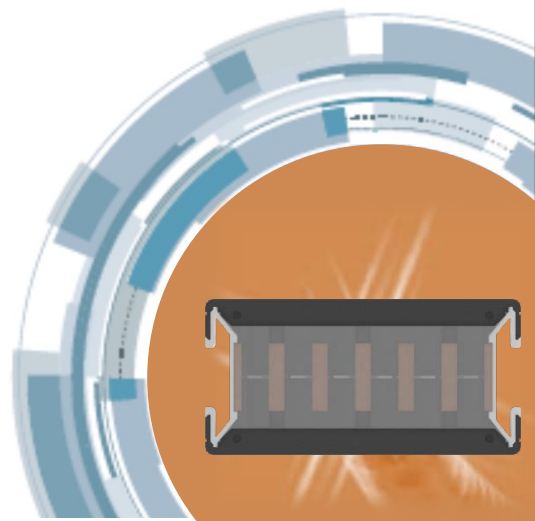


# Rx

Continuous Plug-In Busway System  
for Data Centers



**TBC** *Critical Power  
Solutions*



## About us



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

### Taiwan Busway Company, Ltd. (TBC)

TBC take pride in understanding our customers' and the markets' wants and needs. We listen to the challenges faced by our customers and then develop innovative, practical solutions to remedy their tough situation. We consider ourselves as our customers' business partner and we strive to support our customers' business objectives & profitability. TBC's superior products and solutions are cost competitive and offer the best value throughout the product life-cycle (from installation to operational costs). We are confident that our customers will recognize the benefits and advantages offered by TBC after our products are installed and operational.



### Brand & Product

TBC was established in 2002 with the promised commitment to deliver premium quality busway systems and services to our customers. It is with this promise that **TBC** 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. In 2004, TBC developed **hot swappable plug-in panel**, an advanced power distribution board that provides easy feeder additions/modifications. These two brands provide you with a large number of power distribution system possibilities, based on your application requirements.



### Tradition & Innovation

TBC: Our Past, Present & Future

- Adhere to the traditional, proven methodologies with the emphasis for product quality every step of the way;
- Keep innovating and continuous improvements based on evolving market needs;
- Strive to do more and exceed our customer expectations.



### Consistent High Quality

Quality and reliability are embedded in TBC's product design. This is why the high-grade materials and state-of-the-art production & testing equipment are used in the manufacture of TBC products. Additionally, we:

- Strictly abide to the product design standards;
- Great attention to detail and ensure good workmanship in manufacturing;
- Provide responsive service support to address customer concerns.

**TBC symbolizes product, brand & quality**



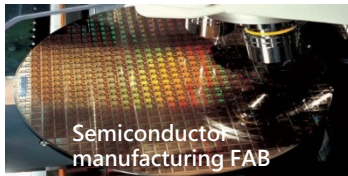
### Environmental Protection & Sustainable Development

TBC is driven by resource-saving products and technology development, and is committed to the environment, society and employees.

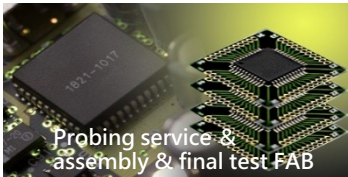
- Design and manufacture of TBC products must adhere to good environmental and social principles.
- Continuous R&D of more environmentally-friendly products.
- The basic principles of fairness and respect towards our employees and business partners.

# Reliable Performance: Our Commitment to Customer Confidence

TBC understands the importance and significance of reliable, high up-time power to our customers' continuous manufacturing processes and business requirements. The cornerstone of TBC's product designs and solutions are focused on long-lasting product performance and reliable power system operations to ensure our customers are ahead of their competitors. Based on this premise, our existing customers prefer TBC products and we look forward to serving new customers.



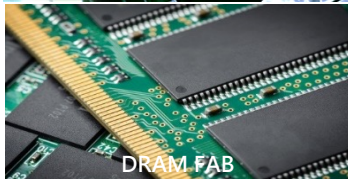
Semiconductor  
manufacturing FAB



Probing service &  
assembly & final test FAB



TFT LCD FAB



DRAM FAB



LED FAB



SOLAR Power FAB



Datacenter



Hospital & Biotechnology

## TBC Busway's Significant Milestones & Achievements:

- 2003** AUO M10 LCM [TFT LCD]  
Inotera Memories [DRAM Memories]
- 2005** AUO Fab L5C [TFT LCD]  
PTI 3A [Probing service & assembly & final test]
- 2006** **TSMC** [Semiconductor manufacturing]  
PTI 2A [Probing service & assembly & final test]
- 2007** UMC [Semiconductor manufacturing]  
AUO Fab L7A [TFT LCD]  
PTI 2B [Probing service & assembly & final test]
- 2008** NEXPOWER corporation [SOLAR power]  
AUO Fab L7B, L8A, F12, M12 [TFT LCD]
- 2009** Malaysia - Petronas [Oil Drilling platform]
- 2010** UMC 12AP3, 12AP4 [Semiconductor manufacturing]  
PTI /PMT/F3 [Probing service & assembly & final test]  
TSMC LED Fab
- 2011** Switzerland - Yahoo Datacenter  
USA - Facebook Datacenter
- 2012** Singapore - Singtel Datacenter  
Google Datacenter  
Shanghai SRC Bank Datacenter  
Far Eastern Telecommunication Datacenter  
ASE Group [Probing service & assembly & final test]  
Koo Foundation Sun Yat-Sen Cancer Center [Hospital]
- 2013** AUO L4B [TFT LCD]  
Germany - BMW Charging Station
- 2014** TSMC 14P7, TSMC 12P7 [Semiconductor manufacturing]  
UMC Fab 12AP5P6 [Semiconductor manufacturing]  
INNOLUX [TFT LCD]  
Malaysia - DIGI Telecommunications Datacenter  
Singapore - Singtel KCDC Datacenter  
Taishin Bank Datacenter
- 2015** AUO Fab L8B GED [TFT LCD]  
Google CHG3 P1 Datacenter
- 2016** Nanya Technology 3A-N [DRAM Memories]  
Google CHG3 P2 Datacenter  
Jing Peng T5 plant [PCB manufacturing]  
IDC Chunghwa Telecom Datacenter  
Malaysia - Petronas SK316 offshore platform
- 2017** ST Hubert project  
Singapore - Singtel KCDC replacement  
Chunghwa Telecom Datacenter
- 2018** Bangladesh - Dhaka Colo  
NCHC Data Center sites – Hsinchu & Taichung  
NRB Global Bank Datacenter, Bangladesh  
Taiwan High Speed Net Center

For more info, please visit: [www.TBCbusway.com](http://www.TBCbusway.com)



# Rx-series Busway for Server Room Overhead Power Distribution

With over a decade's experience in design and manufacturing cutting-edge power distribution systems, TBC has continued to develop innovative solutions to serve the unique requirements of our IT/mission critical customers. TBC's compact product footprint, and its low EMC, overcomes space constraints in server rooms and allows designers to run power distribution in closer proximity to the data cables. Additionally, the customizable plug-in units provides flexibility in power delivery to each server rack.



## Busway:

- fully insulated busbars enclosed in Aluminum housing
- continuous plug-in openings
- standard lengths available: 1M, 2M, 3M, 4M
- customizable lengths available on request
- Finger-safe IP20 rating



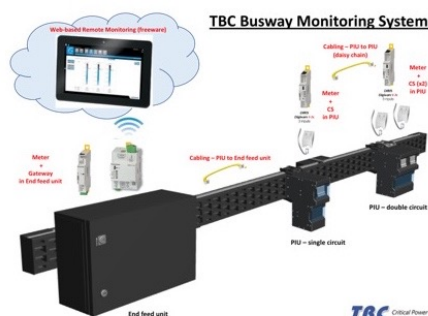
## Plug-in unit:

- hot pluggable
- does not require special tools to install
- flexible and customizable to include meter, phase selector switch, etc.
- single or multiple out-going circuits
- available branch circuit monitoring (BCMS) or DCIM integration



## Product Features:

- 100 - 1600A
- Up to 200% Neutral
- Class-F (155°C) insulation material
- Fully insulated busbars
- Optional over-temperature detection system (OTDS)



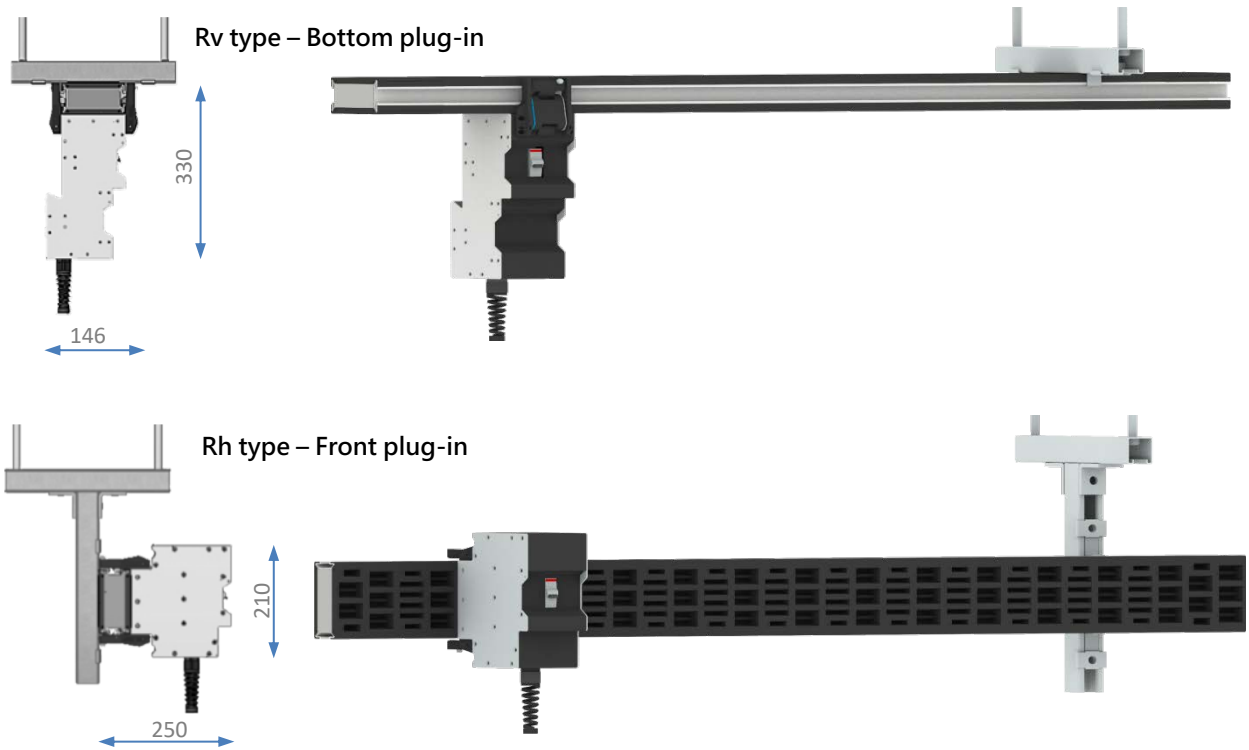
## Benefits:

- Compact product footprint/size
- Low EMC/EMF
- 200% Neutral
- Safe, flexible & customizable busway and plug-in units

## Rx-series Continuous Plug-In Busway – Technical Data

General Data (Copper)								
Standards		IEC60439-2, IEC61439, IEC60529, IEC60331, IEC60332						
		CNS14286, CNS12514, CNS14165, CNS11073						
		JIS C8364, JIS A1304, JIS H3140, GB7251.1, GB7251.2						
		ANSI/UL857, NEMA BU-1						
Ambient temperature		-20°C /+50°C    avg. 35°C						
Altitude		below 2,000m from sea level						
Busway Rating		250A	400A	600A	800A	1000A	1250A	1600A
Catalogue number [Copper]		RxC02	RxC04	RxC06	RxC08	RxC10	RxC12	RxC16
Rated voltage	V	1000V						
Rated current	A	250	400	600	800	1000	1250	1600
Frequency	Hz	60/50						
Conductor		Copper    purity: 99.9%    Conductivity: 99.9% IACS						
Conductor plating		Tin plating (Std.)						
Insulation material		Epoxy cast resin						
Insulation class		Class F (155°C)						
Enclosure/ housing		Epoxy/Aluminum						
Fire protection		UL94 V0						
Ingress Protection rating		IP20						
Mechanical Impact		IK10						
EMC Shielding Degree		Ea,Eb, Ec	Ea,Eb, Ec	Ea,Eb, Ec	Ea,Eb, Ec	Ea,Eb, Ec	Ea,Eb, Ec	Ea,Eb, Ec
Dimensions – wxh	mm	117x58	117x58	117x58	117x73	117x86	117x113	117x153
Weight	kg/m	12	15	15	23	32	46	59
Color		RAL 9010/RAL 9003						
Plug-in Unit								
Contact design		lug-in type						
DB design		Plug-in w/ MCB/RCCB/RCBO Plug-in w/ MCB/RCCB + Socket-outlet Plug-in w/ MCB/RCCB + Power Meter						
Max. Pole		1P-30P						
Max. Rating		250A						
MCB brands		Mitsubishi, Terasaki, Fuji, GE, Schneider (MG), or Customer specified						
Protection rating		IP20/IP42/IP54 (Option)						
Panel coating		Powder coated paint						
Color		RAL 7043						

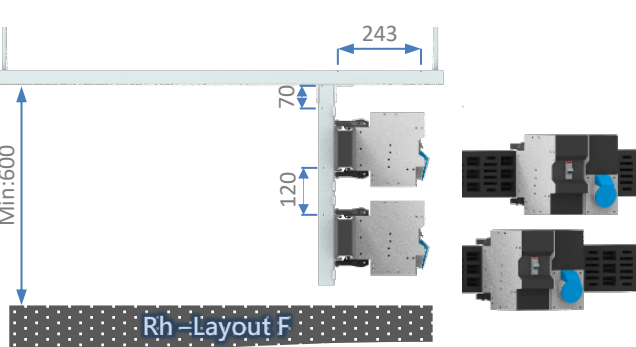
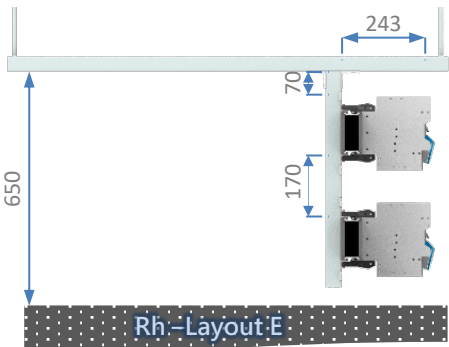
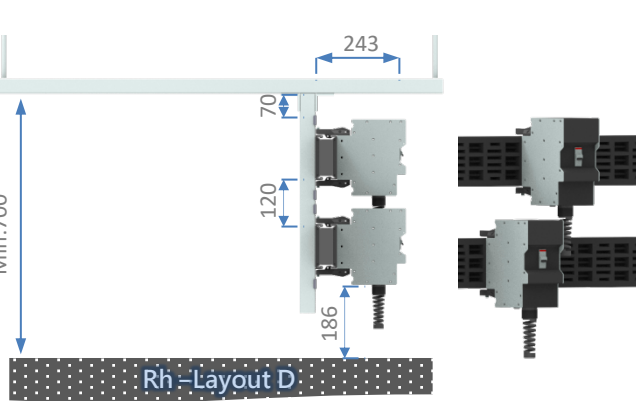
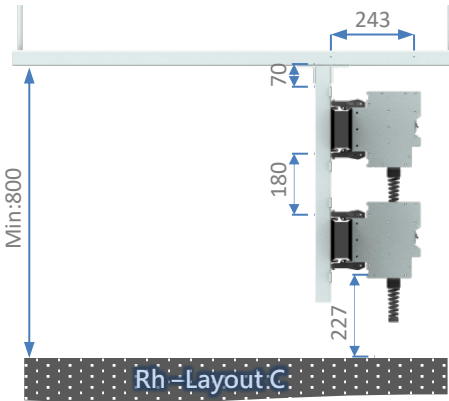
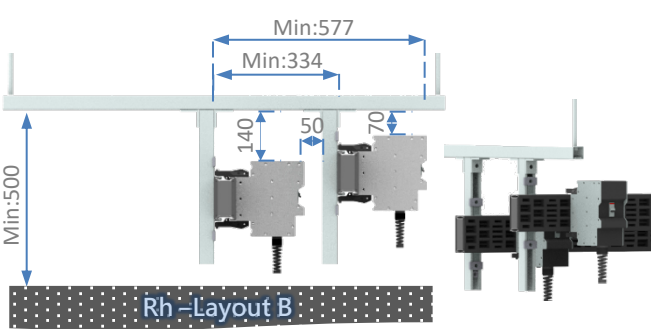
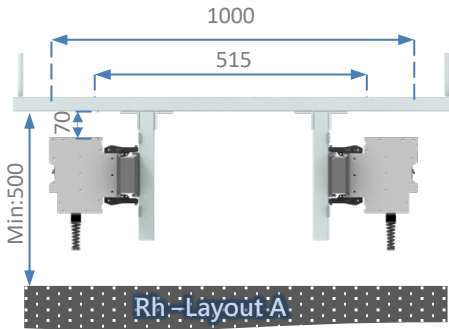
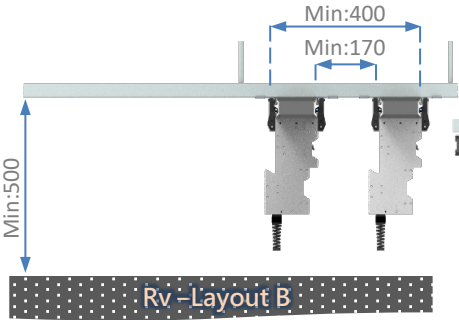
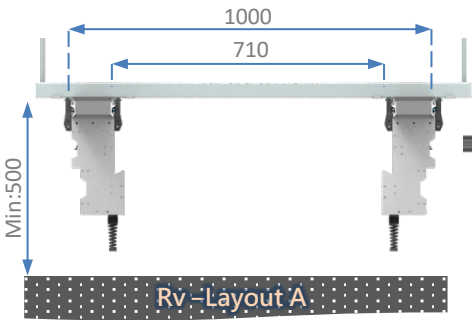
# Rx-series Busway – Physical & Technical Data (Copper)



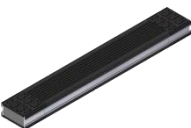
## Technical Data (Copper)

Busway Ratings		250A	400A	600A	800A	1000A	1250A	1600A	2000A
Catalog number		RxC02	RxC04	RxC06	RxC08	RxC10	RxC12	RxC16	RxC20
Rated voltage (AC/DC)	V	1000	1000	1000	1000	1000	1000	1000	1000
Rated current	A	250	400	600	800	1000	1250	1600	2000
Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Impedance values are for busway operating at 20/85°C temperature									
Resistance $R_{20}$	$\mu\Omega/m$	213.0	178.0	106.3	68.7	50.2	34.7	23.0	17.9
Resistance $R_{85}$	$\mu\Omega/m$	267.4	223.5	133.5	86.2	63.0	43.5	28.9	22.5
Reactance $X_{50}$	$\mu\Omega/m$	138.1	129.5	112.3	79.9	57.3	42.3	28.0	22.1
Impedance $Z_{50}$	$\mu\Omega/m$	301.0	258.3	174.5	117.5	85.2	60.7	40.2	31.5
Reactance $X_{60}$	$\mu\Omega/m$	165.7	155.4	134.8	95.9	68.8	50.8	33.6	26.5
Impedance $Z_{60}$	$\mu\Omega/m$	314.6	272.2	189.7	128.9	93.3	66.9	44.3	34.8
Conductor cross-section area									
L1,L2,L3	mm <sup>2</sup>	72.5	100	145	232	307.4	464	696	928
N (100%)	mm <sup>2</sup>	72.5	100	145	232	307.4	464	696	928
G (50% Internal)	mm <sup>2</sup>	72.5	50	72.5	116	153.7	232	348	464
Busway Dimensions									
Feeder h x w	mm	117x58	117x58	117x58	117x73	117x86	117x113	117x153	117x193

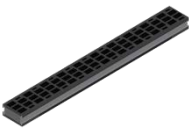
# Rx-series Busway – Examples of Installed Layout Footprint



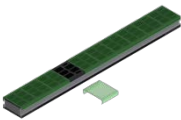
# Full Range of Accessories & Fittings



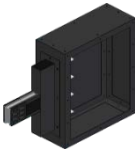
Feeder section



Plug-in section



Slot Cover



End cable box



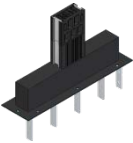
Ceiling trapeze (Rv)



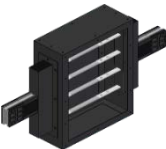
Flatwise elbow



Edgewise elbow



Flange end



Center cable box



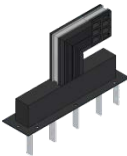
Ceiling trapeze (Rh)



Flatwise offset



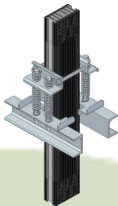
Edgewise offset



Flange end/Edgewise elbow



Plug-in unit



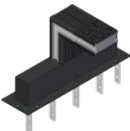
Spring hanger



Flatwise Tee



Edgewise Tee



Flange end/Flatwise elbow



Plug-in unit w/PM



Flat to edge elbow



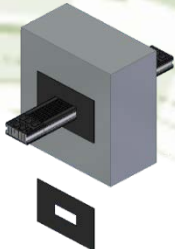
Edge to Flat elbow



Unfused reducer



End Cable Tap Off

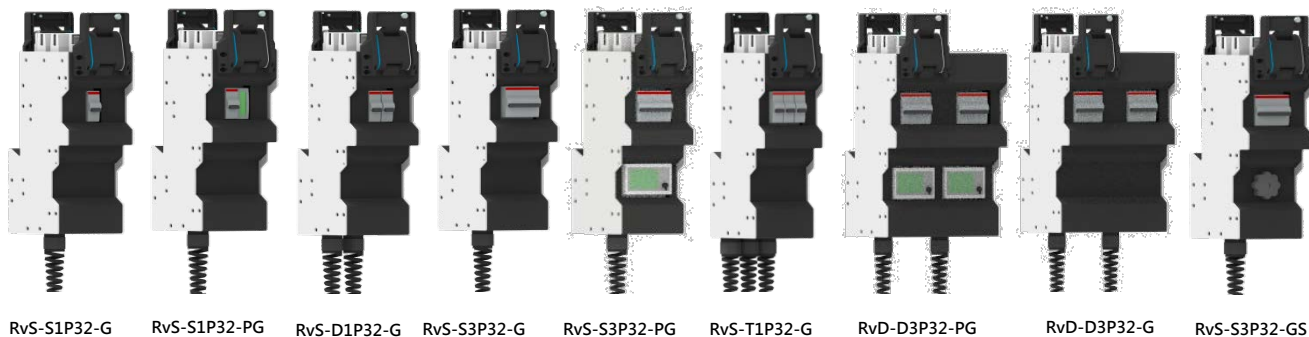
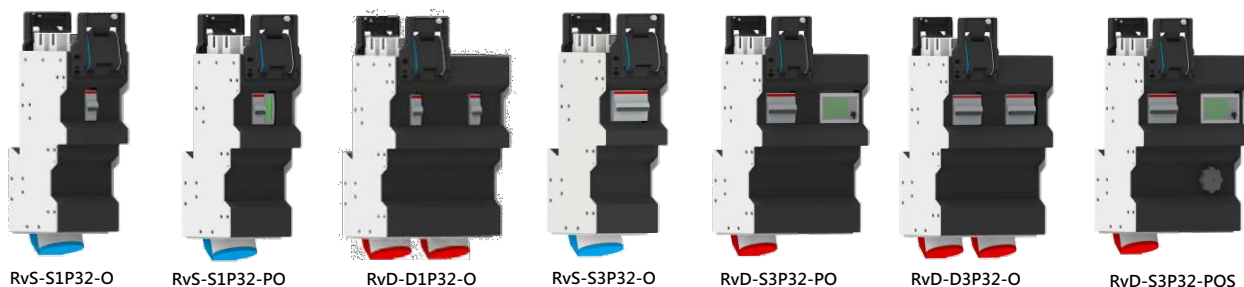
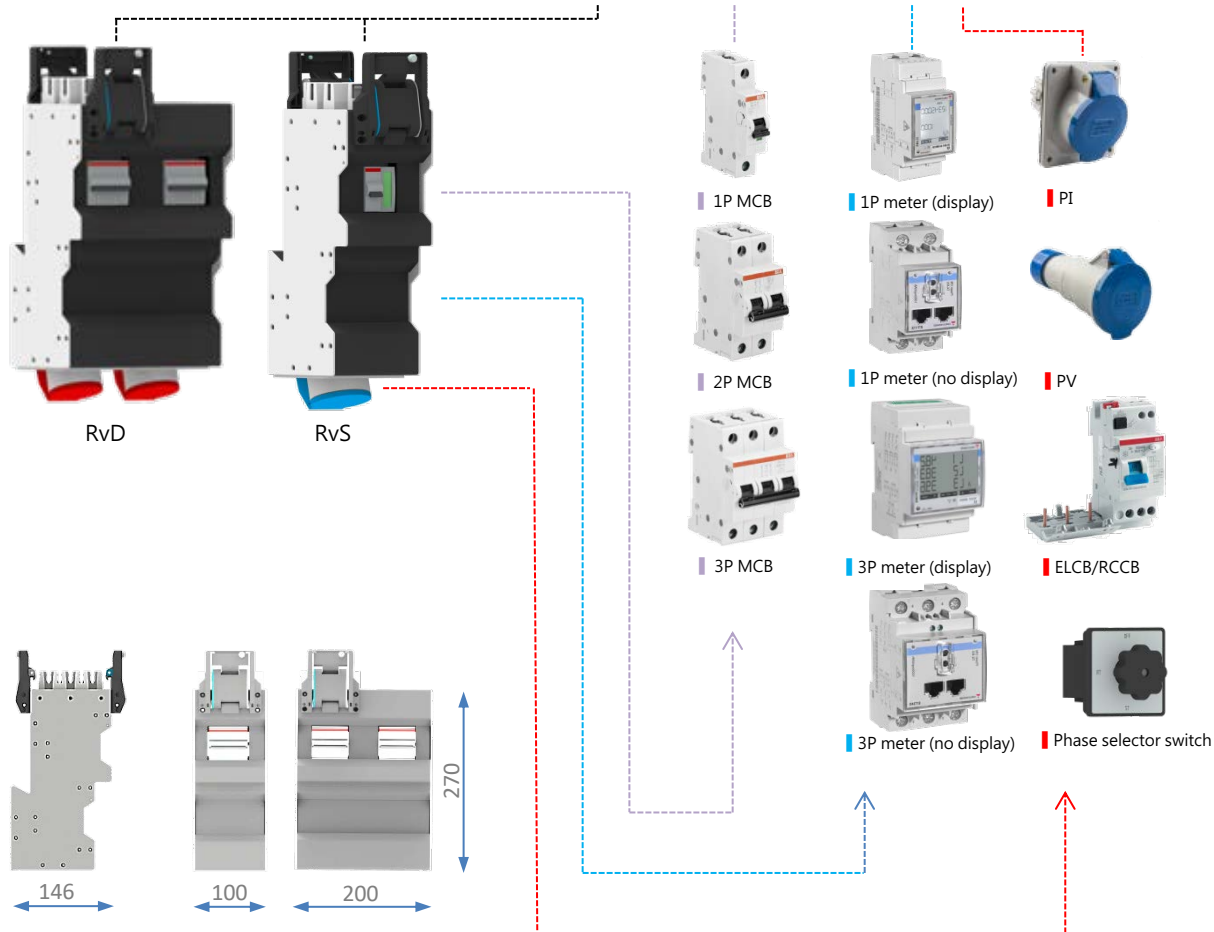


Wall/ Floor flange



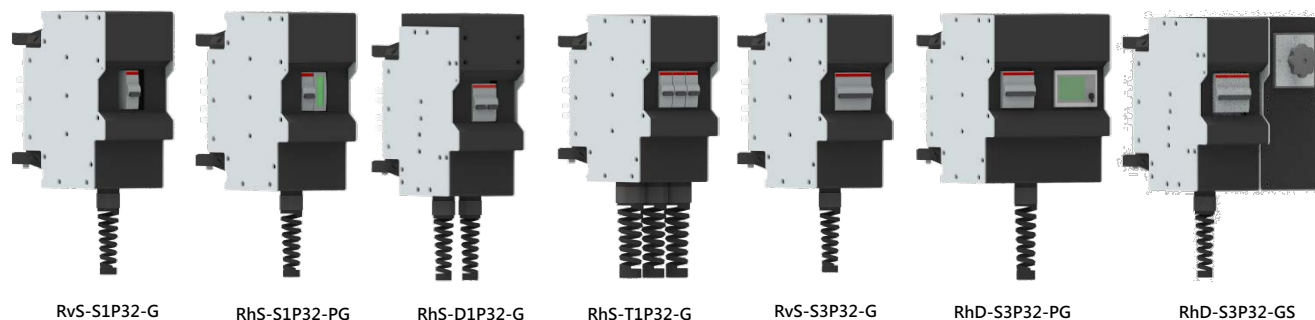
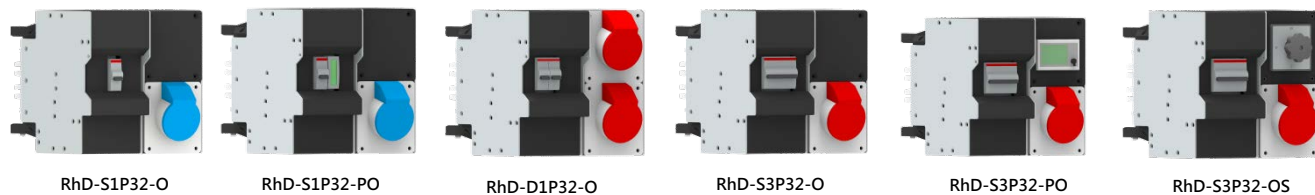
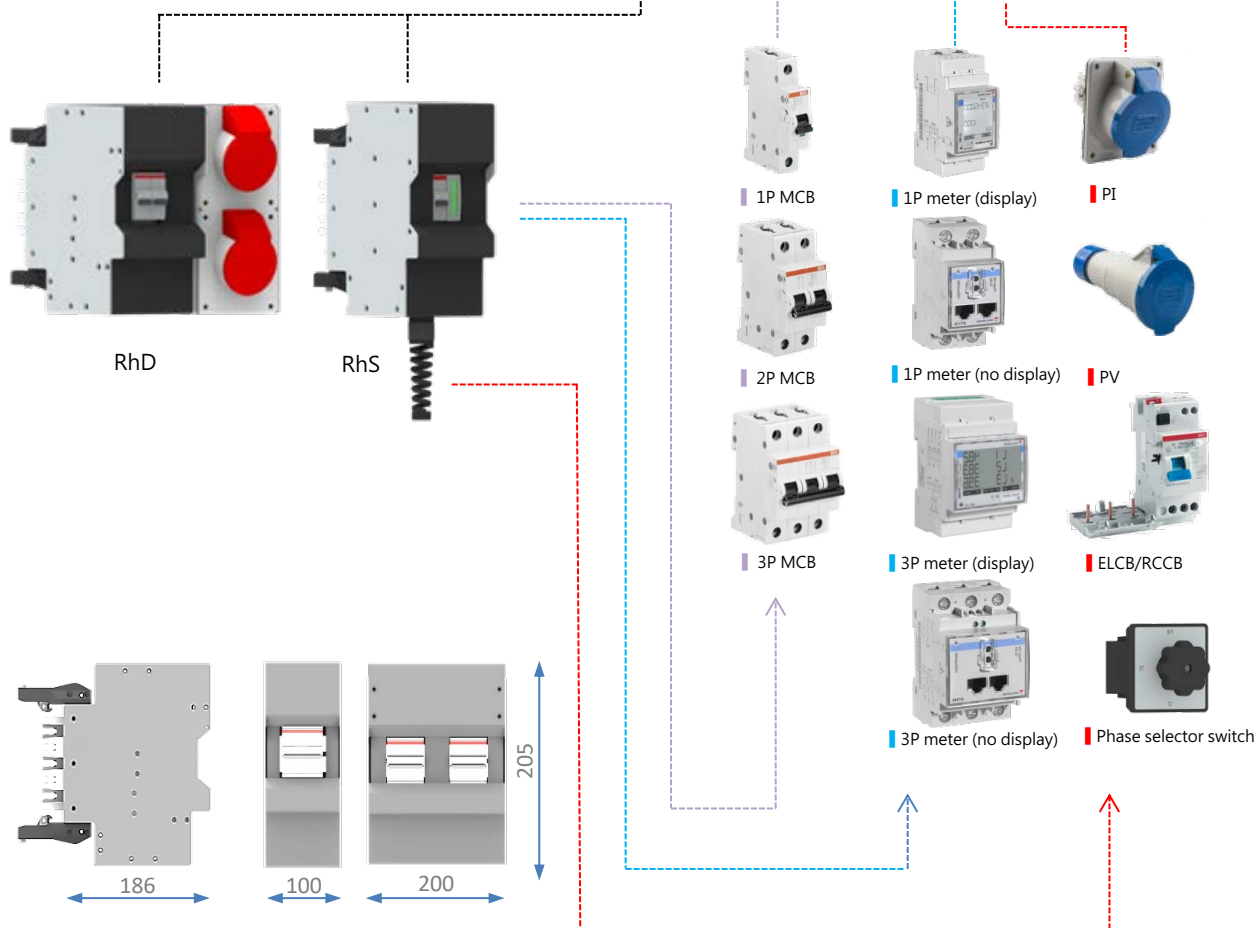
# Standard Configurations for Plug-In Unit (Rv type)

## RvS-S3P32-PO

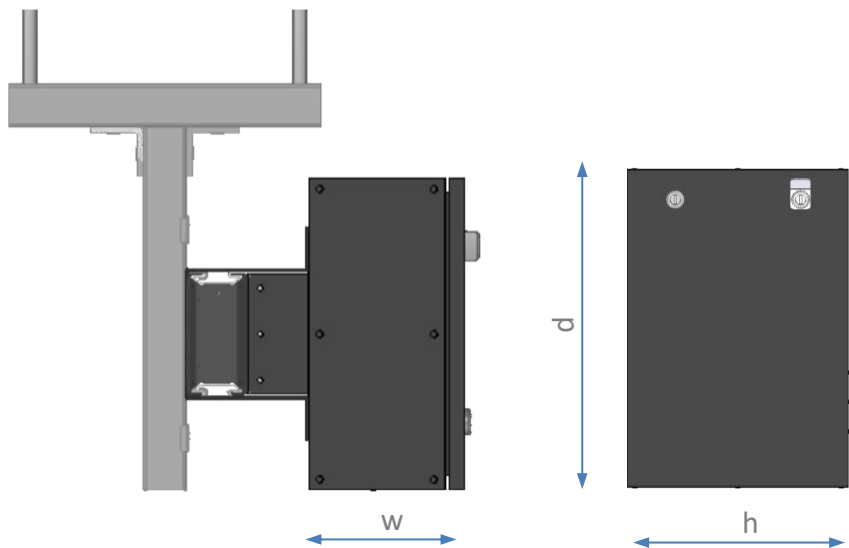


# Standard Configurations for Plug-In Unit (Rh type)

## RhS-S3P32-PO



# Cable End Feed Unit

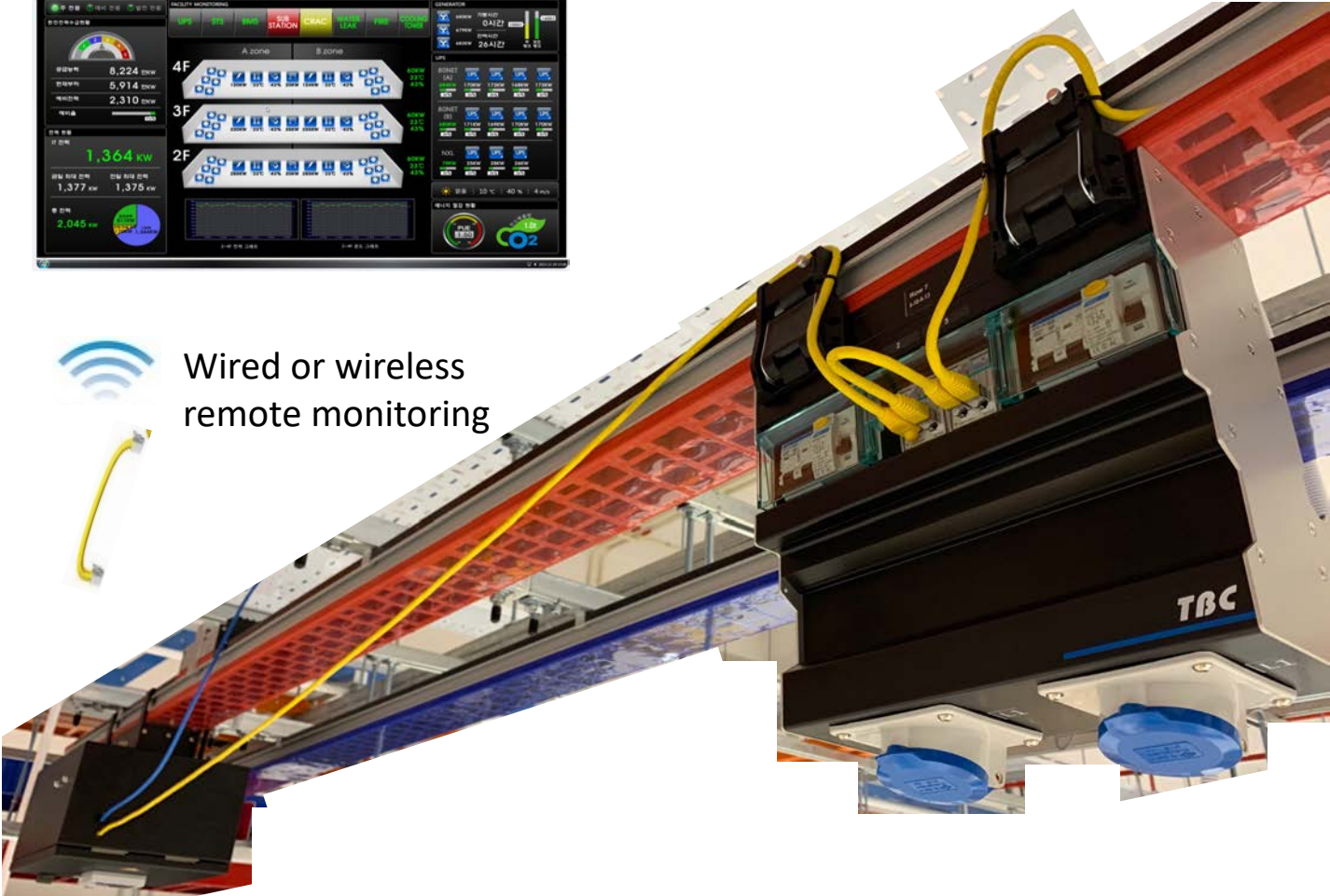


Plug-in Amp. Ratings		250A	400A	630A	1250A	1600A	2000A
Catalogue number		Rt-3P250	Rt-3P400	Rt-3P630	Rt-3P1250	Rt-3P1600	Rt-3P2000
W	mm	160	160	160	250	250	250
H	mm	300	300	300	300	300	300
D	mm	430	430	430	430	430	430
Color		RAL7043	RAL7043	RAL7043	RAL7043	RAL7043	RAL7043
IP Rating		IP42	IP42	IP42	IP42	IP42	IP42
Weight	kg	15	15	17	21	28	39

# TBC Busway Monitoring System (stand-alone BCMS, or DCIM integration)

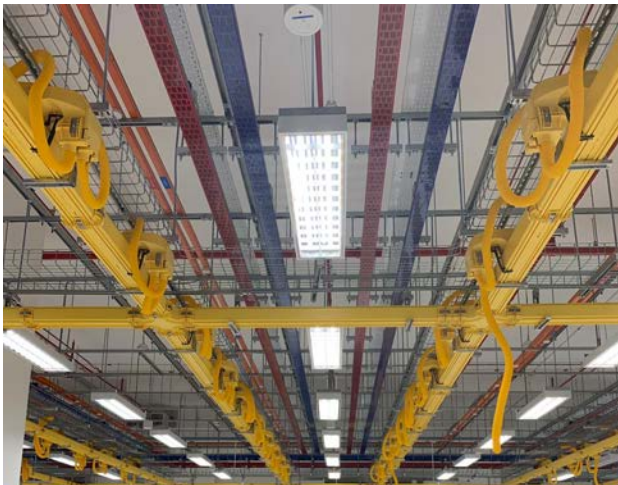
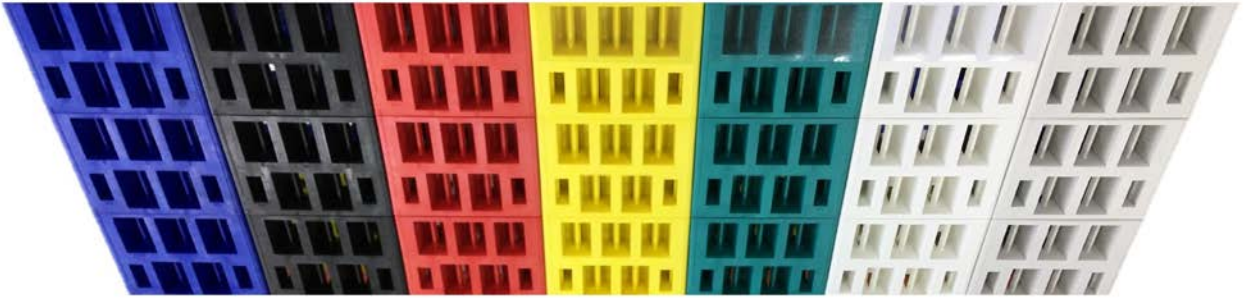


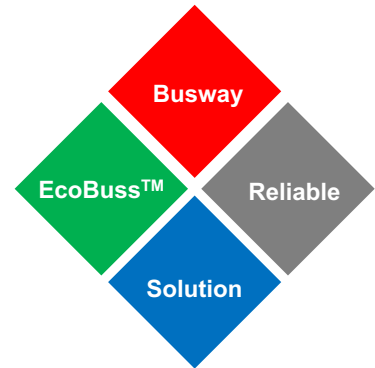
Wired or wireless  
remote monitoring





# Photos





## TBC Products & Services:

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**Busway** • Taiwan Busway Company (TBC) was established in 2002 with the premise of delivering premium quality busway systems and solutions to our customers. Through the years, we were able to distinguish ourselves as the preferred busway supplier with the reputation for reliable product designs quality, timely delivery and ability to meet our commitments.

**EcoBuss™** • 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 used by TSMC, UMC, AUO, M+W, Natus(Germany), Eaton(USA), Petronas(Malaysia) and other world leading corporations or engineering consultants, which is a testament for the quality & reliability of the TBC products.

For more info, please visit: [www.TBCbusway.com](http://www.TBCbusway.com)

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