



Your Partner in  
**Reliable  
Solutions**  
for **Power  
Distribution**



**SAMCON**



SINCE 1998

**SAMCON INDUSTRIAL CONTROLS PVT. LTD.**

ISO 9001 - 2015 | ISO 14001 - 2015 | OHSAS 18001 - 2007 Certified Organisation  
CIN No. : U31200MH1998PTC114659

DRIVEN BY THE DESIRE  
TO DELIVER THE BEST

# VERIFIED SAFE

When dealing with electrical systems, there are no second chances. Ti is equipped with a range of safety features to safeguard your system as well as the people who operate it.

**Design verified for Safety:** Ti is a design verified assembly, in accordance with IEC 61439, assuring you of the highest levels of quality and safety, from design to assembly.

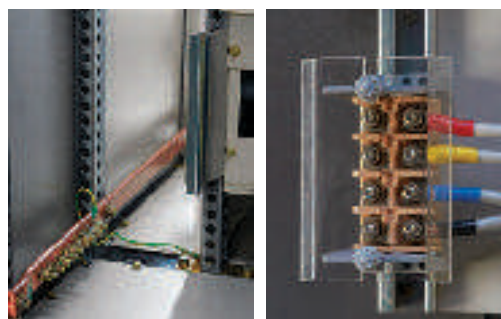
**Safer busbars:** Busbars in the Ti range have higher clearances than those prescribed by global switchboard standards (25 mm – Ph to Ph and 19 mm - Ph to N/Ph to E), offering a superior level of safety.

**Zero 'stray-voltage' doors and panels:** The Ti's panel doors are designed to prevent accidental opening. We have also placed earthing contacts on every door and an Earthbar running the length of the switchboard, connected to structural members. These ensure that the outer surfaces do not have stray voltages, as this could harm an operator.

**Best-in class insulation:** The Busbars in the Ti range are equipped with polyester glass supports for insulation. You also have the choice to install heat-shrunk PVC sleeves for extra protection.

**Enhanced ingress protection:** A minimum ingress protection of IP2X is provided even with the doors open to ensure that an operator does not come in contact with live terminals or parts during maintenance.

**No accidental contact:** Rotary knobs ensures that an operator does not come in contact with live terminals or parts during maintenance.



# DESIGNED FOR CONVENIENCE

The Ti range incorporates a number of features that help make installation and maintenance easy.

**Wide Cable Alleys:** The Ti range is equipped with 300 mm wide cable alleys, facilitating easy and quick access at all times. You also have the option to increase the alley width using 300 mm add-on chambers (AOCs)

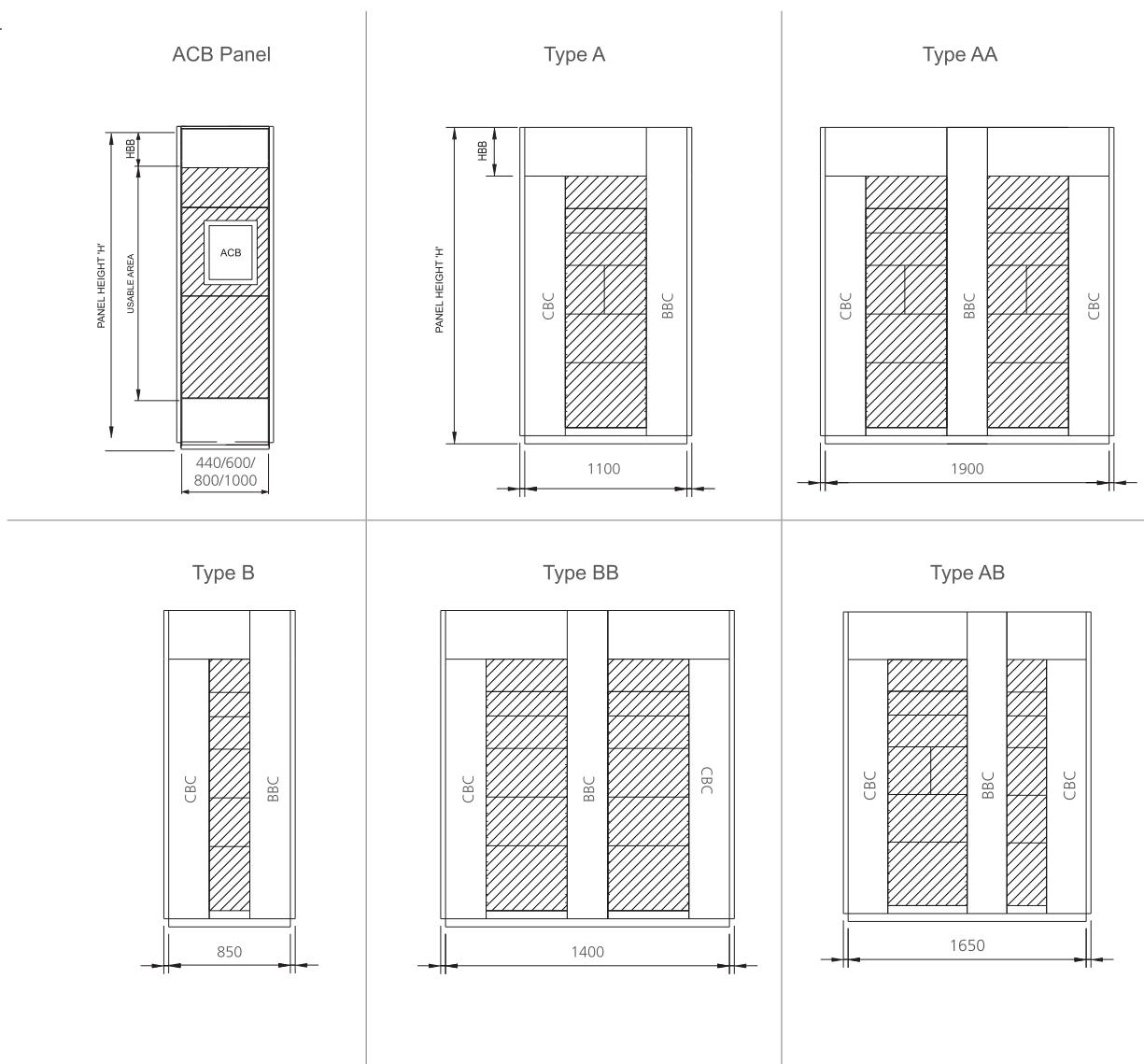
**Quick Release System:** The Ti range allows quick maintenance through a system that requires just a single spanner to unbolt connections from droppers.

**Easy Access Doors:** The Ti is fitted with hinged doors that open up to an angle of 95°, improving access during installation or maintenance, and saving time during each operation.



# CONFIGURATIONS

## PANEL TYPES



FRONT VIEW

CBC - cable chamber (width = 300 mm), BBC - busbar chamber (width = 300 mm)

Panel Height 'H'	Usable Area					
	ACB section			Outgoing section		
	210HBB	310HBB	410HBB	210HBB	310HBB	410HBB
1800	1220	1120	1020	1460	1360	1260
2000	1420	1320	1220	1660	1560	1460
2200	1620	1520	1420	1860	1760	1660
2400	1820	1720	1620	2060	1960	1860

\*HBB - Horizontal Bus Bar

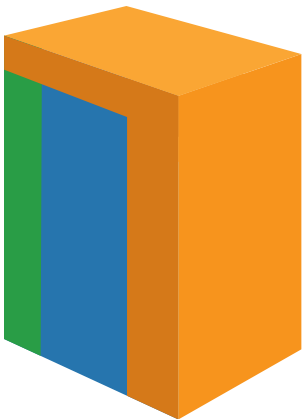
# TYPICAL ARRANGEMENTS



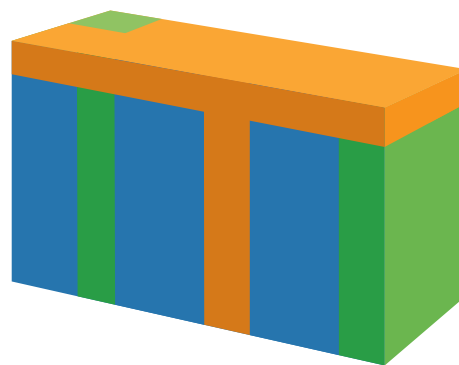
ACB panel






Outgoing section  
with front cable entry



Outgoing section  
(double front arrangement)



ACB section  
coupled with  
outgoing section

-  Feeders
-  Cable alley
-  Busbar

# SPECIFICATIONS

		Standards	IEC 61439 - 1&2
Insulation characteristics	Clearance		> 20 mm
	Creepage distances		> 20 mm
	Overvoltage category		II / III / IV
	Pollution degree		3
	Field condition		Inhomogeneous (non-uniform)
Electrical characteristics	Voltage ratings	Rated operational voltage ( $U_n$ )	415-690 VAC, 24-220 VDC
		Rated insulation voltage ( $U_i$ )	690 V
		Rated impulse withstand voltage ( $U_{imp}$ )	6 / 8 kV
		Rated frequency ( $f_n$ )	50 / 60 Hz
	Current ratings	<b>Main Horizontal busbars:</b>	
		Rated current ( $I_{nA}$ )	up to 5000 A
		Rated peak withstand current ( $I_{pk}$ )	up to 154 kA
		Rated short-time withstand current ( $I_{cw}$ )	up to 70 kA, 1s
		<b>Vertical Distribution busbars :</b>	
		Rated current ( $I_{nA}$ )	up to 3000 A
	Rated peak withstand current ( $I_{pk}$ )	up to 154 kA	
	Rated short-time withstand current ( $I_{cw}$ )	up to 70 kA, 1s	
Mechanical Characteristics	Degree of protection	In accordance with IEC 60529:	
		External	IP- 42 / IP-5X*
		Internal	IP 2X
	Forms of separation	as per IEC 61439 - 2	Form 3b / 4b
	Dimensions	Height (mm)	1800, 2000, 2200, 2400
		Width (mm)	440, 600, 800, 1000 (ACB section)*
			850, 1100, 1400, 1650, 1900 (Outgoing section)*
		Depth (mm)	440, 600, 900, 1000, 1100 (ACB section)*
			440, 600 (Outgoing section)*
	Surface Treatment	Structure	Powder coated
		Internal Components	Powder coated
		External Components	Powder coated
	Resistance to Corrosion	Damp heat cycling test	IEC 60068-2-30
Salt mist test		IEC 60068-2-11	
Plastic components	Flame retardant, self-extinguishing, Halogen-free	IEC 60695-2-10, IEC 60695-2-11	

\*Customized solution can be offered on request.



## FIELD APPLICATIONS

Samcon panel have designed for the needs of consumers in many fields from heavy industry to construction. Offering safe working conditions Form 1 to Form 4b with fixed and withdrawable modules. Samcon provides several advantages in various areas of implementation.



MINING



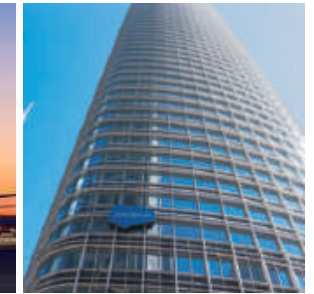
IRON STEEL INDUSTRY



METRO



AIRPORTS



HIGH BUILDING



AUTOMOTIVE INDUSTRY



POWER GENERATION & DISTRIBUTION CENTERS



WATER TREATMENT PLANTS



CEMENT INDUSTRY



FOOD INDUSTRY



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