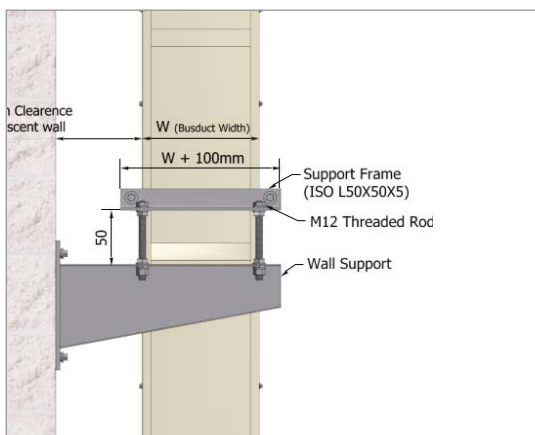


BUS DUCT SUPPORTS

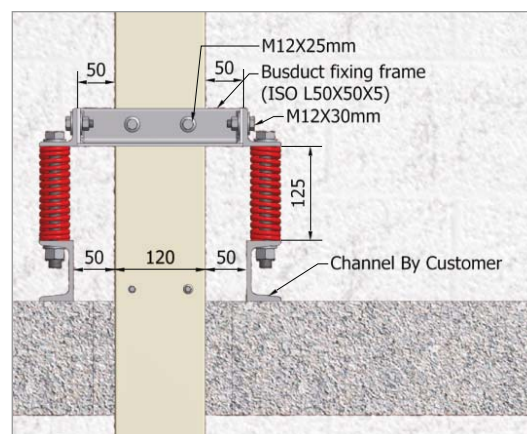
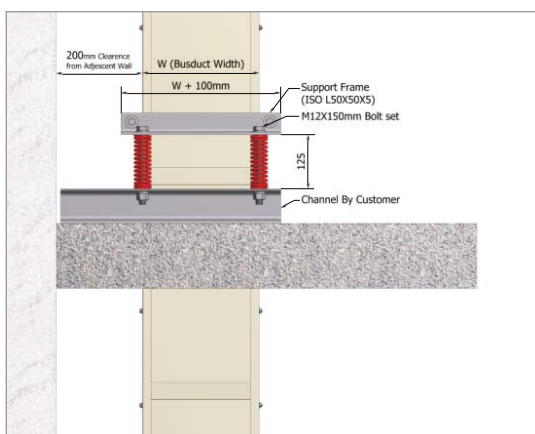




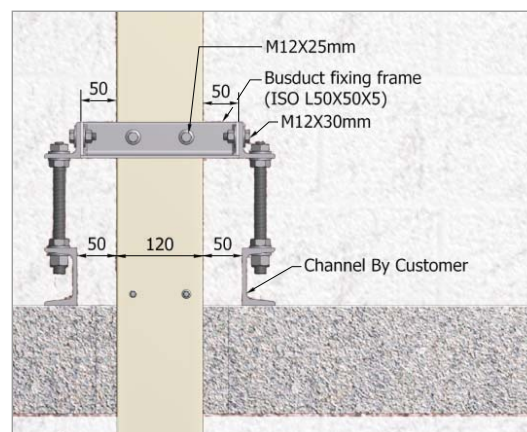
**VERTICAL
WALL SUPPORT
(WITH SPRING)**



**VERTICAL
WALL SUPPORT
(WITHOUT SPRING)**

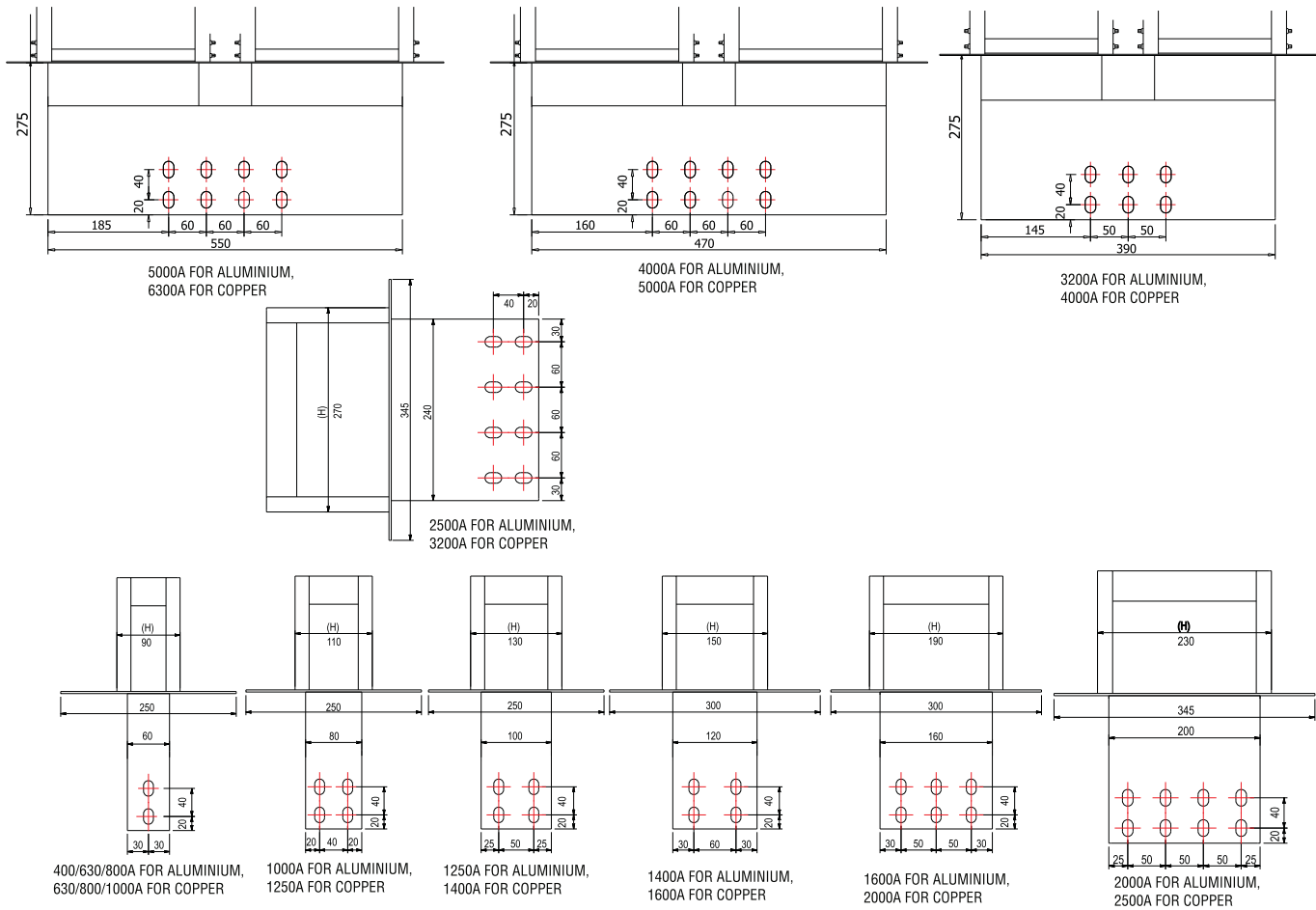


**VERTICAL
FLOOR SUPPORT
(WITH SPRING)**

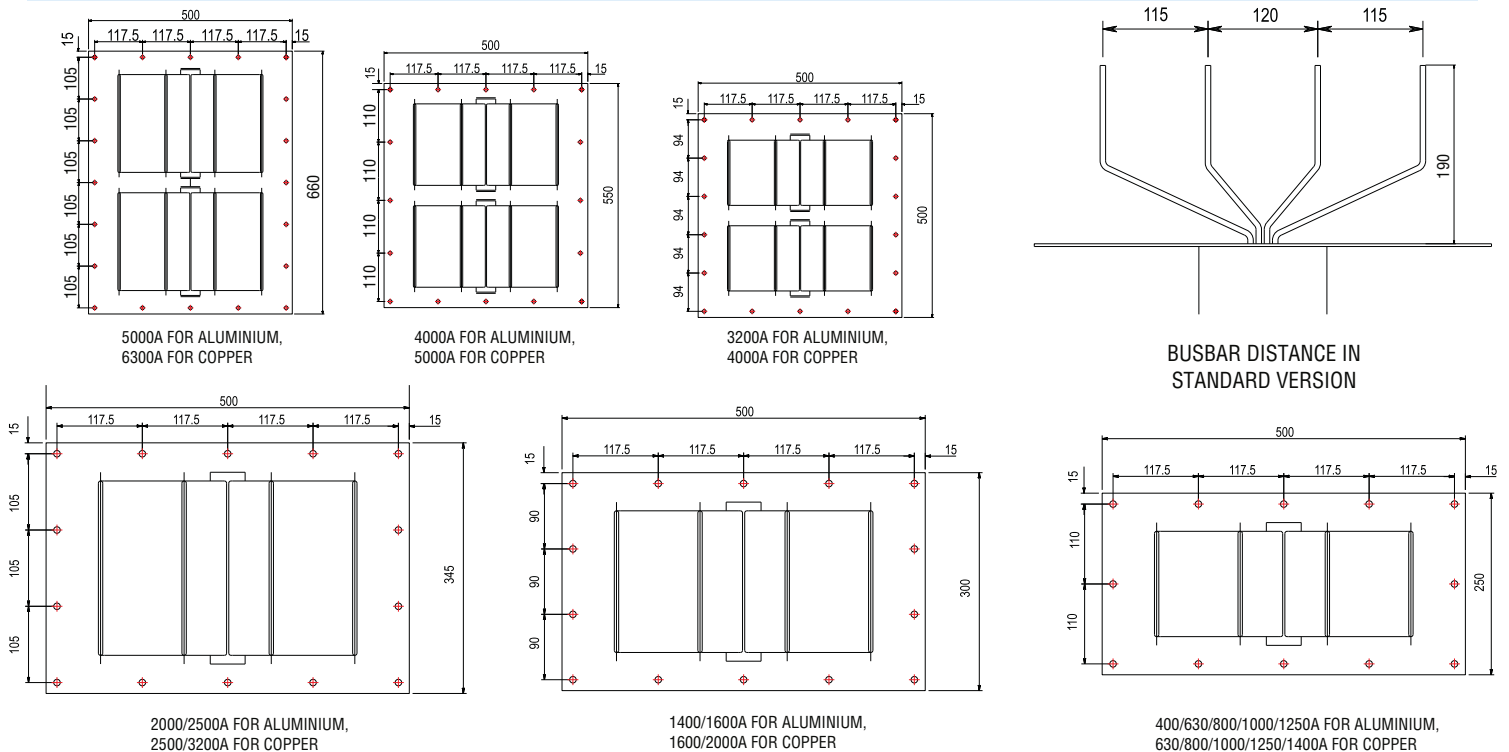


**VERTICAL
FLOOR SUPPORT
(WITHOUT SPRING)**

TERMINAL BUSBAR DRILL DETAIL



TERMINAL BASE PLATE DRILL DETAIL



BUSBAR DISTANCE IN STANDARD VERSION

CERTIFICATIONS

Entraco BKS busducts are type tested and confirms IEC60439-2:



ELECTRICAL RESEARCH AND DEVELOPMENT ASSOCIATION
(Accredited by the National Accreditation Board for Testing and Calibration Laboratories, Govt. of India)
ERDA Road, Mahape Industrial Estate, Vasind Road-90 015, India.
EPABX : +91 (020) 2642942, 2642964, 2642977, 2642978 / 26 / 30 / 31 / 32
Fax : +91 (020) 2638332, 2638333
E-mail : erda@erda.org, info@erda.org

TEST REPORT

SHEET 1 OF 4

NAME & ADDRESS OF CUSTOMER
ENTRACO-BKS BUSDUCTS PVT. LTD.
A-36/2, NICE AREA,
MIDC, SATPUR,
NASHIK- 422 007,
(M.S.) INDIA

REPORT NO: PLV/10/SC/557
DATE: 15.07.2009
CUSTOMER REF.NO: EBBPL/015/2009
DATED: 24.06.2009
DATE OF SAMPLE RECEIPT: 03.07.2009
DATE OF TESTING:

SAMPLE DESCRIPTION
1400A SANDWICH TYPE ALUM BUSBAR BUSDUCT
Rated Operational Voltage (Ue): 4
Rated Operational Current (Ie): 14
Rated Frequency: 50 Hz
Rated insulation voltage: 1000 V
No. of Phases: TPN
Rated short time withstand current duration:
- 65 kArms for 1 sec. with an initial peak of 143 kA between phases
- 39 kArms for 1 sec. with an initial peak of 81.9 kA between adjacent & neutral.
Quantity (Tested): 1 No.

TEST DETAILS
Verification of short circuit withstand strength (Cl. No. 8.2.3)

ENCLOSURES:
NUMBER OF OSCILLOGRAM : TH
NUMBER OF PHOTOGRAPH : ON
NUMBER OF TEST CIRCUIT DIAGRAM : TW
NUMBER OF DRAWINGS : ON

TEST WITNESSED BY: Mr. MANOJ
REMARKS: The sample conforms to the requirements of IEC 60439-2:2005
PREPARED BY: P. J. Phatak
CHECKED BY: P. J. Phatak
NOTE: 1. This report relates only to the particular sample.
2. This report cannot be reproduced in part under any circumstances.
3. Publication of this report requires prior permission in writing from Director, ERDA.
4. Only test asked by customer have been carried out.



ELECTRICAL RESEARCH AND DEVELOPMENT ASSOCIATION
(Accredited by the National Accreditation Board for Testing and Calibration Laboratories, Govt. of India)
ERDA Road, Mahape Industrial Estate, Vasind Road-90 015, India.
EPABX : +91 (020) 2642942, 2642964, 2642977, 2642978 / 26 / 30 / 31 / 32
Fax : +91 (020) 2638332, 2638333
E-mail : erda@erda.org, info@erda.org

TEST REPORT

SHEET 1 OF 4

NAME & ADDRESS OF CUSTOMER
ENTRACO BKS BUS DUCTS PVT.LTD.
A/36 2, NICE AREA, MIDC SATPUR,
NASHIK 422 007,
INDIA.

REPORT NO: LSCS/204
DATE: 10.08.2011
CUSTOMER REF.NO: NIL
DATED: 15.07.2011
DATE OF SAMPLE RECEIPT: 15.07.2011
DATE OF TESTING: 18.07.2011

SAMPLE DESCRIPTION
2000A, TP+100%N, IP-55 ALUMINIUM BUSDUCT
Rated Operational Voltage (Ue): 1000 V
Rated Operational Current (Ie): 2000 A
Rated Frequency: 50 Hz
Rated insulation voltage: 2500 V
No. of Phases: TPN
Rated short time withstand current & its duration:
- 65 kArms for 1 sec. with an initial peak of 143 kA between phases
- 65 kArms for 1 sec. with an initial peak of 143 kA between adjacent phase & neutral
Quantity (Tested): 1 No.

TEST DETAILS
Verification of the short circuit withstand strength test (Cl.No.8.2.3)

ENCLOSURES:
NUMBER OF OSCILLOGRAM : TH
NUMBER OF PHOTOGRAPH : ON
NUMBER OF TEST CIRCUIT DIAGRAM : TW
NUMBER OF DRAWINGS : ON

TEST WITNESSED BY: Mr. A.P.ROY
REMARKS: The sample conforms to the requirements of IEC 60439-2:2005
PREPARED BY: P. J. Phatak
CHECKED BY: P. J. Phatak
NOTE: 1. This report relates only to the particular sample.
2. This report cannot be reproduced in part under any circumstances.
3. Publication of this report requires prior permission in writing from Director, ERDA.
4. Only test asked by customer have been carried out.



ELECTRICAL RESEARCH AND DEVELOPMENT ASSOCIATION
(Accredited by the National Accreditation Board for Testing and Calibration Laboratories, Govt. of India)
ERDA Road, Mahape Industrial Estate, Vasind Road-90 015, India.
EPABX : +91 (020) 2642942, 2642964, 2642977, 2642978 / 26 / 30 / 31 / 32
Fax : +91 (020) 2638332, 2638333
E-mail : erda@erda.org, info@erda.org

TEST REPORT

SHEET 1 OF 4

NAME & ADDRESS OF CUSTOMER
ENTRACO BKS BUS DUCTS PVT.LTD.
A/36 2, NICE AREA, MIDC SATPUR,
NASHIK 422 007,
INDIA.

REPORT NO: LSCS/203
DATE: 10.08.2011
CUSTOMER REF.NO: NIL
DATED: 15.07.2011
DATE OF SAMPLE RECEIPT: 15.07.2011
DATE OF TESTING:

SAMPLE DESCRIPTION
1250A, TP+100%N, IP-55 ALUMINIUM BUSDUCT
Rated Operational Voltage (Ue): 1000 V

TEST DETAILS
Verification of the short circuit withstand strength test (Cl.No.8.2.3)

ENCLOSURES:
NUMBER OF OSCILLOGRAM : TH
NUMBER OF PHOTOGRAPH : ON
NUMBER OF TEST CIRCUIT DIAGRAM : TW
NUMBER OF DRAWINGS : ON

TEST WITNESSED BY: Mr. A.P.ROY
REMARKS: The sample conforms to the requirements of IEC 60439-2:2005
PREPARED BY: P. J. Phatak
CHECKED BY: P. J. Phatak
NOTE: 1. This report relates only to the particular sample.
2. This report cannot be reproduced in part under any circumstances.
3. Publication of this report requires prior permission in writing from Director, ERDA.
4. Only test asked by customer have been carried out.



ELECTRICAL RESEARCH AND DEVELOPMENT ASSOCIATION
(Accredited by the National Accreditation Board for Testing and Calibration Laboratories, Govt. of India)
ERDA Road, Mahape Industrial Estate, Vasind Road-90 015, India.
EPABX : +91 (020) 2642942, 2642964, 2642977, 2642978 / 26 / 30 / 31 / 32
Fax : +91 (020) 2638332, 2638333
E-mail : erda@erda.org, info@erda.org

TEST REPORT

SHEET 1 OF 4

NAME & ADDRESS OF CUSTOMER
ENTRACO BKS BUS DUCTS PVT.LTD.
A/36 2, NICE AREA, MIDC SATPUR,
NASHIK 422 007,
INDIA.

REPORT NO: LSCS/205
DATE: 10.08.2011
CUSTOMER REF.NO: NIL
DATED: 15.07.2011
DATE OF SAMPLE RECEIPT: 15.07.2011
DATE OF TESTING:

SAMPLE DESCRIPTION
3200A, TP+100%N, IP-55 ALUMINIUM BUSDUCT
Rated Operational Voltage (Ue): 1000 V
Rated Operational Current (Ie): 3200 A
Rated Frequency: 50 Hz
Rated insulation voltage: 2500 V
No. of Phases: TPN
Rated short time withstand current & its duration:
- 80 kArms for 1 sec. with an initial peak of 176 kA between phases
- 80 kArms for 1 sec. with an initial peak of 176 kA between adjacent phase & neutral
Quantity (Tested): 1 No.

TEST DETAILS
Verification of the short circuit withstand strength test (Cl.No.8.2.3)

ENCLOSURES:
NUMBER OF OSCILLOGRAM : TH
NUMBER OF PHOTOGRAPH : ON
NUMBER OF TEST CIRCUIT DIAGRAM : TW
NUMBER OF DRAWINGS : ON

TEST WITNESSED BY: Mr. A.P.ROY
REMARKS: The sample conforms to the requirements of IEC 60439-2:2005
PREPARED BY: P. J. Phatak
CHECKED BY: P. J. Phatak
NOTE: 1. This report relates only to the particular sample.
2. This report cannot be reproduced in part under any circumstances.
3. Publication of this report requires prior permission in writing from Director, ERDA.
4. Only test asked by customer have been carried out.



ELECTRICAL RESEARCH AND DEVELOPMENT ASSOCIATION
(Accredited by the National Accreditation Board for Testing and Calibration Laboratories, Govt. of India)
ERDA Road, Mahape Industrial Estate, Vasind Road-90 015, India.
EPABX : +91 (020) 2642942, 2642964, 2642977, 2642978 / 26 / 30 / 31 / 32
Fax : +91 (020) 2638332, 2638333
E-mail : erda@erda.org, info@erda.org

TEST REPORT

Sheet 1 of 4

NAME & ADDRESS OF THE CUSTOMER
ENTRACO BKS BUS DUCTS PVT. LTD.
A/36 2, NICE,
MIDC SATPUR,
NASHIK 422007,
INDIA

TEST REPORT NO.: LSWG/503
DATE : 17/11/2011
CUSTOMER REF. NO. NIL
DATED 01/11/2011
DATE OF SAMPLE RECEIPT 02/11/2011
DATE OF TESTING 11/11/2011

SAMPLE DESCRIPTION
5000A SANDWICH TYPE ALUMINIUM BUSBAR BUSDUCT
Rated operational voltage : 1000 V
Rated current : 5000 A
Rated frequency : 50 Hz
Rated insulation voltage : 2.5 kV
Rated short time withstand current & its duration : 80 kA for 1 sec.
Busbar supporting material: Polyester Film Mylar
Insulation class of busbar supporting material : Class 'F'
Degree of protection : IP 55
Quantity (tested) : 1 No.

SAMPLE IDENTIFICATION
ERDA sample code no. : LSWGWO097324/02
Manufacturer's name: M/s. Entraco BKS Bus Ducts Pvt. Ltd.
Type : LV-S DB 240 AL
Drawing no.: EBB-T-SKTMP (sheet 1)

TEST DETAILS
1) Verification of temperature-rise limits (Cl. No. 8.2.1) IEC : 60439-2:2005
2) Verification of electrical characteristics of busbar trunking system (Cl. No. 8.2.9)

ENCLOSURE: 1) Photograph No.: 97324/02/A
2) Drawing no.: EBB-T-SKTMP (sheet 1)

TEST WITNESSED BY: Mr. A. P. Roy of M/s. Entraco BKS Bus Ducts Pvt. Ltd.
TEST RESULTS: As per attached sheets.

Prepared By P. J. Phatak
Checked By P. J. Phatak
Approved By P. J. Phatak
Note: 1. This report relates only to the particular sample received in good condition for testing at ERDA.
2. This report can not be reproduced in part under any circumstances.
3. Publication of this report requires prior permission in writing from Director, ERDA.
4. Only the test asked for by the customer has been carried out.

Note :

Entraco BKS has a policy of continuous development therefore reserves the right to supply products which may differ in design and specifications from those shown in this publication. Product visuals shown here are only indicative and actual product may vary. Errors and omissions exempted.



An Indo-Swiss Venture

> IP55 - SANDWICH

A 36/2, NICE Area, MIDC Satpur
Nashik, Maharashtra, India 422007

+91-253 6698126 (t)

+91.2532.355083 (t)

+91.2532.351223 (f)

info@entracogroup.com

www.entracobks.com