



**Tai Sin®**

# Busbar Trunking System

**The First & Only Busbar Trunking System Test & Assembly Line In Singapore**

Sandwich

AI: 250A to 4000A  
Cu: 400A to 5000A

IP54 / IP66

KEMA KEUR  
IEC 61439

## PRODUCT FEATURES

### Superior & Reliable Insulation

- Both polyester film insulation and epoxy insulation (Class B) are available with exceptional electrical performance and superior mechanical strength.
- Materials are environmentally friendly and certified by a reputable international laboratory. The busbar trunking system is halogen-free with no toxicity emission in the case of fire.

### 99.9% Purity Copper Conductor

High-speed sawing for a high sawing accuracy and smooth cut to reduce temperature rise at the busbar joint.

### Remote Conditional Monitoring

[Optional Feature]

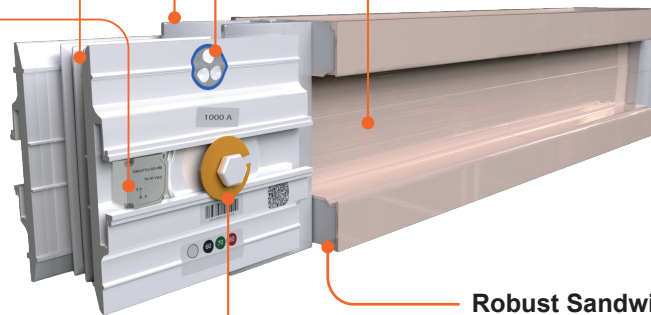
A temperature sensor that is not affected by electromagnetic noise provides the temperature report quickly and accurately of any joints at any time.

### Predictive Temperature Rise Indicator

- Joint insulator with a convex-concave groove edge provides an increased creepage distance.
- Color-coded-temperature indicator applied at busbar joint to give an early warning when high temperature occurs at the joint.

### Unique Structure Design

- The unique "serrated surface" design of extruded >3mm thickness aluminum housing greatly improves the heat dissipation for the whole busbar trunking system.
- By the design of two-piece housing, Tai Sin Low Voltage Busbar Trunking System provides more reliable IP protection for the field application than traditional design, including IP54, IP65, IP66.



### Unique Joint Design

- Single bolt joint design to shorten the time of connection by 50% compared to the traditional design.
- Double-headed "break off" joint bolt is applied to tighten the busbar with just a common 16mm socket wrench. Belleville spring washers are adopted to ensure pressure evenly applied across the joint. The tightening and re-tightening torque value for the double-headed joint bolt is 70-80N.

### Robust Sandwich Structure

Densely arranged conductors in the housing to achieve superior heat dissipation, lower temperature rise and eliminate the "chimney effect".

### Other Features:

- Novel Conductor Structure
- Compact Design
- Unique Error-proof Device (Bridge Type Joint)
- Plug Outlet And Busbar Plug



View All Features

For more details: <https://www.taisn.com.sg/our-products/busbar-trunking-system/>

## WHY TAI SIN BUSBAR TRUNKING SYSTEM?

### Manufacturer Of Power Distribution System Since 1980s

- The only brand that conduct factory routine test in Singapore.
- Provide local technical and replacement/repair support with the shortest lead time.
- Type tested and certified to IEC 61439-6 standard.
- Quality assured with 3rd party (KEMA) surveillance.



**KEMA Quality**





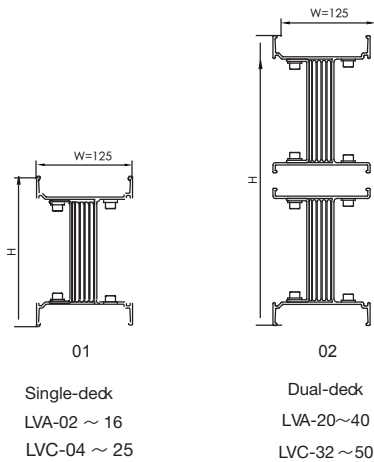
Tai Sin®

# Busbar Trunking System

## PHYSICAL DATA

### Straight Length

- Feeder, the straight length without outlets, can be installed either horizontally or vertically.
- The standard length is either 3000mm or 4000mm.
- The minimum length is 460mm.



## INSTALLATION

### LV Busbar Protection Class Up To IP66 According To Different Applications

#### Notes:

- IP40---"4" indicates that solid objects greater than 1mm in diameter will not penetrate the housing."0" denotes no protection.
- IP42---"4" indicates that solid objects greater than 1mm in diameter will not penetrate the housing."2" denotes prevention of water dripping inside by an angle of up to 15°.
- IP54---"5" for dust, "4" indicates splashes of water.
- IP65---"6" for dust density, "5" indicates protection from water spray.
- IP66---"6" for dust density, "6" for protection of stronger water spray

## ABOUT US



Tai Sin®

Tai Sin was incorporated in 1980, we specialise in power distribution products and solutions. Our business has expanded to busbar trunking system and branch cable systems for use in areas of power distribution network for commercial, residential, industrial and infrastructure projects.

CABLES & WIRES

BUSBAR TRUNKING SYSTEMS

BRANCH CABLE SYSTEMS

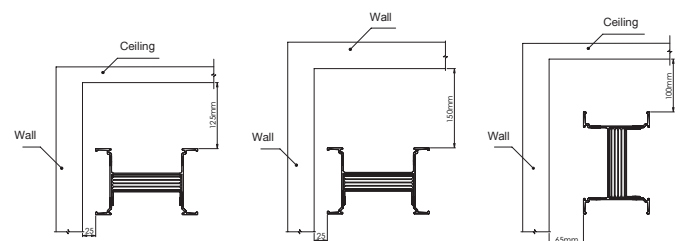
### Copper Conductor

Current Rating (A)	Dimension (mm)		Weight per meter (kg/m)		Fig.
	Width (w)	Height (H)	4wire 100%N	5wire 100%N, 50%PE	
400	125	103	11.3	12.4	01
630	125	103	12.5	13.6	
800	125	118	15.4	17.1	
1000	125	128	18.1	19.9	
1250	125	153	22.8	25.4	
1600	125	188	30.7	34.3	
2000	125	223	38.2	42.8	
2500	125	273	52.8	59.4	02
3200	125	352	59.5	66.5	
4000	125	432	76.9	86.3	
5000	125	532	97.3	108.9	

### Aluminium Conductor

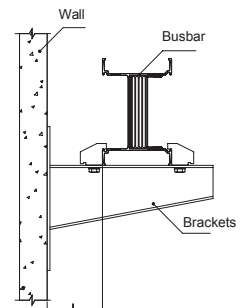
Current Rating (A)	Dimension (mm)		Weight per meter (kg/m)		Fig.
	Width (w)	Height (H)	4wire 100%N	5wire 100%N, 50%PE	
250	125	103	6.8	7.2	01
400	125	113	7.5	7.9	
630	125	128	8.8	9.3	
800	125	143	9.8	10.4	
1000	125	168	11.8	12.7	
1250	125	203	14.6	15.7	
1350	125	203	14.6	15.7	
1600	125	253	18.3	19.8	02
2000	125	322	22.6	24.3	
2500	125	392	28.7	31	
3200	125	492	36.2	39.4	
4000	125	572	44.7	48.9	

### Minimum clearance required for installation



### Minimum clearance required for plug-in box installation

Current level for plug-in box (A)	L (mm)
100	150
160	175
250	195
400	210
630	230
800	260
1000	300



LT Line I