FASTER













MODDIS

FORM 3 & 4 TYPE TESTED ENCLOSURES











MODDIS is extensively tested and verified to IEC 61439-1-2, Edition 3 standards for low voltage switchboards. All major brands of breakers, just fit perfectly into the MODUTEC modular switchboard enclosure system. It results from 35 years of innovative thinking, R&D and continuous testing at recognized test stations to global standards.

The growing demand in industrial power distribution, building & infrastructure are the important drivers increasing growth in the global electrical enclosure markets. World-wide the government of many countries has implemented stringent regulations regarding safety, compliance to IEC standards and world-class quality. To evangelize this trend and to enable any panel builder to build world-class panels in terms of quality, safety & technology, MODDIS leads in empowering: 'ON TIME DELIVERY', 'LEAD TIME REDUCTION' through 'SIMPLIFICATION'.

Unlike in the other modular models available abroad, with MODUTEC, the panel builder can shear (piece) the length of the frame bar or cross bar into smaller lengths (pieces) as required for use. This tremendouslyreduces the inventory, that needs to be carried, and work never gets constrained for want of a specific length of profile that may not be readily available in the stock => (peace of mind). This concept of "Piece – Pieces – Peace" is a Decisive Competitive Edge MODUTEC has.

These modular enclosures are available in different forms of construction, with a range of accessories and possibilities to address the need of every panel builder in a simple, systematized & standardized manner.

MODDIS modular enclosures are the most versatile switchboard enclosure systems at the best possible price. And, all the shipping sections of panels rest on a modular base frame which incorporates the possibility to join and design a free-standing line-up making it easy to transport section wise. We also advise many more standardizations in our Partner Program to help simplify panel building.

MODUTEC is committed to facilitating & scaling your panel board business with ease.











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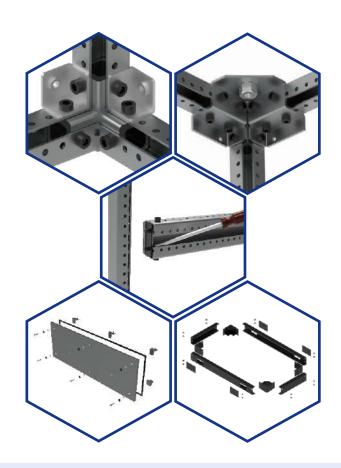






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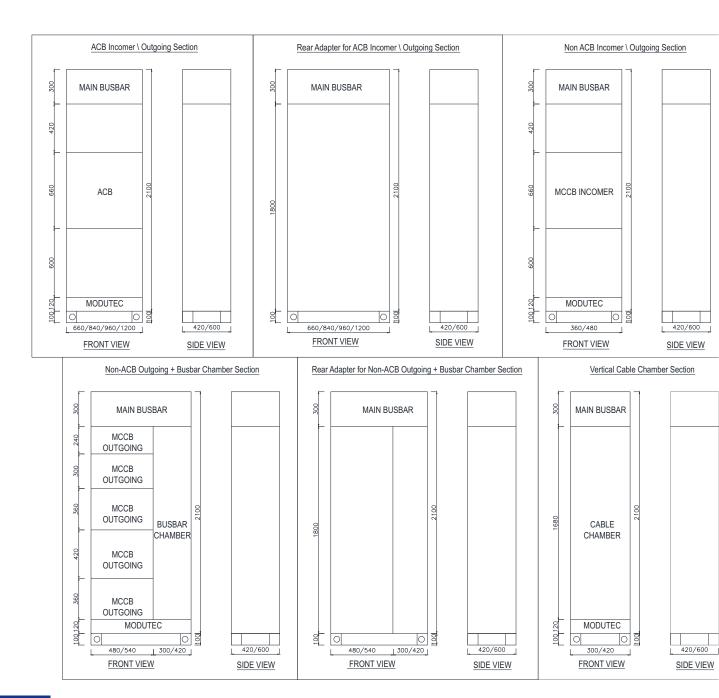


Some of the salient features of MODDIS are as follows:

- Tested to IEC 61439-1 & 2 with ASTA, ERDA & CPRI Certifications for various Electrical switchgears.
- Type tested with 4000A Copper & 5000A Aluminium Busbars.
- Build to suit upto IP55, Form 4B Type 7 construction, 100 kA for 1 Sec Fault current ratings.
- Standardized W, H & D to limit your inventory carrying.
- Catalogued system for ease of identification.
- Very well illustrated assembly manuals & videos to support putting the panel together.
- Available in Pre-assembled or Flat Pack system to facilitate optimized freight cost & space to stock.
- Inventory carrying of the structural parts supports commencement of manufacturer on receiving of approved drawings.
- Flexible to change the design as per clients changing requirements at any time.
- Ease of shipment of parts over a long distance without damage due to flat pack.
- MODSIM software-driven tool helps to generate GA Drawings and Bill of Materials with pricing. Development drawings available for licensed users.
- Freedom to choose any electrical switchgear has Modutec is switchgear agnostic.
- Fairly priced in comparison with all IEC 61439 type tested branded options.

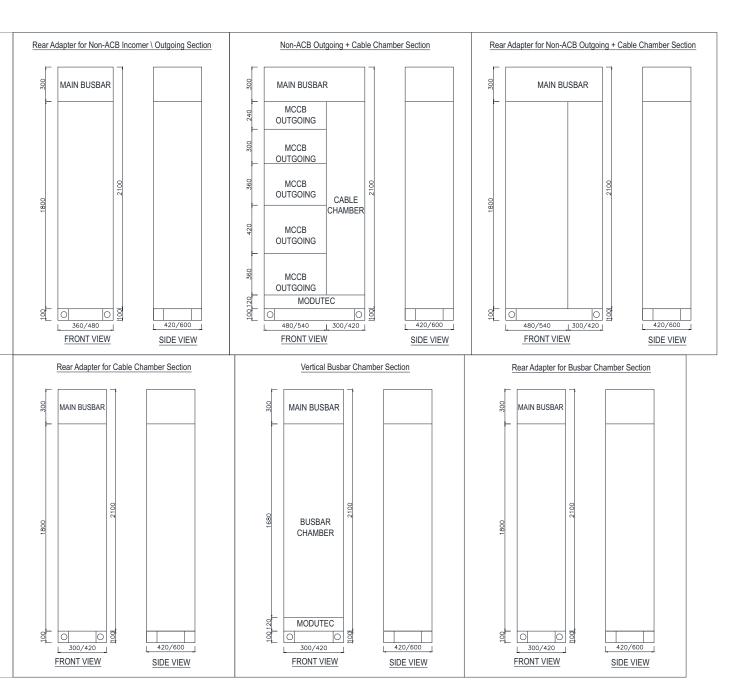


Standard Configurations



Note:

- ACB panel as per 4 sizes available.
- MCCB incomer for 2 frame sizes.
- Outgoing switchgear to 2 standard width's.
- Outgoing cable chamber to 2 standard width's.
- Outgoing busbar chamber to 2 standard width's.
- Marshalling stroke drive panel to single width with mounting plate.
- Side cover to 2 width's as per 2 depth's.
- Depth of panel can be 420mm / 600mm / 420+420 / 420+600 and so on...



		MODI	DIS S	tanda	rd Dim	ensi	ons	
SL No	Type of Section	Panel Height	Panel Width	Vertical Cable Chamber Width	Vertical Busbar Chamber Width	Panel Depth	IP 43	IP 54 / 55
1			660	_	_		SS066210042A400	SS066210042A500
2			840	_	_	420	SS084210042A400	SS084210042A500
3			960	_	_		SS096210042A400	SS096210042A500
4	ACB Incomer	2100	1200	_	_		SS120210042A400	SS120210042A500
5	or Outgoing Section		660	_	_		SS066210060A400	SS066210060A500
6			840	_	_	600	SS084210060A400	SS084210060A500
7			960	_	_		SS096210060A400	SS096210060A500
8			1200	_	_		SS120210060A400	SS120210060A500
1A			660	_	_		SS066210042H400	SS066210042H500
2A			840	_	_	420	SS084210042H400	SS084210042H500
3A			960	_	_		SS096210042H400	SS096210042H500
4A	Rear Adaptor For ACB Incomer 210 or Outing Section	2100	1200	_	_		SS120210042H400	SS120210042H500
5A			660	_	_	600	SS066210060H400	SS066210060H500
6A			840	_	_		SS084210060H400	SS084210060H500
7A			960	_	_		SS096210060H400	SS096210060H500
8A			1200	_	_		SS120210060H400	SS120210060H500
9			360	_	_	400	SS036210042B400	SS036210042B500
10	Non ACB Incomer	0.400	480	_	_	420	SS048210042B400	SS048210042B500
11	or Outgoing Section	2100	360	_	_		SS036210060B400	SS036210060B500
12			480	_	_	600	SS048210060B400	SS048210060B500
9A			360	_	_	400	SS036210042I400	SS036210042I500
10A	Rear Adapter For	2400	480	_	_	420	SS048210042I400	SS048210042I500
11A	Non ACB Incomer 2100 or Outgoing Section	Z 100	360	_	_	_	SS036210060I400	SS036210060I500
12A			480	_	_	600	SS048210060I400	SS048210060I500

	MODDIS Standard Dimensions								
SL No	Type of Section	Panel Height	Panel Width	Vertical Cable Chamber Width	Vertical Busbar Chamber Width	Panel Depth	IP 43	IP 54 / 55	
13			480	300	_		SS078210042C400	SS078210042C500	
14				540	300	_	420	SS084210042C400	SS084210042C500
15			480	420	_		SS090210042C400	SS090210042C500	
16	Non ACB Outgoing	2100	540	420	_		SS096210042C400	SS096210042C500	
17	Cable Chamber Section		480	300	_		SS078210060C400	SS078210060C500	
18			540	300	_	600	SS084210060C400	SS084210060C500	
19			480	420	_		SS090210060C400	SS090210060C500	
20			540	420	_		SS096210060C400	SS096210060C500	
13A			480	300	_		SS078210042J400	SS078210042J500	
14A			540	300	_	420	SS084210042J400	SS084210042J500	
15A			480	420	_		SS090210042J400	SS090210042J500	
16A	Rear Adaptor For Non ACB Outgoing +	2100	540	420	_		SS096210042J400	SS096210042J500	
17A	Cable Chamber Section		480	300	_	600	SS078210060J400	SS078210060J500	
18A			540	300	_		SS084210060J400	SS084210060J500	
19A			480	420	_		SS090210060J400	SS090210060J500	
20A			540	420	_		SS096210060J400	SS096210060J500	
21			480	_	300		SS078210042D400	SS078210042D500	
22		Non ACB Outgoing + 2100 Busbar Chamber Section	540	_	300	400	SS084210042D400	SS084210042D500	
23	Busbar Chamber		480	_	420	420	SS090210042D400	SS090210042D500	
24			540	_	420		SS096210042D400	SS096210042D500	
25			480	_	300	600	SS078210060D400	SS078210060D500	
26			540	_	300		SS084210060D400	SS084210060D500	
27			480	_	420		SS090210060D400	SS090210060D500	
28			540	_	420		SS096210060D400	SS096210060D500	

	MODDIS Standard Dimensions							
SL No	Type of Section	Panel Height	Panel Width	Vertical Cable Chamber Width	Vertical Busbar Chamber Width	Panel Depth	IP 43	IP 54 / 55
21A			480	_	300		SS078210042K400	SS078210042K500
22A			540	_	300	420	SS084210042K400	SS084210042K500
23A			480	_	420		SS090210042K400	SS090210042K500
24A	Rear Adaptor for Non ACB Outgoing	2100	540	_	420		SS096210042K400	SS096210042K500
25A	+ Busbar Chamber		480	_	300		SS078210060K400	SS078210060K500
26A	Section		540	_	300	600	SS084210060K400	SS084210060K500
27A			480	_	420		SS090210060K400	SS090210060K500
28A			540		420		SS096210060K400	SS096210060K500
29			_	300	_	420	SS030210042E400	SS030210042E500
30	Vertical Cable		_	420	_	420	SS042210042E400	SS042210042E500
31	Chamber Section		_	300	_	000	SS030210060E400	SS030210060E500
32		2100	_	420	_	600	SS042210060E400	SS042210060E500
29A			_	300	_	420	SS030210042L400	SS030210042L500
30A	Rear Adaptor for		_	420	_	420	SS030210042L400	SS030210042L500
31A	Cable Chamber Section		_	300	_	222	SS042210042L400	SS042210042L500
32A			_	420	_	600	SS030210060L400	SS030210060L500
33			_	_	300	420	SS030210042F400	SS030210042F500
34	Vertical Busbar		_	_	420	120	SS042210042F400	SS042210042F500
35	Chamber Section		_	_	300	600	SS030210060F400	SS030210060F500
36		2100	_	_	420	600	SS042210060F400	SS042210060F500
33A	Rear Adaptor for Busbar Chamber		_	_	300	420	SS030210042M400	SS030210042M500
34A	Section (Busbar supports here, if required will be extra)		_	_	420	420	SS042210042M400	SS042210042M500
35A	,		_	_	300	202	SS030210060M400	SS030210060M500
36A			_	_	420	600	SS042210060M400	SS042210060M500

	MODDIS Standard Dimensions							
SL No	Type of Section	Panel Height	Panel Width	Vertical Cable Chamber Width	Vertical Busbar Chamber Width	Panel Depth	IP 43	IP 54 / 55
37	Marshaling / Drive	2100	660	_	_	420	SS066210042G400	SS066210042G500
38	Panel Section		660	_	_	600	SS066210060G400	SS066210060G500
37A	Rear Adaptor Marshaling / Drive	2100	660	_	_	420	SS066210042N400	SS066210042N500
38A	Panel Section	2100	660	_	_	600	SS066210060N400	SS066210060N500
39	Side Cover	2100	_	_	_	420	SS000210042O400	SS000210042O500
40	Side Cover	2100	_	_	_	600	SS000210060O400	SS000210060O500
41	Baying Kit	2100	_	_	_	_	SSBYK210000PXXX	SSBYK210000PXXX
42	Coupling Sheet	2100	_	_	_	420	SS000210042QXXX	SS000210042QXXX
43	Coupling Sheet	2100	_	_	_	600	SS000210060QXXX	SS000210060QXXX
44			300	_	_	_	SS030210000RXXX	SS030210000RXXX
45			360	_	_	_	SS036210000RXXX	SS036210000RXXX
46			420	_	_	_	SS042210000RXXX	SS042210000RXXX
47	Door Cover	0400	480	_	_	_	SS048210000RXXX	SS048210000RXXX
48	Rear Cover	2100	540	_	_	_	SS054210000RXXX	SS054210000RXXX
49			660	_	_	_	SS066210000RXXX	SS066210000RXXX
50			840	_	_	_	SS084210000RXXX	SS084210000RXXX
51			960	_	_	_	SS096210000RXXX	SS096210000RXXX
52			1200	_	_	_	SS120210000RXXX	SS120210000RXXX

Note:

- The above dimensions have been optimized for maximizing productivity with minimal stock.
- Customized dimensions in multiples of 60mm preferably in X,Y,Z axis can be facilitated.
- The panel depths shown above can be either 420mm / 600mm / 600+420mm / 600+600 mm and so on as per specific site requirement.
- IP 43 panels have top plate and IP 54 top door on top of the panel to meet the respective IP clause.

The Part that Makes the Whole

MODUTEC Cross Bar:

A four bend profile that provides for the internal forms of construction as well. It adds to the strength of the Switchboard, as the weight of the Switchgear, Bus Bars etc are taken by this frame that gets built, not the walls as in conventional welded designs. These are available in 2400mm length pieces or in smaller sizes starting from 180mm.

MODUTEC Hinged Doors:

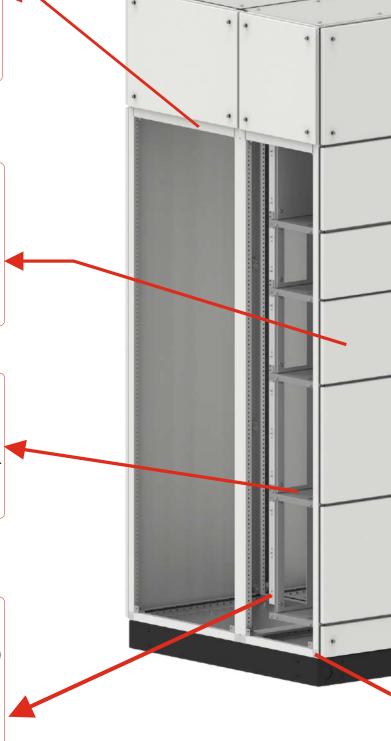
These come with a double bending on all 4 edges. This adds significantly to the strength, aesthetics & IP clause protection with polyurethane foam gaskets to boot. They are provided with concealed hinges and door locks as required.

MODUTEC Partition Plate:

These are used to segregate the different compartments width-wise, height-wise, and depth wise. These are used to form barriers, separate live parts from contact with humans and provide for construction forms as per IEC 61439 as required for the given application.

MODUTEC Fixed Type Compartment:

These is useful in building Form 3 & 4 types of construction and their sub forms as per IEC 61439 standard. The beauty of this system is that if for a reason, two compartments would need to be merged into one or vice versa to accommodate a changed project requirement, this can be easily achieved.



MODUTEC Bolted Covers:

The bolted cover has double bending on all 4 edges. The IP clause protection is achieved by using polyurethane foam gasket and sealing arrangement for fasteners.

MODUTEC Frame Bar:

A three-bend profile that's punched and pierced so as to make the assembly of the switchboard quick, while being flexible, adaptable and versatile. The pierced holes are at a pitch of 30mm which renders the system to make Switchboards in multiples of 30mm in the X, Y & Z axis. These are available in 2400mm length pieces or in smaller sizes starting from 180mm.

MODUTEC Plinth Profiles:

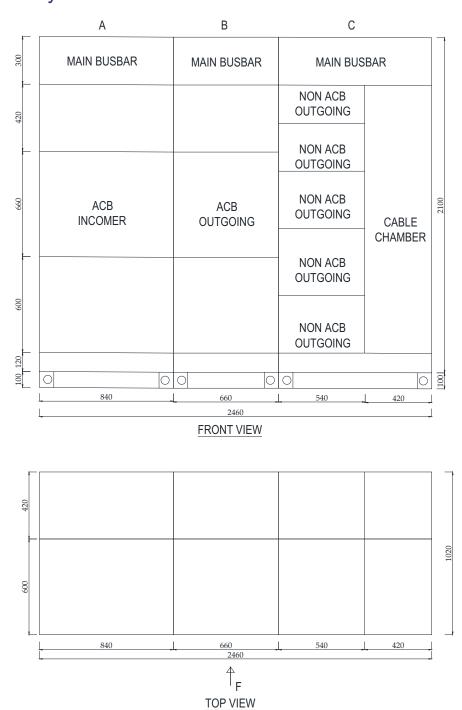
These are made out of 3mm steel and available in heights of 100mm or 200mm. For a given depth respective profile sizes are bolted together to form the base of the panel. The Plinth profiles are powder coated to black matt finish.

MODUTEC Tripod:

This is an aluminum alloy, pressure die cast and helps form the corners of the Switchboard shipping sections. It also aids in the earthing continuity of the Panel line up.

Reference GA

Say, you have a requirement as below and you want to arrive at part codes to be ordered, here is how you do it.



Note:

End to end width will be 2460+25+25mm for bolted doors for either end adding to 2510 mm.

How to Order								
Panel IP		IP 55						
Panel Dimension	2460W x 2100H x 1020D(600+420)							
Column Number	Part Code	Description	Qty					
А	SS084210060A500	ACB Incomer or Outgoing Section	1					
Α	SS084210042H500	Rear adaptor for ACB Incomer or outgoing section	1					
Α	SS084210000RXXX	Rear cover	1					
А	SS000210042QXXX	Coupling Sheet	1					
Α	SSBYK210000PXXX	Baying Kit	1					
В	SS066210060A500	ACB Incomer or outgoing section	1					
В	SS066210042H500	Rear adaptor for ACB Incomer or outgoing section	1					
В	SS066210000RXXX	Rear cover	1					
В	SS000210042QXXX	Coupling Sheet	1					
В	SSBYK210000PXXX	Baying Kit	1					
С	SS096210060C500	Non ACB Outgoing + Cable Chamber Section	1					
С	SS096210042J500	Rear adaptor for non ACB Outgoing + Cable Chamber Section	1					
С	SS042210000RXXX	Rear cover	1					
С	SS054210000RXXX	Rear cover	1					
Side Cover	SS000210060O500	Side Cover	1					
Side Cover	SS000210042O500	Side Cover	1					

Modular Design



Structure Assembly



Structure Assembly with Bus Bars





Tripod



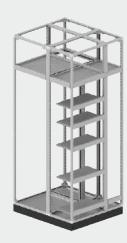
Frame Bar



Cross Bar



Stage 1



Stage 2



Stage 3



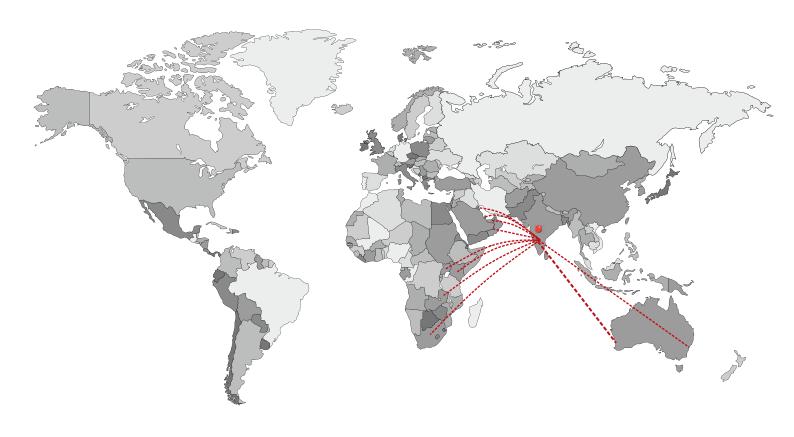
Stage 4

Technical Specifications for Modutec Enclosures

Description	Material	Thickness
Frame Bar	AluZn	2 MM
Cross Bar	AluZn	2 MM
Hinged Door	CRCA with PC	1.6 / 2 MM
Bolted Cover	CRCA with PC	1.6 / 2 MM
Gland Plate	CRCA with PC	3 MM
Side Seperation Plate	GI	1.2 MM
Feeder Seperation Plate	GI	1.2 MM
Coupling Sheet	Gl	1.2 MM
Busbar Chamber Seperation Plate	Gl	1.2 MM
Top Cover / Bottom Cover	CRCA with PC	1.6 MM
Mounting Plate	GI	2 MM
Cable Ladder	GI	2 MM
Plinth	CRCA / ISMC with PC	3 MM CRCA / 75 / 100 ISM
Busbar Support Fixing Channel	GI	2 MM
Busbar Insulators	SMC	
Busbar Insulator Support	GI	2 MM
With Modular Accessories	CRCA with ZINC Blue Passivation Plating	

Note:

The above specifications are indicative and are subjective to change without notice.



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