

Electronics







**MODULAR SRE ENCLOSURE SOLUTIONS** 

#### **Introduction of the SRE Electricals:**

SRE Draw out type MCC/PCC enclosures are well designed by experience consultant/ engineer having much more years practical association. In design and development of sheet steel standard switchboards and factory built assembly, reliability, safety and rugged construction are the Distinguish features of our product.

Our Design meets technical requirement of all kind of industries such as Cement, Power, Steel, Chemical, Fertilizers Refinery and many process plant, and also it's Flexibility enough to suit varying requirement of customers.

Our Draw out MCC/PCC are enclosed type factory built Assembly in accordance with IS and IEC. Standard specification and incorporate, L&T, Siemens, GE, ABB, Havel's and Others Switchgear and Control Gear for all of starters and power distribution units.

#### **Concept of Team:**

SRE system is based on a concept of standard D/O enclosure for the construction of electrical panels. Using standard parts, it is possible to construct a D/O enclosure with standard switchgear.

The advantage of this system makes it easy and quick to assemble and install electrical panels as and/or modify existing panels-including older enclosure.

#### Safety & Secure:

Draw-out panels are used all over the world for distribution of electrical energy with the highest possible safety and operational dependability. Ours draw-out system which can be constructed with cassettes up to 800 amps, ensures minimum operational down-time and a high degree of personal safety Earthlings studs are provided as standard and earthlings points are given on all discrete assemble sections; therefore enclosure is made totally safe from risk of leakage current.

#### **Type-Tested busbar systems:**

Our

busbar supporting systems available up to 6000amps. the designs are regularly tested for different panel builder at

CPRI Beawar , according to IS/IEC standard to a shortcircuit level of 50kA for 3sec/65kA for 1 sec and a peak with stand current max. 143kA, the busbar are easily assembled & fitted into the panel. The busbar systems are incorporated in the modular system and are described in detail in our Instruction Manual, which make them easy to install in the panel.

#### Separation:

With the SRE modular system you can choose a separation from FORM 1 to FORM 4, and you are thus ensure optimum personal safety and operational dependability according to IEC 60439-1 and the customer's whishes. After installation and commissioning, you can make a visual inspection and thermograph the busbar joints. All the necessary coverings and protection plates are available as standard parts of the modular system and require no adjustment. The photo to the right shows a FORM 2 protection of the busbars vertically, in top and in front of the joints of the busbar systems. The individual sections are here made in FORM 4, which is particularly suited for maximum safety.

#### Motrcon: 2480 Features

- Fully Compartmentalized (Form 1V-B) designs ensure operator safety.
- Drawout Modules are Withdrawable with distinct positions viz. Test, Services & Isolation.
- Drawout Modules of same size are fully interchangeable.
- > Totally enclosed, vermin-proof & dust-proof vertical bus-bar chamber.
- Automatic safety shutter for the vertical bus chamber.
- Main bus-bars are easily approachable from the top.
- Self-aligning & self-disconnecting power auxiliary control contacts.
- Vertical bus-bars are free of any nuts & bolt hence the entire vertical bus-bar is maintenance free.
- Double stab-in Earthing provided for all the drawout modules.
- Swiveling lever-guide for easy withdrawal of the modules without any additional tool.
- Feeder & cable alley doors open in opposite directions providing ample working space.
- Highly flexible modular design, changes are possible as per site condition.

#### Motrcon: 2480

(Drawout Motor Control Enclosure System)



#### modern

industry, reliable electrical systems are a must to reduce the production downtime & improve efficiency.

This extensive range of Electric Control Panel has been manufactured for Controlling Electric Motor s & other Equipments from a Central Location.

#### Motrcon: 2480

Motor control centre (MCC) is of standard design, being designed to meet the growing needs of modern industry with maximum operational reliability & safety. Its modular construction facilitates ease of future expansion & changes at site.

#### Motrcon: 2480

It is sturdy, compact & highly versatile, whist providing adequate space for ease of operation & maintenance.

#### Motrcon: 2480

Satisfies all the stringent technical requirements & is thereby suited to meet diverse requirement under extreme ambient site conditions. It is specially designed to incorporate the complete range of switchgear of Siemens, L&T, Schneider, GE, ABB etc.

#### Motrcon: 2480

It provides fool-proof control for motors installed in various process industries viz. fertilizer, petrochemical, cement oil refineries, chemical plants, steel plants, power stations, material handling systems & other continuous process plants, wherein the continuous flow of power without the slightest break is a must.

#### Motrcon: 2480

This is available in single front & space saving double front design. As a part of our research initiative we have recently launched versions of the MCC using aluminum bus bars in the vertical bay as against the traditional copper bus-bars rated up to 1000A per vertical bus against the previous standard of 600A.

#### Motrcon: 2480

These enclosures are fabricated using the finest materials and come complete with all related electrical drawout accessories including power plug-in contacts & auxiliary sliding contacts.

All that is left for you to do is just the switchgear mounting & wiring and have a totally complete drawout panel.

# Versatile & Safe Features Rich Type-Tested Enclosures:

#### Motrcon: 2480

Offers substantial saving in terms of the time, finance, infrastructure, manpower & inventory required to run a modern sheet steel fabrication & mould shop required to manufacture these state-ofthe-art enclosures.

#### Motrcon: 2480

Enclosures are available off the shelf & thereby lead time is reduced to a minimum. They can be delivered either in preassembled or as dismantled parts, the design being of boltson type modular construction. These enclosures are powercoated & galvanized to provide for a good finish & help protect it from hazardous site condition.

#### Motrcon: 2480

Enclosures, F.R.P. Bus Bar supporting arrangements & other related Electrical Drawout Accessories are test certified for various tests complaint to IEC 60439 – 1, viz. Temperature Rise, Mill volt Drop & Short Circuit withstand strength of 65kA(rms) for 1 Sec., 143KA (peak) at the C.P.R.I. laboratories.

# <u>Bus Bar System</u> – <u>Simple and Technically Sound</u>

#### **Bus Bar System:**



The bus-bars are selected to meet the continuous current rating & short circuit levels as desired. The standard three phase vertical busbars provided are of high conductivity, electrolytic grade copper. Recent developments aimed at making the enclosure more cost-effective have been the introduction of aluminum vertical bus-bars rated for 600A. These vertical droppers are provided chamber located behind the feeder compartment.

The vertical bus chamber is the heart of the Drawout System, it is totally enclosed to prevent the

entry of dust & vermin. The vertical bus-bars are accessible only after the removal of the feeder trolleys & the front FRP shroud. These vertical bus-bars are free of joints; thereby avoiding any holes, bolting of connections is also avoiding making them maintenance free. FRP vertical bus supports are provided through the length of the bus chamber at a distance of 100mm from each other.

"There being an ever growing need for accommodating maximum number of Drawout Modules within a single Drawout MCC Enclosure, SRE has recently launched a new series of Drawout PMCC Enclosures that can accommodate Vertical Bus Bars rated up to 1000A. While maintaining the same compactness in overall size as the regular version rated at 600A."

**Managing Director** 

# Automatic Safety Shutter:

A gravity-operated safety shutter in front of the vertical bus-bar chamber prevents the bus-bars from being touched by accident when the Withdrawable modules are being removed.

Each module is fitted with double earthing contacts with the lifters attached to them. The lifters push the shutter up as the Withdrawable module is levered into the feeder compartment.

# <u>Drawout Module – Compact,</u> <u>Reliable & User-Friendly:</u>

The Withdrawable Modules: The Withdrawable Modules or Trolleys are available in sizes that are standardized in multiple of 100mm with 200mm (M2) as the minimum trolley size. The sizes are based on motor feeder trolley size. The trolleys are arranged vertically in a multi-



tier formation. Each vertical can house up to 9 nos. of 7.5kW DOL starter modules. Individuals motor controls up to a max. of 160kW/215hp can be housed in individual standard trolleys. The maximum feeder size is restricted to size of 900mm (M9) to ensure ease of handling & proper alignment of the trolley.

The trolleys can be provided with door interlocking as additional safety feature. The modular design of the panel chassis allows for ease of alteration & extension if required at the site.

The design ensures absolute interchangeability between the Withdrawable modules of the same size. The trolley equipped with the components for the spare feeders in the MCC is thus fully interchangeable at site.

# **Trolley Earthing:**

Specially designed phosphor-bronze earthing springs are used to provide positive double earthing. The contacts scrape against the electroplated vertical busbar chamber shrouding to provide earthing. The System ensures



earthing before the main contacts make& breaking after the main contacts break.

# Lever & Guide Assembly:

Each Withdrawable module can be withdrawn from or inserted into the connected position with the help of a simple & robust lever arrangement. The guide levers move easily & quickly within the guide rails on the feeders. No additional tools are required in the process. This ensures smooth & easy operation of the trolley.

# Drawout Electrical Accessories:

(Safe, Reliable & Robust)



#### <u>Power</u> <u>Drawout</u> <u>Contacts:</u>

Spring-loaded, tin/silver plated main power contacts are provided for both the incoming as well as outgoing side main circuit connections.

These are in direct contact with the vertical bus-bars. The power contacts are available in ratings from 63A up to

400A. The power contacts are tested for milli-volt drop & temperature rise at C.P.R.I. laboratories.

SRE has recently developed a new set of main power contacts with a swiveling rear link, which makes it, convert

For use in power feeders that have bus bar connections to be made between the power contact & the switchgear. These contacts are available in a ratings of 100A to 630A.They are tested for milli-volts drop & temperature rise at C.P.R.I. Laboratories.

# **Auxiliary Control Terminals:**

Each Withdrawable module is provided with 6-way auxiliary control terminals having test & services position. They are self-aligning, Self-disconnecting during the module operation. The male contacts are silver plated



copper, having both surfaces in contact with the phosphor bronze springs integral to each female contact. The contacts & terminals are designed to be finger-touch proof.

"Keeping in view the demand for drawout contacts with arrangement for flexibility connections, SRE has introduced a new range of power plug-in contacts with rating from 160A to 630A. These contacts have been type tested in accordance with international standards & are well accepted in various markets I the middle East Asian & south East Asian countries" Managing Director

# Technical Data - (An Overview):



Module Size	Door		Mo	Module Dimensions			Contacts	Fastners per
	Height	Width	Height	Width	Depth	Units	Contacts	Door
112	190	560	149	460	275	2	12	1
ю	790	560	249	460	275	1	24	2
M	390	560	349	460	275	5	30	2
16	490	540	449	450	275	7	67	2
M6	590	560	549	460	275	9	54	2
M7	690	560	649	460	275	11	66	3
MB	790	560	749	460	275	13	78	3
M9	890	550	849	455	275	15	90	1

RATED VOLTAGE	1	500 Volts, 3 Ph	500 Volts, 3 Phase, 50 Hz.		
RATED CURRENT	3	upto 3200 Amp	6.	1	
SHORT CIRCUIT STRENGTH	4	Standard	i.	36 kA ( rms) / 1 sec., 76 KA (peak).	
		Optional	\$	50 KA (rms) / 1 sec., 105 KA (peak).	
			ģ	65 KA (rms) / 1 sec., 143 KA (peak).	
DEGREE OF PROTECTION	4.5	Strandard	1	IP - 52.	
(as per IEC 60529)		Optional	:	IP - 54.	
TYPE OF BUS - BAR	1	Horizontal	1	Aluminium.	
	2	Vertical	:	Copper : ( Tinned If reqd.)	
RATING OF BUS - BAR	÷.	Horizontal	ł.	3200 Amps. (Max.)	
	4	Vertical	-	600 Amp. ( max.)	
BUS - BAR SUPPORTS	4	F. R. P.			
DIMENSIONAL DATA	1	SINGLE FRONT	•	2400 (H) X 800 (W) X 600 (D).	
		DOUBLE FRONT	-	2400 (H) X 800 (W) X 800 (D).	
CONFORMANCE		IS 8623 (Pb)		1977 / IEC60439 - 1.	

"The products in our range of modular enclosures are the result of a ground-up approach, with constant changes being the order of the day. This makes the modular range a perfect choice for the discerning panel builder, where you get the perfect blend of superior aesthetic & highly flexible design at a very affordable price." Managing Director

# <u>Modulo – Modular Enclosure</u> <u>System</u>

(Flexible Enclosure Solutions):

The modulo range of Modular Enclosure System caters to the ever growing demand for highly flexible, aesthetically pleasing & cost-effective, off-the-shelf enclosure solutions. The range is the distillation of years of field research & customer interaction, thereby offering you a product that casters to your every requirement.



The modulo range being highly flexible casters to applications like lighting distribution boards, power distribution boards, metering boards, motor control centre's, power control desks, control consoles etc.

The enclosures are highly customizable & cab be setup for a variety of applications. The modularity of the range extends you the flexibility of mixing & matching various styles of enclosures within a single panel board.

The modulo range of enclosure follow a common design thread, with many parts that have multiple applications, thereby reducing the inventory carrying cost. The enclosures are available in single front & space saving double front configurations. The system being modular future expansion is possible.

The systems lets you configure your panel based on the site conditions (top-bus or bottom-bus design) can be configure using the same parts. The modulo range is designed to enable quick assembly using standard tools. Thus giving you the chance to plan your job on the go.

The entire range of modular enclosure is fabricated from the finest of materials with the use of the latest sheet metal fabrication design & manufacturing tools. Thus making them the perfect blend of eye-catching aesthetics & costeffective design.

The range is designed to satisfy the entire stringent technical requirement & it's thereby suited to meet diverse Requirements under extreme ambient site conditions. It is specially designed to incorporate the entire range of switchgear available from Siemens, L&T, Schneider, ABB, GE etc.

# Control Relay Enclosure:

These custom-built enclosures are used for the integration of Control Relay Panels, Annunciation Panels etc.



#### Control Desks/Consoles:

Applications include Desks & consoles for process control applications, machinery control consoles etc.



# Wall/Floor Mount Boxes:

Welded boxes meant for use in a variety of applications such as Distribution Boxes, Junction Boxes and Capacitor Panels etc.



# **Multi-tier Enclosures:**

## (Versatile Everyday Solutions) -



The range of Multi-tier Enclosure Solutions feature a rich variety of type-tested enclosures, that can be configured to suit the demands of various industries viz. power plants, sugar mills, steel plants, cement plants etc. where multi-tier modular enclosures are required in various applications.



>Lighting Distribution Boards

- > Power Distribution Boards > Motor Control Centre
- > Power Control Centre
- > Capacitor Panels.
- > Metering Panels.

# **Features:**

\* Bolted deign ensure superior surface finish, facilitates easy handling & low transportation costs.

\* Designed for quick assembly using standard tools & highly levels of on-site flexibility.

- \* Single Fronts & Double Fronts design available.
- \* Suitable for both top and bottom cable entry.
- \* Modular design aids easy extensibility on either side.

\* High levels of operator safety with multiple levels of internal separation up to from lV-(Type-7).

\* Dust-proofing levels up to IP52 & IP54 can be supplied in standard design (special designs available for higher levels of ingress protection).

\* Doors hinging system is flexible & doors can hinge on either side depending on site requirements.

\* Standard sixes available off-the-shelf, thus cutting down lead time & inventory carrying costs.

\* Design conforms to international standards, duly type tested at tested at C.P.R.I. laboratories for Short Circuit protection up to 50kA, 1 sec.

# Technical Data: An Overview

RATED VOLTAGE	:	500 Volts, 3 Phase, 50 Hz.			
RATED CURRENT	:	upto 4000 Am	ps.		
SHORT CIRCUIT STRENGTH	:	Standard	:	36 kA ( rms) / 1 sec., 76 KA (peak).	
	:	Optional	:	50 KA (rms) / 1 sec., 105 KA (peak)	
DEGREE OF PROTECTION	:	Strandard	:	IP - 52.	
(as per IEC 60529)	:	Optional	:	IP - 54.	
DEGREE OF SEPARATION	:	FROM - 2B / F	OR	M - 3B / FORM - 4B.	
TYPE OF BUS - BAR	:	Horizontal	:	Aluminium / Copper	
	:	Vertical	:	Aluminium / Copper	
RATING OF BUS - BAR	:	Horizontal	:	4000 Amps. (Max.)	
	:	Vertical	:	1000 Amp. ( Max.) (MCC)	
			:	2000 Amp. ( Max.) (MCC)	
BUS - BAR SUPPORTS	:	F. R. P.			
CONFORMANCE	;	IS 8623 (Pb)		1977 / IEC60439 - 1.	

Sr. No.	Panel Height	Bus Camber Height	Feeder Area Height	Feeder Size	Depth of Panel
1.	2000+75	300	1500	200-1500	400/500/600/800
2.	2100+75	400	1500	200-1500	400/500/600/800
3.	2300+75	300	1800	200-1800	400/500/600/800
4.	2400+75	400	1800	200-1800	400/500/600/800
PC	C Enclos	ure - Stand	lard dimen	sions ( in m	1)
PC Sr. No.	C Enclos Panel Height	sure - Stand Bus Camber Height	lard dimen Feeder Area Height	sions ( in m Feeder Size	nm). Depth of Panel
PC Sr. No.	Panel Height 2000+75	Bus Camber Height 300	dard dimen Feeder Area Height 1500	sions ( in m Feeder Size 200-1500	Depth of Panel
PC Sr. No. 1. 2.	Panel Height 2000+75 2100+75	Bus Camber Height 300 400	fard dimen Feeder Area Height 1500 1500	<b>sions ( in n</b> Feeder Size 200-1500 200-1500	Depth of Panel 800/1000/1200/1600 800/1000/1200/1600
PC Sr. No. 1. 2. 3.	Panel Height 2000+75 2100+75 2300+75	Bus Camber Height 300 400 300	Feeder Area Height 1500 1500 1800	sions ( in m Feeder Size 200-1500 200-1500 200-1800	m). Depth of Panel 800/1000/1200/1600 800/1000/1200/1600 800/1000/1200/1600

#### **Single Tier ACB:**

Regular configuration for ACB enclosures, works well in case of smaller panels, where ACB acts as incomer to the panel viz. PDB MCC etc.



## **Two Tiers ACB:**

Usually used in case of PCC Panels where there are multiples of higher rated feeders requiring the use of ACB's & economical in use.



rear.

#### Front Cable & Rear Bus:

This configuration is suitable where there is ample space to attend the panel from both front & rear. Saves the length of panel thereby being more economical.

# Rear Cable & Rear Bus:

**Front Cable & Front Bus:** 

Most suitable for standard panels, both

single & double front configuration can be

achieved. Also useful in case of restricted rear access due close proximity of wall at

This is the most economical & space saving panel configuration used today. All it needs is ample space at the front & rear easy access to the components.



# **Centre Bus PMCC:**

This design houses the main bus bars in the centre of the panel enclosure, thereby making the electrical distribution easier. Usually used in case of PCC's & capacitor Panels.



# Extensible Enclosures (Baying Enclosure Solutions):

The range of Extensible Enclosures is based on a bolt-on type modular construction. These enclosures are made using sheet steel profiles that are provided with multiple holes to ensure complete flexibility to the user in configuring the enclosure to suit their particular application.

# **Features:**



\* Bolted deign ensure superior surface finish, facilitates easy handling & low transportation costs.

\* Designed for quick assembly using standard tools & highly levels of onsite flexibility.

\* Single Fronts & Double Fronts design available.

\* Suitable for both top and bottom cable entry.

\* Safety & Superior dust proofing with the use of 4point locks.

- \* Full or partial mounting plates.
- \* Full or Partial Glass Door.
- \* 19" Rack maintaining arrangement possible.
- \* Top Ventilation with copy for fan & washable filter.

\* Dust-proofing levels up to IP54 can be supplied in standard design (special designs available for higher levels of ingress protection).

\* Doors hinging system is flexible & doors can hinge on either side requirements.

# **Application:**

- > PLC Panels.
- > Drive Panels.
- > Motor Starter Panels.
- > APFC Panels.
- > Transformer Panels.

# <u>Technical Data:</u>

#### An Overview



Sr. No.	A Height mm	B Width mm	C Depth mm
1	1800	600	500
2	1800	600	600
3	1800	600	800
4	1800	800	500
5	1800	800	600
6	1800	800	800
7	2000	800	800
8	2000	1000	600
9	2000	1000	800
10	2000	1200	800
11	2100	800	600
12	2100	800	800
13	2100	1000	800
14	2100	1200	800
15	2200	800	600
16	2200	800	800
17	2200	1000	800
18	2200	1200	800



# Control Desks & Consoles (Process Control Solutions):

The range of Control Desks & Control Console Enclosures is on a bolt-on type modular construction. Each enclosure is configured using a variety parts of various shapes, designed based on the specific application that the enclosure is serving in the control room. There by achieving a customized solution using standard components. These enclosures can be bayed to make a cluster of control room consoles.



# **Features:**

\* Superior aesthetics in design with choice of combination color for high levels of design appeal.

\* Ergonomically designed to ensure minimum operator fatigue.

\* Bolted deign ensure superior surface finish, facilitates easy handling & low transportation costs.

\* Designed for quick assembly using standard tools & highly levels of on-site flexibility.

- \* Rear Bay can be in multiple parts or in a single part.
- \* Modular design aids easy extensibility on either side.

\* 4-points locks for the rear doors & Double Bit cam locks for front. \* Full or partial mounting plate's side.\*Ventilation provided with fan & washable filter.

\* Dust-proofing levels up to IP52 & IP54 can be supplied in standard design (special designs available for higher levels of ingress protection).

\* Ratchet Door Stay provided for the Desk, ensures operator safety through positive locking of the Desk door in open condition.

\* Keyboard tray arrangement can be provided or within the desk if the application so demands. \* Plinth of 100mm or 200mm available.

# **Applications:**

- > Control Desks for Machines
- > Control Desks for Process Control.
- > Control Desks with Mimic Boards.
- > Control Consoles for HMI applications.
- > Control Consoles for related applications.

# Technical Data: An Over view





CONTROL DESK Enclosure				
Sr. No.	Type Reference	A Height mm	B Width mm	C Depth mm
1	Pedestal	670	800	500
2		670	1200	500
3		670	1600	500
4	Desk	200	800	945
5		200	1200	945
6		200	1600	945
7	Console	430	800	445
8		430	1200	445
9		430	1600	445



# Wall Mounting / Floor Standing Welded Boxes - IP 65 (Back to Basics):



Welded Boxes are the most basic of enclosures, usually consisting of welded chamber enclosing the mounting plate meant for equipment mounting. These are provided with either top or bottom gland plates depending on the application. Variations to a basic design include boxes

with canopies for water protection

in case of outdoor installation.

## **Features:**

> Designed to ensure protection of equipment up to IP 65 levels.

> Riveted Gland plate can be provided on top or bottom.

> Doors can be hinged on either side depending on the site condition.

> Additional canopy can be provided in case of outdoors applications.

> Manufactured out of mild steel, Galvanized Steel & Stainless Steel.

> Concealed & easily removed hinges with 120 degree opening.

> Full or partial equipment mounting plates.

> Plinth of 100mm or 200mm available in case of floor mounting.

> Partial or full glass doors.

# **Applications:**

> Junction Boxes

> Distribution Boxes

> Meter Boxes

> Starter Boxes.

# Technical Data: An Overview





Sr. No.	A Height mm	B Width mm	C Depth mm
1	250	200	200
2	250	200	200
3	250	200	200
4	300	250	200
5	300	300	250
6	300	400	250
7	400	300	200
8	400	350	250
9	400	500	300
10	500	400	200
11	500	400	250
12	500	400	300
13	500	600	300
14	500	700	350
15	600	400	250
16	600	500	300
17	700	500	300
18	700	500	350
19	800	600	300
20	800	600	350
21	800	600	400

FLOOR STANDING Enclosure				
Sr. No.	A Height mm	B Width mm	C Depth mm	
1	1000	600	350	
2	1000	700	400	
3	1000	800	400	
4	1200	600	350	
5	1200	800	400	
6	1200	1000	400	
7	1200	1000	500	
8	1400	8000	400	
9	1400	1000	400	
10	1400	1000	500	
11	1500	800	400	
12	1500	1000	400	
13	1500	1000	500	

# Custom Built Enclosures (Designed to Suit):

The range of modulo- Modular Enclosures covers a large variety of standard design to suit everyday requirements. There are however specific applications that call for Custom Built Enclosure. Tapping on to our vast experience in the field of enclosure design, development & manufacture, we offer our clients with the service of customized enclosure solutions to cater to their special requirements. The enclosure is designed with the idea of providing a cast effective, visually appealing & functionally superior

solution.





# **Customer's Benefit:**

- > From maximum reliability & durability.
- > From improved servicing & handling.



#### ADVANTAGE OF USING SRE ELECTRICALS D/O PANEL ENCLOUSERS & D/O

#### **COMPONENTS/SYSTEM**

S. No	SRE Enclosure	Remarks
1	FABRICATION OF ENCOLUSER	Fully standardized on CNC machine, Welded and bolted structure, suitable for Total interchangeability, ensured by Jigs, Fixtures and Gauges.
2	SIZE OF COMPARTMENTS	Compartments are suitable for any make Switchgear and for DOL, SD & SFU feeders.
3	CABLE SPACE	300 mm
4	PLACEMENT OF SWITCHGEAR	We maintain gap of 25mm between Poles, Faces and Earth.
5	PAINTING	Process in Seven Tank Phosphate tank, and Powder Coated as per your required Shade, Minimum thickness 70 Micron.
6	BUSBAR	Calculated for current capacity and Short Circuit and Temperature rise test. Copper or Aluminum as required. We use only Alloy for Aluminum and ETP grade for Copper (never commercial)
7	TIN PLATING	Copper Bus bars are Tinned after cutting, Drilling and bended, with smooth finish. On Demand.
8	PVC SHELVING	We shelve Aluminum or Copper Bus bars with PVC shelving to protect from accidental touch.
9	Hardware	For Joints , Bus bar support, & tap off we use HT Steel Bolts and Nuts, of recommended Size
10	HBB SUPPORT	Finger type SMC ONLY (TEST AT CPRI FOR 50Ka/ 65kA for 3/1 second.)
11	VBB support	TP OR TPN IN SMC (AS PER REQUIREMENT) Tested at CPRI for 50kA for 1 second and Independent from feeder size.
12	INCOMING AND OUTGOING POWER CONTACT	Special design and tested for fault level and temperature rise available from 63A to 630A Used on various project supplied by our client (Panel builder) in last 25 years. Kindly note our contacts are silver plated with minimum 5 micron, to assure Proper contacts. Special Leaf spring provide sufficient pressure on leaf contact.

The product is manufactured as per IS -8623 and IEC-439.

#### YOUR CONFIDENTLE VENDOR FOR D/O PANEL ENCLOUSERS

Outside Suraj Pole Gate, Shree Cement Road, Beawar. Pin Code - 305901 (Rajasthan). Tele No. : 91-01462-257089, Fax No. : 91- 01462-257089

Website: www.sre.com E-mail: srelctbwr2000@vahoo.co.in , r\_marothiyabwr@rediffmail.com

