



Cast resin busway system with EcoBuss[™] technology







We focus on supplying premium quality cast resin busway systems and plug-in power panelboards through reliable product designs, advanced manufacturing processes and superior service support.



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Company Overview







Taiwan Busway (TBC) was Ltd. Company, 2002 with established in the promised commitment to provide premium quality busway systems and services to our customers. It is with this promise that we are able to quickly distinguish ourselves as a preferred busway supplier with a good reputation for manufacturing quality, timely delivery, competitive prices and responsive service.

Over the years, TBC has won over many customers with its simple, yet highly-reliable, cast resin busway design. After having gained a significant market presence in the Taiwan market, TBC has expanded its global outreach by supplying to customers in Germany, Australia, China, Southeast Asia, Middle-East, and the USA.

Key industries served include:

- Semiconductor, TFT/LCD, solar;
- electronics & industrial factories;
- telecommunications & data centers;
- petro-chemical / oil & gas;
- hospitals & healthcare facilities;
- finance & banking;
- infrastructure airport, seaport, high-speed rail, metro/subway, water treatment, etc.

Our customers served include: Taiwan Semiconductor Manufacturing Company (TSMC), Intel, AU Optronics, United Microelectronics Corporation (UMC), Powertech, Inotera, EVA Airlines, Eaton USA, etc.

At TBC, we recognize that our clients have their own unique needs & requirements for their particular project or the specific application. We take pride in our ability to develop/customize our product designs and to provide a value-added Solution that best fit the end-users needs.



Dur innovation, your evolution. Your evolution, our pride.

TBC Busway Product Overview

Through TBC's extensive research & development efforts in resin materials for industrial power distribution equipment and the technical team's vast experiences in vacuum cast resin, the TBC cast resin busway system was conceived in 2002. The TBC cast resin busway system was developed through the team's vast experiences in vacuum cast resin and in resin materials research & development for industrial power distribution equipment to provide a higher level of protection and performance than other conventional busway systems.

Tested and certified to the various global codes and standards, the TBC cast resin busway has been installed and proven in numerous industries and applications, across the world. The TBC cast resin busway is manufactured under the concept of direct encapsulation of copper or aluminum conductors with an insulation of proprietary "cast resin" compound materials. Due to the nature of this design concept, the busway system provides excellent electromechanical characteristics while offering a high level of Ingress protection (IP68) and is flame-resistant.

Having mastered the basics of busway design and manufacturing, **TBC is now working to provide unique &** customized solutions to address our customers' operational issues and challenges.

Innovative Design

- ◀ Rated voltage up to 1000V
- Current ratings: 600-6400A (Cu); 400-5000A (Al)
- Fully encapsulated and insulated bus bar conductors
- ✓ Class F (150°C) insulation material
- Tested & certified to IEC 61439-6, IEC 60439-1 & IEC 60439-2
- Options for standard fully-encapsulated joints





Safety Features

- ✓ Fire resistance compliant to IEC 60331, 750°C for 3 hrs.
- ✓ Fire resistance compliant to CNS 12514 & JIS A1304, 840°C for 30 mins.
- ✓ Fire resistance compliant to BS 6387 / SS 299, 950°C for 3 hrs.
- Self-extinguishing insulation compliant to IEC 60332
- IEC 60529 Ingress protection rating to IP68
- Ex.m.II.T5 explosion-proof classified to CNS 3376 / IEC 60079
- ◀ High mechanical strength (IK10 impact test) to IEC 61439-1
- Seismic certified to 0.8g
- Chemical (acid & alkaline) resistant

Savings

- Low impedance busway that reduces loss and voltage drop
- Compact size and space-saving dimensions
- Easy and quick installations and expansion/re-configuration
- Maintenance-free





Applications

The TBC cast resin busway is ideally suited for applications that require high degrees of protection and proven reliability in harsh operating environments. TBC's cast resin busway offers the following benefits:

- ◀ IP68 Ingress protection
- ◀ Fire-resistance
- Explosion-proof
- Chemical resistant
- Seismic certified



	Emergency Services & Outdoor Feeders	Petro-Chem, Marine, Oil & Gas	Mission Critical & Data Centers	Electronics & Semiconductor Fabs	Water Purification & Water Treatment	Power Utilities & Wind Power
Outdoor/ IP68	x	х	x	x	x	х
Explosion-proof	x	x	x	x	x	x
Fire resistance	x	х	x	х	x	x
Seismic certified	x	x	x	x	x	x
Chemical resistance	х	x	x	x	x	х







Overall Busway System Description



- 1 Feeder section
- 2 Flatwise elbow
- 3 Edgewise elbow
- 4 Flanged end
- 5 Flanged end/FST
- 6 Plug-in section/bolt-on type
- Plug-in slot/bolt-on type

- 8 Plug-in unit/bolt-on type
 9 Plug-in section
 10 Plug-in slot/plug-in type
 11 Plug-in unit
 12 Cable box/End box
- 13 Joint
- 14) Spring hanger

Busway Joint Design Options



 The TBC busway sections are connected by modular bridge joint stacks that allow quick and trouble-free assembly (and disassembly for future expansions and line reconfigurations).





This patented joint design utilizes double torque bolts to provide for an even and larger spread of compression on the copper joint surfaces, providing a more reliable connection between busways. In addition, these joints are able to maintain their integrity against temperature fluctuations caused by long term usage and loading alterations.

• Error-proof safety features are incorporated in the design to ensure the joints are tightened and torqued securely.



• The standard joint design complies with IP68 rating (TBC proprietary gasket design).

• An optional encapsulated joint design is also available to provide additional protection and is explosion-proof rated (double IP68). This is ideal solution for outdoor feeder applications to eliminate condensation.

Plug-in Unit Design Options



- The TBC plug-in units (PIU) provides and delivers flexible power to the load connections. They are designed to provide safe and reliable operations and are easy-to-install.
- Available plug in unit designs:
 Plug-in type : up to 630A
 Bolt-on type : up to 2000A





Plug-in type

Bolt-on type

- Standard plug-in busway length is 4.2 meters, and provides up to five (5) plug-in slots. The positioning and the number of slots can be designed to the customer's requirements.
- The type and brand of circuit protective devices (Fuse, MCCB, etc.) can be specified by the customer to meet the design criteria and the project requirements.
- The PIU can be enhanced to provide metering and circuit monitoring capabilities. This information can be displayed locally on the PIU, or can be connected to the central monitoring system via RS485 communications.



Our innovation, your evolution. Your evolution, our pride.

EcoBussTM

Energy Efficient Busway Technology

Environmental responsibility – TBC's pioneering solution to increase power transmission & distribution efficiencies

Taiwan Busway Company (TBC) is both a creative and practical manufacturer. Over the past 15 years, we have been fortunate to have served and gained the confidence of many industry leaders worldwide through our technical competency and dedicated service support. Having forged these long-term partnerships, TBC has a clear understanding for our customers' unique application requirements and practical needs.

TBC strive to continually pursue innovative new ideas/solutions that contribute beyond product functionality, and to provide value-add benefits to the equipment owner or end-user. Based on this premise and drive, **TBC** is proud to have pioneered the development of EcoBuss[™] technology in our busway products – a proven technology for long-term energy savings through higher power distribution efficiencies.

The emphasis of TBC's **EcoBuss**TM technology is to maintain low resistances of the conducting components/parts, which is a primary source of power losses. This proprietary design (Patent Pending) developed by TBC provides for increased power efficiency, and thus reduces operational power consumption and ultimately CO_2 emissions. We at TBC are proud that our latest technological innovation provide <u>Operational Cost Savings</u> to the users, and enabling TBC to be an <u>Environmentally Responsible</u> company.

EcoBuss[™] Technology = Efficiency



Long-term savings with EcoBuss[™] technology:

The basic function of busway product is to transmit power from Point A to Point B, safely & reliably. While others may still struggle with this basic premise, we at TBC have taken the further step to tackle the accepted issue of power losses inherent in busway products.

Leveraging our extensive research & development (R&D) expertise in advanced material science, TBC has developed a proprietary technology that enables low resistance and low temperature-rise design in our busway product, called **EcoBuss™** technology.

Highlights of TBC busway with **EcoBuss™** technology:

- Low resistance and low temperature-rise through SIAL thermal composite application (Patent Pending)
- Busway conductor material is at the optimal low-resistance state
- Low resistance in busway = higher efficiency = reduced energy consumption = Lower electricity bills
- 15%-40% savings in electricity bills (compared to other traditional busway products)



EcoBuss[™] Technology = Energy Savings

1 unit = 1KWH

$W=3 \times I^2 R$

Power consumption comparison

Busway rating: 2000A; assume busway length: 100M R = 100M x 18.2 μ Q /1000000 = 0.00182, I=2000A W = 3 x I² R = 3 x 2000² x 0.00182Q = 21,840W

 $W = I^2 R$ W: Loss [Watt], I: Current [A], R: Resistance [Ω]



Product Certifications



















Project References

TBC Cast Resin Busway -- Projects Reference List

No.	Project Name/Customer-Location	Туре
1	TSMC Hsinchu P12 - Taiwan	Semicond
2	TSMC Taiwan P14 - Taiwan	Semicond
3	TSMC Taichung 15 - Taiwan	Semicond
4	TSMC Tainan P18 - Taiwan	Semicond
5	TSMC Taichung CP03-Taiwan	Semicond
6	AU Optronics LMC M10 project - Taiwan	TFT LCD
7	AU Optronics L11 Phases 1 to 3 - Taiwan	TFT LCD
8	AU Optronics B11 project - Taiwan	TFT LCD
9	AU Optronics L7B project - Taiwan	TFT LCD
10	AU Optronics L8A project - Taiwan	TFT LCD
11	AU Optronics L6B project - Taiwan	TFT LCD
12	AU Optronics L8B project - Taiwan	TFT LCD
13	AUO Crystal - Taiwan	TFT LCD
14	AU Optronics Molding Factory-Taiwan	Electronics
15	United Microelectronics Corp - Talwan	Electronics
16	ASE Group - Taiwan	Electronics
17	Linde Engineering project - LIAE	Industria
18	Clean Energy Los Angeles MTA - LISA	CNG station
19	Wasre Water Treatment Plant OLD - Australia	Water treatment
20	Huntspoint NV - USA	Water treatment
20	KWP II Moui - USA	Wind nower
22	Vahoo Data Center - Suitzerland	Mission official
22	ER Data Center - USA	Mission oritical
20	CD D1/D2 Tatuan	Mission offical
24	GD P1/P3 - Idiwan	Mission critical
25	Chunghwa lelecom Data Center - laiwan	Mission critical
20	Far Eastern lelecommunication - laiwan	Mission critical
2/	Singrei - Singapore	Mission critical
28	Pacnet - Singapore	Mission critical
29	Steedcs Hubert - Singapore	Mission critical
30	Digi Data Center - Malaysia	Mission critical
31	Karamay Regional Data Center	Mission critical
32	National high-speed network - Taiwan	Mission critica
33	Intel Project - China	Mission critica
34	An Xun IDC Data Center	Mission critica
35	MRT Xin Zhuang Line - Taiwan	Transportation
36	Taoyuan Airport MRT - Taiwan	Transportation
37	Songshan Airport - Taiwan	Infrastructure
38	Taiwan-Hi-speed Rail Station - Taiwan	Infrastructure
39	Huashan Culture Park - Taiwan	Infrastructure
40	Shongshan Tobacco Plant - Taiwan	Infrastructure
41	2009 World Game Main Stadium - Taiwan	Infrastructure
42	Fruit and vegetable market - Taiwan	Infrastructure
43	Keelung port West Dock - Taiwan	Infrastructure
44	Taoyuan Aircargo Station - Taiwan	Infrastructure
45	Southern National Palace Museum - Taiwan	Infrastructure
46	Nanning Subway - China	Infrastructure
47	Directorate High ways MOTC - Talwan	Infrastructure
48	Changhwa Museum of Art - Taiwan	Infrastructure
49	New Taipei Library - Taiwan	Infrastructure
50	Ankang Market - Taiwan	Infrastructure
51	Urumqi air traffic control station-China	Infrastructure
52	Eon power plant-Germany	Utility
53	Lurgi Al Heracles-UAE	Electronics
54	Eon power plant-Germany	Utility
55	Man Project-Germany	Industria
56	Natus NLPP Project-Germany	Industria
57	Neo Solar Power Corp-Taiwan	Industrial
58	Utech-Solar Coro -Taiwan	Industrial
50	Ginvech Energy Conv-Talwan	Industrial
60	Enjetar Co. Ltd. Jalwan	Industrial
00	Londial CO., LIG. IGIWAIT	in rouging

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No.	Project Name/Customer-Location	Туре
61	Universal Scientific Industrial-China	Office
62	Procysral Technology-Taiwan	Industrial
63	Emerging Display Technology-Taiwan	Industrial
64	Sumika Technology-Taiwan	Industrial
65	Chisso Taiwan Tainan-Taiwan	Industrial
66	Climax Technology-Taiwan	Industrial
67	Innaa Technology-Taiwan	Industrial
60	Maaratach Tachaalaan ka	Industrial
40	ITAC Takuan	Industrial
70	Ulachaga Sassia and ustar Tabum	Industrial
70	Hsinsheng semiconductor-iaiwan	Industrial
/1	Lextar Corplaiwan	Industrial
12	Hanbell Screw Technology-Taiwan	Industrial
73	E-Ton Solar-Taiwan	Industrial
74	Gemtek technology-Taiwan	ndustria
75	Ultra-Pak industries-Taiwan	Industrial
76	Nanya Technology-Talwan	Industrial
77	Chicony-Taiwan	Industrial
78	Power Technology Plant 2A/2B/3-Taiwan	Industrial
79	notera Mermories LncTaiwan	Industrial
80	Evenlight Electronics CorpTaiwan	Industrial
81	Formosa Advanced Technology-Taiwan	Industrial
82	Formosa Taffeta-Taiwan	Industrial
83	Holy Stone Enterprise Corp. Taiwan	Industria
84	Walsin Technology Taiwan	Industrial
85	Forhouse Corp-Taiwan	Industrial
86	Soat project-Malaysia	Ol&Gas
87	Taget project-Malaysia	Oll&Cas
00	PDD4 Project Malaysia	OlleCas
00	Linkey Deves Station Takyon	Deuter plant
09	Linkou Power Station Talwan	Power plant
90	SIG 21 C Preis et Mader ein	Powerpiani
91	SK 316 Project Malaysia	Platform
92	Dream Mall (Uni-President)-laiwan	Shopping Ma
93	Lung Plaze-Taiwan	Shopping Ma
94	Shin Kong Mitsukoshi A5-Taiwan	Shopping Ma
95	Far Eastern Dept, Store-Taiwan	Shopping Ma
96	Jiao jiu BOT-Taiwan	Shopping Ma
97	Uni-President BOT - Taiwan	Shopping Ma
98	Taoyuan Multi-Purpose Expo Center-Taiwan	Exhibition
99	Wuku Multi-function Performance Center	Exhibition
100	Far Glory Future City-Taiwan	High rise building
101	Top of The World	High rise building
102	Southern Star-Taiwan	High rise building
103	Taipei Bay Dan Shui-Taiwan	High rise building
104	Park River Life-Taiwan	High rise building
105	Fo Guang Shan Monastery Building-Taiwan	High rise building
106	Upper River Park	High rise building
107	Southern Park	High rise building
108	Harmony Residential District	High rise building
109	Cube Tower-Philippine	High rise building
110	Guotai Minshena Jianauo Buildina	High rise building
111	Evergreen Aerospace building-Taiwan	Office
112	Hua Nan bank-Taiwan	Office
113	Taishin bank-Taiwan	Office
114	Shanahai Lunar China	Office
114	Taiwan mobile Com Taiwan	Office
114	Pap Helan Bank Talwan	Office
110	Takuan Cooperation Pank Isture	Office
11/	Iawan Cooperation Bank-Ialwan	Office
118		Опісе
119	sneng Chang Qualinerb-Taiwan	Medical
120	Armed Force 802 HospitaHalwan	Medica

General Data-Copper



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Busway Ratings		600A	800A	1000A	1250A	1600A	2000A	2500A	3200A	4000A	5000A	6400A
Catalogue number		LC06	LC08	LC10	LC12	LC16	LC20	LC25	LC32	LC40	LC50	LC64
Rated voltage	V					1000V						
Frequency	Hz					60/50						
Power Loss Watt ₈₀ *1	W/m	157	177	207	215	233	279	350	479	546	741	987
Short-circuit	kA/1sec	65	65	65	65	80	80	100	130	150	150	150
Resistance R ₂₀	μΩ/m	117.8	74.6	55.8	37.2	24.6	18.8	15.1	12.6	9.2	8.0	6.5
Resistance R ₈₀	μΩ/m	145.6	92.2	69.0	46.0	30.4	23.2	18.7	15.6	11.4	9.9	8.0
Reactance X ₅₀	μΩ/m	87.8	67.8	49.8	38.5	25.5	20.1	16.1	12.2	9.1	7.3	5.8
Impedance Z ₅₀	μΩ/m	170.0	114.4	85.1	60.0	39.7	30.7	24.6	19.8	14.6	12.3	9.9
Reactance X ₆₀	μΩ/m	105.3	81.3	59.8	46.2	30.6	24.1	19.3	14.6	10.9	8.8	6.9
Impedance Z ₆₀	μΩ/m	179.7	122.9	91.3	65.2	43.1	33.5	26.8	21.3	15.8	13.2	10.6
Conductor cross section area												
L1,L2,L3	mm²	145	232	307.4	464	696	928	1160	1392	1856	2320	2784
N(100%)	mm²	145	232	307.4	464	696	928	1160	1392	1856	2320	2784
G* ²	mm²	72.5	116	153.7	232	348	464	580	696	928	1160	1392
Busway Dimension												
Feeder h x w	mm	100x55	100x70	100x83	100x110	100x150	100x190	100x230	100x270	100x395	100x475	100x555
Joint A x B	mm	152x93	152x93	152x106	152x133	152x173	152x213	152x253	152x293	152x418	152x498	152x578
Figure		1	1	1	1	1	1	1	1	2	2	2

Note1: Please contact the manufacturer for the data sheet of Voltage drop and Loss KW/m .

Note1: Please contact the manufacturer for the data sheet of Voltage drop Voltage drop ΔU = √3 x I (Rso Cosφ + Xso/60 Sinφ) (V/m) I: loading current Cosφ : power factor Sinφ = (1 - Cosφ ²)^{1/2} Loss = Rated current, Resistance/80°C, Watt_{so} = 3x I²R_{so} (W/m) Note2: Housing Ground(Option): Aluminum alloy
 Note3: Busway Resistance can be special made as per customer's request.

General Data-Aluminum



Busway Ratings		400A	600A	800A	1000A	1250A	1600A	2000A	2500A	3200A	4000A	5000A
Catalogue number		LA04	LA06	LA08	LA10	LA12	LA16	LA20	LA25	LA32	LA40	LA50
Rated voltage	V					1000V						
Frequency	Hz					60/50						
Power Loss Watt ₈₀ *1	W/m	72	125	148	184	242	241	345	387	516	693	861
Short-circuit	kA/1sec	65	65	65	65	65	80	80	100	130	150	150
Resistance R ₂₀	μΩ/m	122.0	93.5	62.6	49.7	41.8	25.4	23.3	16.7	13.6	11.7	9.3
Resistance R ₈₀	μΩ/m	150.6	115.5	77.4	61.4	51.7	31.4	28.8	20.6	16.8	14.4	11.5
Reactance X ₅₀	μΩ/m	100.0	59.8	46.7	40.8	32.7	19.0	15.2	11.2	8.7	6.9	5.1
Impedance Z ₅₀	μΩ/m	180.9	130.1	90.3	73.8	61.1	36.7	32.5	23.4	18.9	16.0	12.6
Reactance X ₆₀	μΩ/m	120.0	71.7	56.0	49.0	39.2	22.8	18.2	13.4	10.4	8.3	6.1
Impedance Z ₆₀	μΩ/m	192.7	136.0	95.5	78.6	64.8	38.8	34.0	24.6	19.7	16.7	13.0
Conductor cross section area												
L1,L2,L3	mm²	232	307.4	464	580	696	1160	1392	1856	2320	2784	2784
N(100%)	mm²	232	307.4	464	580	696	1160	1392	1856	2320	2784	2784
G* ²	mm²	116	153.7	232	290	348	580	696	928	1160	1392	1392
Busway Dimension												
Feeder h x w	mm	100x70	100x83	100x110	100x130	100x150	100x230	100x270	100x395	100x475	100x555	100x555
Joint A x B	mm	152x93	152x106	152x133	152x153	152x173	152x253	152x293	152x418	152x498	152x578	152x578
Figure		1	1	1	1	1	1	1	2	2	2	2

Note1: Please contact the manufacturer for the data sheet of Voltage drop and Loss KW/m . Note1: Please contact the manufacturer for the data sheet of Voltage drop Voltage drop $\Delta U = \sqrt{3 \times I (R_{80} \cos \varphi + X_{50/60} \sin \varphi)}$ (V/m) I:loading current Cos φ : power factor Sin $\varphi = (1 - \cos \varphi^2)^{\frac{1}{2}}$ Loss = Rated current, Resistance/80°C, Watt₈₀ = 3x I²R₈₀ (W/m) Note2: Housing Ground(Option): Aluminum alloy Note3: Busway Resistance can be special made as per customer's request.

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	Busway Ratings		1600A	2000A	2500A	3200A	5000A	6400A	7500A	9600A			
	Catalogue number		LC06	LC08	LC10	LC12	LC16	LC20	LC25	LC32			
	Rated voltage	Vdc				DC10	V0C						
	Resistance R ₂₀	μΩ/m	39.3	24.9	18.6	12.4	8.2	6.3	5.0	4.2			
PER	Resistance R ₈₀	μΩ/m	48.6	30.8	23	15.4	10.2	7.8	6.3	5.2			
<mark>0</mark>	Conductor cross-section area [+/- terminal]	mm²	435	696	922.2	1392	2080*2	2784* ²	3480	4176			
	Feeder h x w	mm	2-[100x55]	2-[100x70]	2-[100x83]	2-[100x110]	2-[100x150]	2-[100x190]	2-[100x230]	2-[100x270]			
	Joint A x B	mm	2-[152x93]	2-[152x93]	2-[152x106]	2-[152x133]	2-[152x173]	2-[152x213]	2-[152x253]	2-[152x293]			
	Conductor Copper purity: ≥99.9% conductivity: ≥ 99.9%IACS												
	Conductor plating		Copper: Tin pl	ating (standarc	l); Silver platin	g (Option)							
	Busway Ratings		1250A	1600A	2000A	250	DA 3:	200A	5000A	6400A			
	Catalogue number		LA04	LA06	LA08	LA1	.0 L	A12	LA16	LA20			
	Rated voltage	Vdc				DC10	V0C						
Σ	Resistance R ₂₀	μΩ/m	40.7	31.2	20.9	16.	6 :	13.9	8.5	7.8			
INNI	Resistance R ₈₀	μΩ/m	50.2	38.5	25.8	20.	5	17.2	10.5	9.6			
TUM	Conductor cross-section area [+/- terminal]	mm²	696	922.2	1392	174	0 2	2080	3480*2	4176* ²			
A	Feeder h x w	mm	2-[100x70]	2-[100x83]	2-[100x1]	10] 2-[100:	(130] 2-[1	00x150] 2	-[100x230]	2-[100x270]			
	Joint A x B	mm	2-[152x93]	2-[152x106]	2-[152x13	33] 2-[152:	(153] 2-[1	52x173] 2	-[152x253]	2-[152x293]			
	Conductor		Aluminum allo	oy purity: ≥98.0)% conductivi	ty: ≥56.0%IAC	S						
	Conductor plating		Aluminum allo	y with Copper	contact : Cop	per coating + T	in plating						
	Insulation material				Ероху са	ast resin							
	Insulation class				Class F	(155°C)							
	Fire Protection	Fire-r	esistant : IEC6	0331 750°C	3hrs; IEC603	32; Fireproo	of : CNS1251	4 840°C 30	min(Copper o	nly) *Option			
	Ingress Protection rating				P68 / Double	e IP68*Option							
	Earthquake test			0.	8g [magnitu	de >7]; Zone	4						
	Explosion-proof class			Ex r	nb II C T4 [C	ast resin Join	tt]						
	Mechanical Impact				IK	10							

Note1: DC Busway Conductor Layout and Rated current can be special made as per customer's request Note2: EcoBuss™ technology is applied.

Temperature-Rise Profile





Temperature rise-Aluminum



Short-Circuit Ratings

Short circuit -Copper

D [4]	RI	VIS Symmetrical (kA)			
Rating [A]	6 cycles	1 sec	3 sec		
600	140	65	38		
800	140	65	38		
1000	140	65	38		
1250	140	65	38		
1600	175	80	46		
2000	175	80	46		
2500	220	100	58		
3200	280	130	75		
4000	410	175	101		
5000	410	200	115		
6400	410	200	115		

Short circuit - Aluminum

Deting [4]	R	VIS Symmetrical (kA)	
Kating [A]	6 cycles	1 sec	3 sec
400	105	50	29
600	105	50	29
800	105	50	29
1000	140	65	38
1250	140	65	38
1500	140	65	38
1600	140	65	38
2000	175	80	46
2500	175	80	46
3200	220	100	58
4000	280	130	75
5000	410	175	101

Full Range of Fittings & Accessories

Accessories







Feeder section



Flatwise elbow



Flatwise offset



Flatwise Tee



Flat to edge elbow





Edgewise elbow



Edgewise offset



Edgewise Tee



Edge to Flat elbow



Unfused reducer



Expansion fitting



Flange end



Flange end/Edgewise elbow



Flange end/Flatwise elbow



End cable box



Center cable box



Feeder end



End cover



Ceiling trapeze



Plug-in unit



Plug-in unit w/PM box



Spring hanger



Wall/ Floor flange

Ingress Protection (IP) Ratings



TBC busway system IP levels - Standards: IEC60529 , CNS14165

1 -Feeder	IP68
2 -Plug-in feeder	IP54*
3 -Bridge Joint	IP68
4 -Plug-in units	IP42*
5 -End/center box	IP54*
6 -Expansion units	IP68

* IP rating for the above elements can be increased as per customer's request (special made).

Busway Dimensions & Weights



Copper

Busway Ratings		600A	800A	1000A	1250A	1600A	2000A	2500A	3200A	4000A	5000A	6400A
Catalogue number		LC06	LC08	LC10	LC12	LC16	LC20	LC25	LC32	LC40	LC50	LC64
Feeder hxw	mm	100x55	100x70	100x83	100x110	100x150	100x190	100x230	100x270	100x395	100x475	100x555
Joint AxB	mm	152x93	152x93	152x106	152x133	152x173	152x213	152x253	152x293	152x418	152x498	152x578
Weight 3P3W 50% G	Kg/m	13.9	18.9	23.3	32.4	45.8	59.3	72.7	86.1	118.6	145.4	172.2
Weight 3P3W 100% G	Kg/m	14.5	19.7	24.5	34.1	48.3	62.6	76.8	91.1	125.2	153,6	182.2
Weight 3P4W 50% G	Kg/m	15.0	20.6	25.5	35.7	50.8	65.9	81.0	96.0	131.8	162.0	192.0
Weight 3P4W 100% G	Kg/m	15.5	21.4	26.6	37.4	53.3	69.2	85.1	101.0	138.4	170.2	202.0
Figure		А	A	A	A	A	A	А	А	В	В	В

Aluminum

Busway Ratings		400A	600A	800A	1000A	1250A	1500A	1600A	2000A	2500A	3200A	4000A	5000A
Catalogue number		LA04	LA06	LA08	LA10	LA12	LA15	LA16	LA20	LA25	LA32	LA40	LA50
Feeder hxw	mm	100x70	100x83	100x110	100x130	100x150	100x190	100x230	100x270	100x395	100x475	100x555	100x555
Joint AxB	mm	152x93	152x106	5 152x133	152x153	152x173	152x213	152x253	152x293	152x418	152x498	152x578	152x578
Weight 3P3W 50% G	Kg/m	14.0	16.6	22.2	26.4	30.6	39.0	47.3	55.6	78.0	94.6	111.2	121.2
Weight 3P3W 100% G	Kg/m	14.1	16.7	22.5	26.7	30.9	39.4	47.8	56.2	78.8	95.6	112.4	122.4
Weight 3P4W 50% G	Kg/m	14.2	16.9	22.6	26.9	31.2	39.8	48.3	56.8	79.6	96.6	113.6	123.6
Weight 3P4W 100% G	Kg/m	14.3	17.0	22.9	27.2	31.5	40.2	48.8	57.4	80.4	97.6	114.8	124.8
Figure		A	A	A	А	A	А	A	А	В	В	В	В

Flanged End – Copper















Figure 5

Figure 6

Flanged collar hole location and spacing 3P4W

Flanged collar hole location and spacing 3P4W

copper

Busway Ratings		600A	800A	1000A	1250A	1600A	2000A	2500A	3200A	4000A	5000A	6400A
A	mm	65	80	93	120	160	200	240	280	405	485	565
В	mm	105	120	133	160	200	240	280	320	445	525	605
С	mm	135	150	163	190	230	270	310	350	475	555	635
D	mm									150	190	230
w	mm	25	40	53	80	120	160	200	240	365	445	525
Figure		1	1	1	2	2	3	3	4	5	5	6
Weight	Kg	10	14	16	22	30	39	46	52	71	87	100

Flanged End – Aluminum



Aluminum

Busway Ratings		400A	600A	800A	1000A	1250A	1500A	1600A	2000A	2500A	3200A	4000A	5000A
A	mm	80	93	120	140	160	200	240	280	405	485	565	565
В	mm	120	133	160	180	200	240	280	320	445	525	605	605
с	mm	150	163	190	210	230	270	310	350	475	555	635	635
D	mm									150	190	230	230
w	mm	40	53	80	100	120	160	200	240	365	445	525	525
Figure		1	1	2	2	2	3	3	4	5	5	6	6
Weight	Kg	10	12	15	16	20	25	31	36	49	60	70	70

Plug-In Unit (Plug-in Type)



Dimensions

Plug-in Ratings		30A	63A	100A	225A	250A	400A	630A
L	mm	500	500	500	500	500	700	850
L1	mm	250	250	250	250	250	350	350
W	mm	300	300	300	300	300	300	430
н	mm	275	275	275	275	275	305	335
D	mm	280	280	280	280	280	280	410
Color		RAL7047						
Weight	kg	15	15	17	19	22	24	48

Plug-In Unit (Bolt-on Type)



_ ·	
Dimoncion	
DILLEUSIO	13

Plug-in	Ratings	63A	100A	225A	250A	400A	630A	800A	1000A	1200A	1600A	2000A
L	mm	500	500	500	500	700	850	850	1100	1100	1100	1300
W	mm	300	300	300	300	300	430	430	430	530	530	530
н	mm	270	270	270	270	300	330	330	380	380	380	560
D	mm	280	280	280	280	280	410	410	410	510	510	510
Color		RAL7047										
Weight	kg	15	17	19	22	24	48	48	48	48	60	60

End Cable Tap Box







		Figure 1		Figure 2	
L	С	08	6	EB	Dimension A
	- [1	
	C Cu A Al	04 400A 20 2000A 06 600A 25 2500A 08 800A 32 3200A 10 1000A 40 4000A 12 1250A 50 5000A 15 1500A 64 6400A 16 1600A	 3 3¢3W 100%G 4 3¢3W 50%G 5 3¢4W 100%G 6 3¢4W 50%G 7 3¢4W 0%G 8 3¢4W 50%N 0%G 9 3¢3W 0%G 10 3¢4W 50%N 50%G 11 3¢4W 200%N 100%G 12 3¢4W 200%N 50%G 	EB End tap box	725

Copper

Busway Ratings		600A	800A	1000	A 1250	A 160	OA	200	0A 25	DOA 3	3200A	4000A	5000A	6400A
w	mm	205	220	233	260	30	0	34	0 3	80	420	545	625	705
W1	mm	55	70	83	110	15	0	19	0 2	30	270	395	475	555
IP Rating		IP54	IP54	IP54	IP54	IP5	4	IP5	4 IP	54	IP54	IP54	IP54	IP54
Color		RAL7043	RAL7043	B RAL704	43 RAL70	43 RAL7	043	RAL7	043 RAL	7043 R	AL7043	RAL7043	RAL7043	RAL7043
Figure		1	1	1	1	1		1		1	1	2	2	2
Aluminum														
Busway Ratings		400A	600A	800A	1000A	1250A	15	00A	1600A	2000	A 2500	A 3200	A 4000A	5000A
w	mm	220	233	260	280	300	3.	40	380	420	545	625	705	705
W1	mm	70	83	110	130	150	1	90	230	270	395	475	555	555
IP Rating		IP54	IP54	IP54	IP54	IP54	IP	54	IP54	IP54	IP54	1 IP54	IP54	IP54
Color		RAL7043	RAL7043	RAL7043	RAL7043	RAL7043	RAL	7043	RAL7043	RAL704	43 RAL70	43 RAL704	43 RAL704	3 RAL7043
Figure		1	1	1	1	1		1	1	1	2	2	2	2

Center Cable Tap Box





		Figure 1		Figure 2	
L	С	08	6	СВ	Dimension A
	C Cu A Al	04 400A 20 2000A 06 600A 25 2500A 08 800A 32 3200A 10 1000A 40 4000A 12 1250A 50 5000A 15 1500A 64 6400A 16 1600A	 3 3¢3W 100%G 4 3¢3W 50%G 5 3¢4W 100%G 6 3¢4W 50%G 7 3¢4W 0%G 8 3¢4W 50%N 0%G 9 3¢3W 0%G 10 3¢4W 50%N 50%G 11 3¢4W 200%N 100%G 12 3¢4W 200%N 50%G 	CB Center tap box	950

Copper

Busway Ratings		600A	800A	1000/	A 1250	A 160	0A	2000	DA 250	0A 3	200A	4000A	5000A	6400A
w	mm	205	220	233	260	30	0	340	38	80	420	545	625	705
W1	mm	55	70	83	110	15	0	190	23	0	270	395	475	555
IP Rating		IP54	IP54	IP54	IP54	I IPS	54	IP5	4 IP:	54	P54	IP54	IP54	IP54
Color		RAL7043	RAL7043	B RAL704	13 RAL70	43 RAL7	043	RAL70	043 RAL	/043 R/	L7043	RAL7043	RAL7043	RAL7043
Figure		1	1	1	1	1)	1	1	l.	1	2	2	2
Aluminum														
Busway Ratings		400A	600A	800A	1000A	1250A	150	AOO	1600A	2000A	2500	A 3200	A 4000A	5000A
w	mm	220	233	260	280	300	34	10	380	420	545	625	705	705
W1	mm	70	83	110	130	150	19	90	230	270	395	475	555	555
IP Rating		IP54	IP54	IP54	IP54	IP54	IP:	54	IP54	IP54	IP54	IP54	IP54	IP54
Color		RAL7043	RAL7043	RAL7043	RAL7043	RAL7043	RAL7	7043	RAL7043	RAL704	B RAL704	43 RAL70	43 RAL704	3 RAL7043
Figure		1	1	1	1	1	1	L	1	1	2	2	2	2

Expansion Joint

											Ŷ		
		μ				3	×		······				
		Figu					-	F	L igure 2				
L C	08			6				EF			Di	mension	A
					r -			- 1					
C Cu A Al	04 400A 06 600A 08 800A	20 20 25 25 32 32	000A 500A 200A	3 4 5	3¢3W 3¢3W 3¢4W	100%G 50%G 100%G		EF Exp	bansion f	fitting	12	00	
Conner	10 1000/ 12 1250/ 15 1500/ 16 1600/	A 40 4(A 50 5(A 64 64 A	000A 000A 400A	6 7 8 9 10 11 12	3¢4W 3¢4W 3¢4W 3¢3W 3¢4W	50%G 50%N 0 50%N 0 50%N 5 50%N 5 200%N 5	%G 0%G 100%G 50%G	 Expar 50m l Expar run cr Expar the le 	nsion fitt ong. nsion fitt osses an nsion ran ngth of t	ings are i ing shall I expansio ge: +/-40 he buswa	nstalled i be applie on joint o)mm mov ay system	n bus run d on busv f a buildir rement al 1.	s over vay ng. ong
Busway Ratings		600A	800A	100	DA 125	OA 16	00A 2	000A 2	500A	3200A	4000A	5000A	6400A
W	mm	126	126	13	9 16	6 2	06	246	286	326	451	531	611
w1	mm	55	70	83	11	0 1	50	190	230	270	395	475	555
1	mm	1200	1200	120	0 12	00 13	200	1200	200	1200	1200	1200	1200
IP Rating		1268	1266	IP6	8 IP	58 16	268	IP68	P68	1268	1268	IP68	1268
Color		RAI 7043	RAI 704	3 8417	143 RAIT	7043 RAI	7043 R/	17043 R/	17043 R	AI 7043	RAI 7043	RAI 7043	RAI 7043
Figure		1	1	1	1	L	1	1	1	1	2	2	2
Aluminum Busway Ratings		400A	600A	800A	1000A	1250A	1500A	1600A	2000A	2500A	3200A	4000A	5000A
W	mm	126	139	166	186	206	246	286	326	451	531	611	611
W1	mm	70	83	110	130	150	190	230	270	395	475	555	555
L	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
IP Rating	00000	IP68	IP68	IP68	IP68	IP68	IP68	IP68	IP68	IP68	IP68	IP68	IP68
Color		RAL7043	RAL7043 R	AL7043	RAL7043	RAL7043	RAL7043	3 RAL7043	RAL7043	RAL7043	RAL7043	RAL7043	RAL7043
Figure		1	1	1	1	1	1	1	1	2	2	2	3

Vertical Spring Hangers





Spring Hanger shall be applied when busway passes through floors to support.

Sh600 Max. load: 900kg

Copper

Busway Ratings		600A	800A	1000A	1250A	1600A	2000A	2500A	3200A	4000A	5000A	6400A
Catalogue number		SH600										
Height 1m/weight	kg	15.0	20.6	25.5	35.7	50.8	65.9	81.0	96.0	131.8	162.0	192.0
Height 3m/weight	kg	45.0	61.8	76.5	107.1	152.4	197.7	243.0	288.0	395.4	486.0	576.0
Height 4m/weight	kg	60.0	82.4	102.0	142.8	203.2	263.6	324.0	384.0	527.2	648.0	768.0
Height 5m/weight	kg	75.0	103.0	127.5	178.5	254.0	329.5	405.0	480.0	659.0	810.0	960.0
Hanger width A	mm	165	180	193	220	260	300	340	380	505	585	665
Drop rod dimension M12xB	mm	105	120	140	160	200	240	280	320	450	530	610
Max. tolerance of height	m	≦5	≦5	≦5	≦5	≦5	≦5	≦5	≦5	≦4	≦3	≦3

Aluminum

Busway Ratings		400A	600A	800A	1000A	1250A	1500A	1600A	2000A	2500A	3200A	4000A	5000A
Catalogue number		SH600											
Height 1m/weight	kg	20.6	16.9	22.6	26.9	31.2	32.1	48.3	56.8	64.2	96.6	113.6	113.6
Height 3m/weight	kg	61.8	50.7	67.8	80.7	93.6	96.4	144.9	170.4	192.8	289.8	340.8	340.8
Height 4m/weight	kg	82.4	67.6	90.4	107.6	124.8	128.4	193.2	227.2	256.8	386.4	454.4	454.4
Height 5m/weight	kg	103.0	84.5	113.0	134.5	156.0	160.5	241.5	284.0	321.0	483.0	568.0	568.0
Hanger width A	mm	180	193	220	240	260	300	340	380	505	585	665	665
Drop rod dimension M12xB	mm	120	140	160	180	200	240	280	320	450	530	610	610
Max. tolerance of height	m	≦5	≦5	≦5	≦5	≦5	≦5	≦5	≦5	≦5	≦5	≦5	≦5

Wall & Floor Flange



Wall/Floor Flange

Copper

Busway Ratings Catalogue number		600A	800A	1000A	1250A	1600A	2000A	2500A	3200A	4000A	5000A	6400A
		WF0600	WF0804	WF1006	WF1208	WF1612	WF2000	WF2516	WF3220	WF4025	WF5032	WF6440
Busway Feeder hxw	mm	100x55	100x70	100x83	100x110	100x150	100x190	100x230	100x270	100x395	100x475	100x555
A	mm	155	170	183	210	250	290	330	370	495	575	655
В	mm	200	200	200	200	200	200	200	200	200	200	200
С	mm	258	272	286	313	352	392	432	472	600	680	760
D	mm	109	116	123	91	104	88	98	108	112	128	90

Aluminum

Busway Ratings		400A	600A	800A	1000A	1250A	1500A	1600A	2000A	2500A	3200A	4000A	5000A
Catalogue number		WF0804	WF1006	WF1208	WF0010	WF1612	WF2000	WF2516	WF3220	WF4025	WF5032	WF6440	WF6440
Busway Feeder hxw	mm	100x70	100x83	100x110	100x130	100x150	100x190	100x230	100x270	100x395	100x475	100x555	100X555
A	mm	170	183	210	230	250	290	330	370	495	575	655	655
В	mm	200	200	200	200	200	200	200	200	200	200	200	200
С	mm	272	286	313	334	352	392	432	472	600	680	760	760
D	mm	116	123	91	98	104	88	98	108	112	128	90	90

Busway Product Selection Guide

		///		>	Bill bill	Itis bis	Lease A	>			A A A A A A A A A A A A A A A A A A A			
♦Feeder s	ectio	on SS		♦Plug-ii	n sectio	n SP			►dg	ewise e	elbow L	/	◆Flatw	vise elbow LH
			>				>	<						
Edgewis	se Te	e TV		◆Flatw	vise Tee	тн		•	Flar	iged en	d FS		◆Feed	der End SE
L C	(08			6				SS	5			Dimension	AxBxC
		1				1								
C Cu A Al		04 400 06 600 08 800 00 100 12 125 15 150 16 160	A 20 A 25 A 32 0A 40 0A 50 0A 64 0A	2000A 2500A 3200A 4000A 5000A 6400A	3 4 5 6 7 8 9 10 11 12	3¢3W 3¢4W 3¢4W 3¢4W 3¢4W 3¢3W 3¢3W 3¢4W 3¢4	100%G 50%G 100%G 50%G 50%N 0 0%G 50%N 5 200%N 200%N	%G 0%G 100%G 50%G	SI SI LI CI CI TT FS SI	5 Feede P Plug-ii / Edgew H Flatwi H Flat to V Edge t V Edge t V Edgev H Flatw 5 Flang E Feede	r section n section vise elbow eEdge o Flat vise Tee ise Tee e end er end	V		
Copper														
Busway Ratings			600A	800A	1000A	1250	A 1600	A 200	0A	2500A	3200A	4000A	5000A	6400A
Feeder section	А	mr	n 4200	4200	4200	4200	4200	9 420	00	4200	4200	4200	4200	4200
Plug-in section	А	mr	n 4200	4200	4200	4200	4200) 420	00	4200	4200	4200	4200	4200
Edgewise elbow	AxB	mr	n 250x25	0 250x250	250x25 2	0 250x2	50 250x2	50 250x	250 2	250x250	250x250	250x25	0 250x250	250x250
Flatwise elbow	AxB	mr	n 190x19	0 190×190) 190x19	0 215x2	15 235x2	35 255x	255 2	275x275	295x295	360x36	0 400x400	440x440
Edgewise Tee	AxB	mr	n 200x49	0 200x520	200x55 2	0 200x6	00 200x6	80 200x	760 2	200x840	200x920	200x76	0 200x840	200x920
Flatwise Tee	AxB	mr	n 190x38	0 190x380) 190x38	0 215x4	30 235x4	70 255x	510 2	275x550	295x590	360x72	0 400x800	440x880
Flange end	А	mr	n 380	380	380	380	380	38	0	380	380	380	380	380
Feeder end	А	mr	n 250	250	250	250	250	25	0	250	250	250	250	250
Aluminum Busway Ratings			400A	600A 8	800A 1	1000A	1250A	1500A	160	0A 200	00A 250	0A 32	00A 4000A	5000A
Feeder section	А	mm	4200	4200	4200	4200	4200	4200	420	00 42	00 420	00 42	200 4200	4200
Plug-in section	А	mm	4200	4200	4200	4200	4200	4200	420	00 42	00 420	00 42	200 4200	4200
Edgewise elbow	AxB	mm	250x250 2	250x250 25	0x250 2	50x250 2	250x250 2	250x250	250x	250 250	250 250x	250 250	x250 250x25	0 250x250
Flatwise elbow	AxB	mm	190x190 1	190x190 21	.5x215 22	25x225 2	235x235 2	255x255	275x	275 295)	(295 360x	360 400	x400 440x44	0 440x440
Edgewise Tee	AxB	mm	200x520 2	200x550 20	0x600 20	00x640 2	200x680 2	200x760	200x	840 200)	(920 200x	760 200	x840 200x92	0 200x920
Flatwise Tee	AxB	mm	190x380 1	L90x380 21	5x430 2	25x450 2	235x470 2	255x510	275x	550 295)	(590 360x	720 400	x800 440x88	0 440x880
Flange end	А	mm	380	380	380	380	380	380	38	0 38	30 38	0 3	80 380	380
Feeder end	A	mm	250	250	250	250	250	250	25	0 25	50 25	0 2	50 250	250

Sample Project Photos

















TBC Products and Services:

Busway • Taiwan Busway Company Ltd. (TBC), established in 2002, is commited to supplying premium quality cast resin busway systems and hot plug-in panelboards through reliable product designs, advanced manufacturing processes and superior service support.

EcoBussTM • TBC's pioneering solution to increase power transmission & distribution efficiencies. Our latest technical innovation provide operational cost savings to the end-users.

Solution • Based on our customers requests and requirements, TBC is able to apply its core technology and competency in cast resin materials technology to develop new products and solutions to solve our customers' problems and to enhance their competitiveness.

Reliable • TBC products have been approved and certified by TSMC, UMC, AUO, M+W, Technip, Natus(Germany), Eaton(USA) and many other world leading corporations or engineering consultants, which is a testament for the quality & reliability of the TBC products.









TBC Busway Pte., Ltd. (Singapore)

18 Boon Lay Way, #08-123 Tradehub21 Singapore 609966 TEL/FAX : +65-6276-3988 E-mail : marketing@tbcbusway.com Web site : www.tbcbusway.com SINGAPORE

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