

Excellence and Innovation in Electrical.

Design, Manufacture, Installation
and Service.





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- Main Switch Board Panel

- ATS panel

- Automatic Power Factor correction panels

- Multiple Generator Synchronizing control panels

- Sub-Distribution panels

- Lighting panels

- Motor Center Control Panel

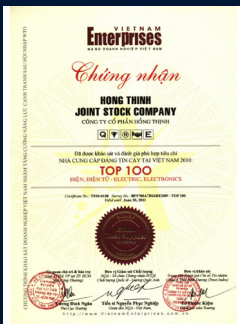
- Industrial Process control Panel

- Outdoor panel

Company Overview

Hong Thinh Joint Stock Company was incorporated in Vietnam year 2000 and has quickly gained a reputation for high quality, reliability and first class electrical engineering service. Our factory is situated in a modern industrial zone in Binh Duong province and built to international standards.

Hong Thinh is a joint venture company between Vietnamese and Australian shareholders who believe strongly in modern production techniques and training. Our overriding aim is to remain ahead of our competition through consistently training our staff to improved levels and offering the customer value added service and electrical engineering and strong after sales support.



Top of 100 Electrical Supplies in Vietnam



Trusted Quality Supplier 2014, 2015.



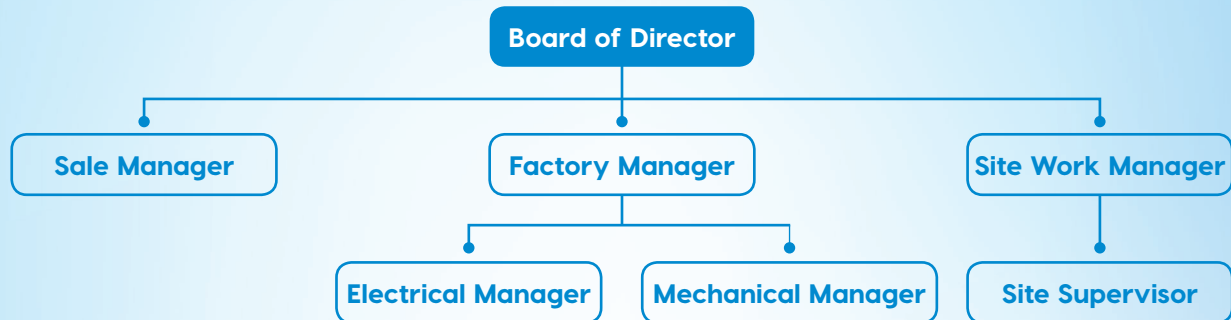
TOP BRANDS YEAR 2015



TYPICAL BRAND, PRODUCT, QUALITY, SERVICE OF ASEAN 2017



Organization Chart



Achievement

HongThinh's Record of Achievement

- 2007 : Quality management system has been certified by ISO 9001 version 2000
- 2008 & 2009 : We won Golden ISO cup, top of 135 companies in Vietnam successful in running ISO system
- 2010 : Be certified Top of 100 Electrical Supplies in Vietnam
- 2011 : Successful in upgrading ISO system to last's Version 2008
- 2014 : Successful Trusted Quality Supplier
- 2015 : Certified Top Brands
- 2017 : Successful in upgrading ISO system to last's Version 2015
- 2017 : Typical brand, Product, Quality, Service of Asean 2017

Our principle aim to save customer resource to enable our customers to succeed which in turn enables us to succeed.

Our management and engineering team are highly experience and skilled in the design and manufacture of:

- MV and LV, Motor Control Centers.
- DB, Distribution Boards.
- Customized Control panels.
 - Industrial and Commercial electrical power distribution panels.
 - PLC, Computer automated systems.
 - Cable ladder and ducting

Engineers and Manufacturing staff at Hong Thinh are committed to a "Total Quality Management system" with pride and quality the foremost responsibility of every employee.

Our employees are the driving force behind our success and we focus on extensive training courses to acquire up to date technology in Electrical Engineering and manufacturing skills and continue to be able to stand the ever-increasing challenges of modern business reflected on customer's demands.



Products & Services



- Design, manufacture and service LV&MV panels, fixed and draw out type MCC panels.
- Primary / secondary design solution for customized application power network up to 22KV.
- Design, manufacture and program for PLC, HMI panels for machinery and production line.
- IEC design, build, wiring and supply components are as per specifications using Schneider, Siemens, Mitsubishi, Omron, Allen-Bardley, ABB and more.
- Program for HMI interface, SCADA system and PLC network.
- Process PLC Desk Control.
- Manufacture of Cable Support Systems.
- CNC punching, bending, robotic welding and laser cutting machines producing high accuracy stainless steel and mild steel parts for electrical enclosures and cable support system products.
- Factory plant electrical, instrumentation installation service and maintenance.
- Full capability, experience, technical know-how to undertake large complex.



Main Switch Board

Main Switch Board enclosure for Low Voltage distribution panel from 160A to 6300A, 3 phases.

All design panel constructions are compiled and have been passed Type tested required by standard IEC 61439-part 1&2 Version 2009. The panels are designed of kit-form enclosures make from steel sheet, can be stand alone, top/ bottom cable entry, and easy extent or modify in future.

Panels are equipped with individual functional unit, consisting of mounting plates or mounting frames support one or more low voltage devise and covered with metal cover plates to prevent from accidental access to live parts.

SPECIFICATION

Standard conformity
Voltage rate operational
Insulation voltage rate
Rated current of bus bar system
Rate short circuit withstand current
Ambient temperature
IP Protection
Form segregation

STANDARD

IEC 61439 part 1&2
690V / 1000V
1000V
up to 6300A
Tested @ 65KA/sec, available for 150KA/sec on request
Up to 55°C
Standard @ IP43, can be IP65 on request
Form 2a/2b/3a/3b/4a/4b



TYPICAL PANEL SIZE

CODE	H	W	D	T	Ver.	IP
EF20896MSO-43	2080	900	600	2.0	0	43
EF20898MSO-43	2080	900	800	2.0	0	43
EF208106MSO-43	2080	1000	600	2.0	0	43
EF208108MSO-43	2080	1000	800	2.0	0	43
EF2081010MSO-43	2080	1000	1000	2.0	0	43
EF2081012MSO-43	2080	1000	1200	2.0	0	43
EF2081014MSO-43	2080	1000	1400	2.0	0	43



ATS Panel

ATS stand for (Automatic Transfer Switch) is automatic system switches the power supply from multi power source supply. Could be transformers, Generators or UPS supply.



ATS SPECIFICATION

SPECIFICATION	STANDARD
Standard conformity	IEC 61439 part 1&2
Source transfer	National grid/transformers/Generators/UPS
Voltage rate	up to 1000 Voltage AC/DC, 2/3 Phase system
Current capacity	from 63A up to 6300A
Rated short circuit withstand current	up 150Ka/s
Contact/Switch	Well-known component such as Socomec/LS/ABB/Schneider/Siemens,...
Control type	Manual mode or Automatic logic control mode

TYPICAL PANEL SIZE

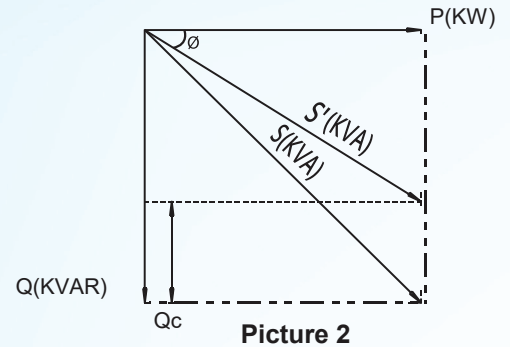
CODE	H	W	D	T	Ver.	IP	Note
EF20864MSO-43	2080	600	400	2.0	0	43	Free floor standing
EF20866MSO-43	2080	600	600	2.0	0	43	
EF20874MSO-43	2080	700	400	2.0	0	43	
EF20876MSO-43	2080	700	600	2.0	0	43	
EF20878MSO-43	2080	700	800	2.0	0	43	
EF20884MSO-43	2080	800	400	2.0	0	43	
EF20886MSO-43	2080	800	600	2.0	0	43	
EF20888MSO-43	2080	800	800	2.0	0	43	
EF20896MSO-43	2080	900	600	2.0	0	43	
EF20898MSO-43	2080	900	800	2.0	0	43	
EF208106MSO-43	2080	1000	600	2.0	0	43	
EF208108MSO-43	2080	1000	800	2.0	0	43	
EF2081010MSO-43	2080	1000	1000	2.0	0	43	
EF2081012MSO-43	2080	1000	1200	2.0	0	43	
EF2081014MSO-43	2080	1000	1400	2.0	0	43	



Automatic Power Factor correction panel

The AC electrical networks consume both active and reactive power as we called (Kw) and (Kvar).

- The real-active power (P-Kw) transmitted to loads such as motors, lamps, heaters...they are transformed into mechanical power, people called heat or light.
- Reactive power (Q-Kvar), used supply only magnetic part of the machine where they have motors and transformers.
- Apparent power (S-KVA) is combined vector of both active and reactive power.
- Cos ϕ representation of power factor (P/S).



ATS SPECIFICATION:

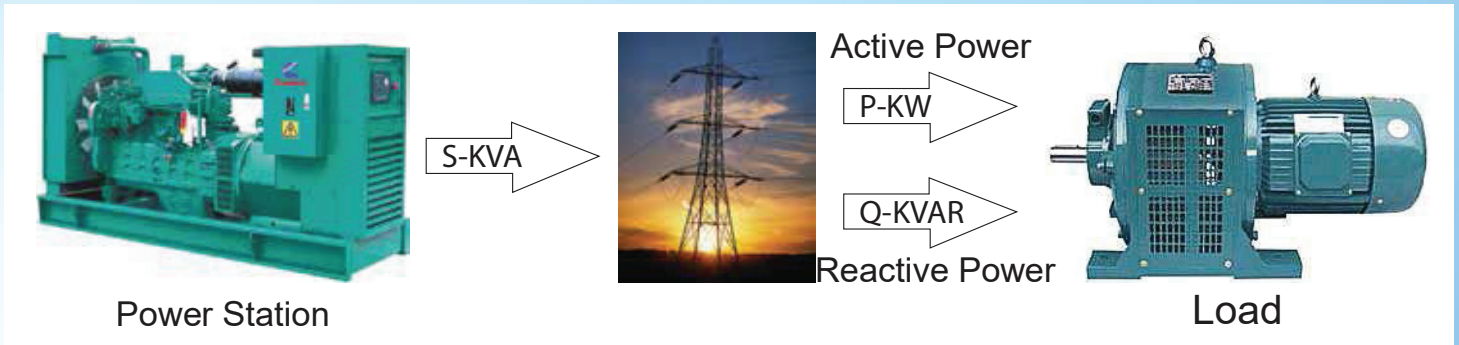
SPECIFICATION

Standard conformity
Source transfer
Voltage rate
Current capacity
Rated short circuit withstand current
Contact/Switch
Control type

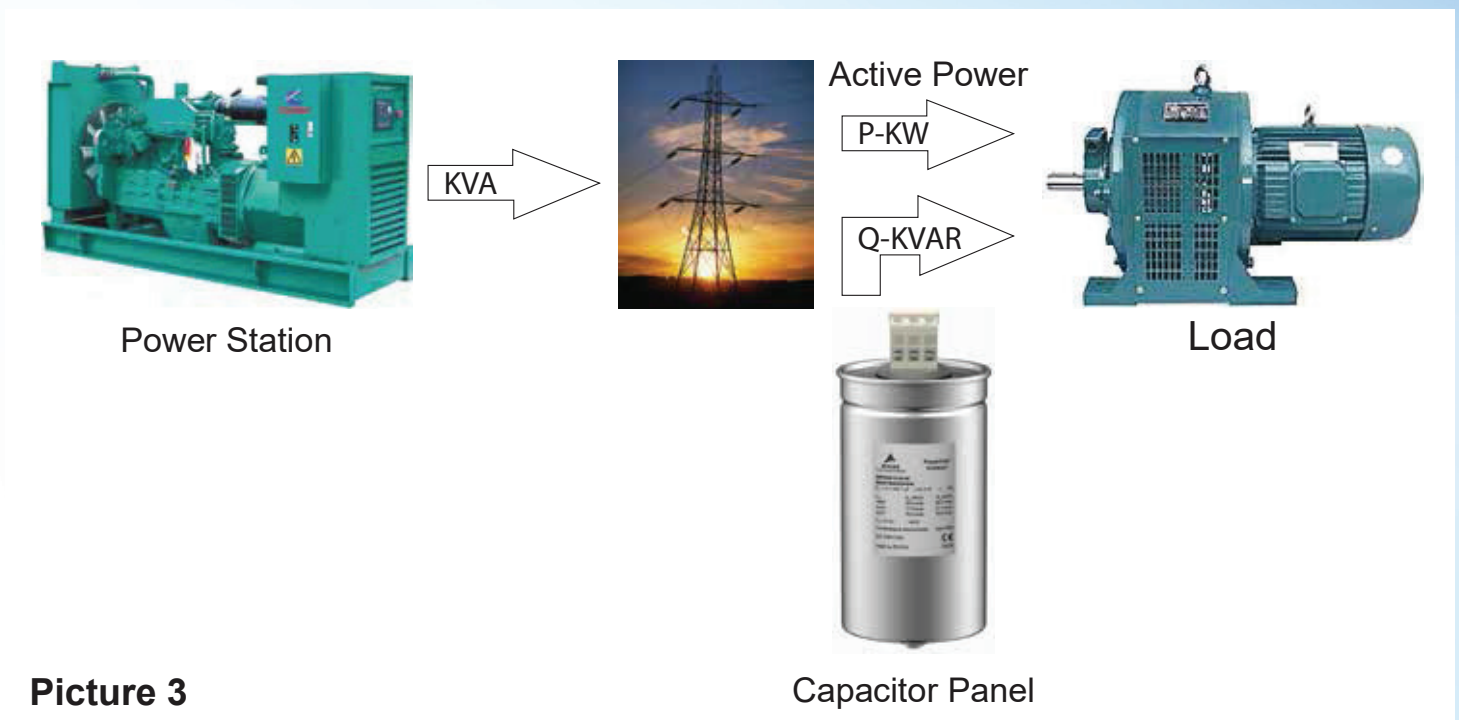
STANDARD

IEC 61439 part 1&2
National grid/transformers/Generators/UPS
up to 1000 Voltage AC/DC, 2/3 Phase system
from 63A up to 6300A
up 150Ka/s
Well-known component such as Socomec/LS/ABB/Schneider/Siemens,...
Manual mode or Automatic logic control mode





Picture 1



Picture 3

Benefits of Capacitor Power Factor correction panels bring to electrical network

(Pic 1) and (Pic 2) shown how electrical power transmit from power station to ending load special motors, magnetic load which mainly consume reactor power (Kvar).

Regard to vector pic.2 assume Total power S (KVA) transmitted from power station to ending load without capacitor banks in the network system and S' (KVA) present for AC electrical network system have capacitor banks nearby motor loads. Apparently, these capacitor banks made system work more efficient, bring in a lot advantage for network: (Pic 3)

- Decreasing load for transmission transformers.
- Decreasing power loss created by transmission cables.
- Control voltage drop better by controlling number of capacitor banks cut in and out.



Diesel Generator Synchronizing Control Panel

We design & manufacture generator synchronizing panels, all control switchgear and components necessary for the generator synchronized operation in auto mode or manual mode such as Circuit Breakers, protection relays, scope meter and relays...

Manual/Auto/Load sharing mode synchronized panels provide all control relays, PLC control and meters to observe various parameters to help the operator safely perform manual start of parallel generators. Increasing your standby power generator sets reliability, expandability, flexibility and serviceability.



Sub-Distribution Panel

Sub-DB (Distribution) is a part of electricity supply system which divides electric power feed into individual circuits while providing protective overload breaker for each circuit in one common panel. In Modern practices RCD- Residual Current Devices or RCBO- Residual Current Breaker with overcurrent protection are being incorporated increasing safety and protection from electrical shock to person who directing operate electric equipment attached to the sub distribution panel power outlets.



GENERAL SPECIFICATION

SPECIFICATION

Applied standard
Insulation voltage rate
Rate current
Rate short circuit
High Voltage tested
Protection degree
Fixing type
Housing Material
Finishing
Cable entry

STANDARD

IEC 61439 Part 1&2
up to 1000V AC/DC
up to 3200A
50KA-1s. available 70KA-1s on request
3000V AC -60s
Standard IP43, can be IP65 on request
Wall mount or free Floor standing
Stainless steel 304, 316 or mild steel
Epoxy powder coated, standard RAL 7032 roughed type, other colors on request
Top and bottom, available side entry on request

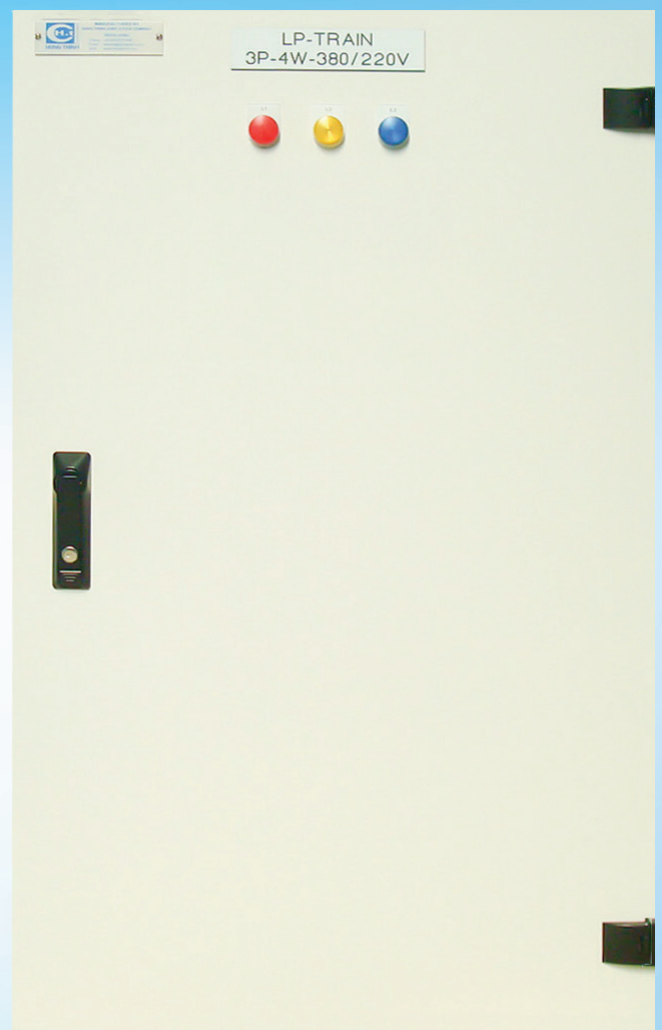
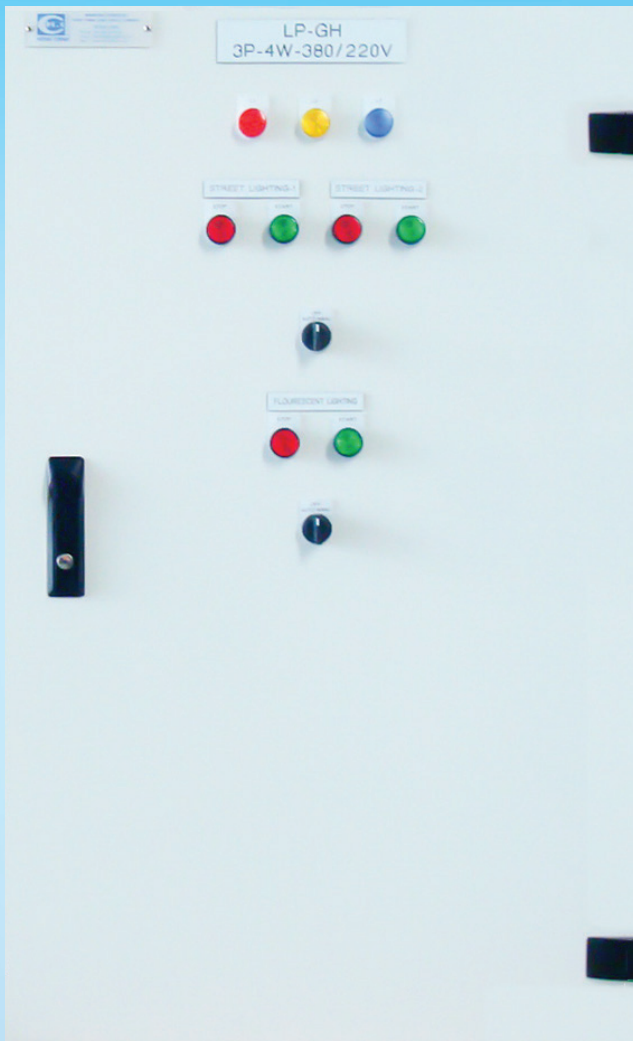


TYPICAL PANEL SIZE

CODE	H	W	D	T	Ver.	IP
EF20864MSO-43	2080	600	400	2.0	0	43
EF20866MSO-43	2080	600	600	2.0	0	43
EF20874MSO-43	2080	700	400	2.0	0	43
EF20876MSO-43	2080	700	600	2.0	0	43
EF20878MSO-43	2080	700	800	2.0	0	43
EF20884MSO-43	2080	800	400	2.0	0	43
EF20886MSO-43	2080	800	600	2.0	0	43
EF20888MSO-43	2080	800	800	2.0	0	43

Lighting Panel

The compact design lighting panel is cost effective to save space, reduce equipment cost and energy. Our solutions deliver flexibility, ease of installation, and allow modification with minimized difficulty. All these benefits will bring to cost saving and energy savings to the customer.



GENERAL SPECIFICATION

SPECIFICATION

Standard conformity
 Insulation voltage rate
 Rate current
 Rate short circuit
 High Voltage Factory tested
 Protection degree
 Fixing type
 Material
 Finishing
 Cable entry

STANDARD

IEC 61439 Part 1&2
 up to 1000V AC/DC
 up to 250A, 630A on request
 32KA-1s. available 50KA-1s on request
 3000V AC -60s
 Standard IP43, can be IP65 on request
 Wall mount or stand on plinth support
 Mild steel, Available for Stainless steel 304, 316 on request
 Epoxy powder coated, standard RAL 7032 roughed type, other colors on request
 Top and bottom, available side entry on request

TYPICAL PANEL SIZE

CODE	H	W	D	T	Ver.	IP	Note
EW050422MSO-43	500	400	220	1.5	0	43	Wall-mounted
EW060422MSO-43	600	400	220	1.5	0	43	
EW070522MSO-43	700	500	220	1.5	0	43	
EW080625MSO-54	800	600	250	1.5	0	54	
EW090625MSO-54	900	600	250	1.5	0	54	
EW100625MSO-54	1000	600	250	1.5	0	54	
EW120640MSO-54	1200	600	250	1.5	0	54	Floors standing
EF140640MSO-43	1400	600	400	2.0	0	43	
EF160640MSO-43	1600	600	400	2.0	0	43	
EF180640MSO-43	1800	600	400	2.0	0	43	
EF180840MSO-43	1800	800	400	2.0	0	43	

Motor Control Center Panel

A Motor Control Center (MCC) is an assembly of one or more enclosed sections having a common power bus and principally containing motor control units.

Motor Control Center's are in modern practice a factory assembly of several motor starters. A motor control center can include variable frequency drives, programmable controllers, and metering

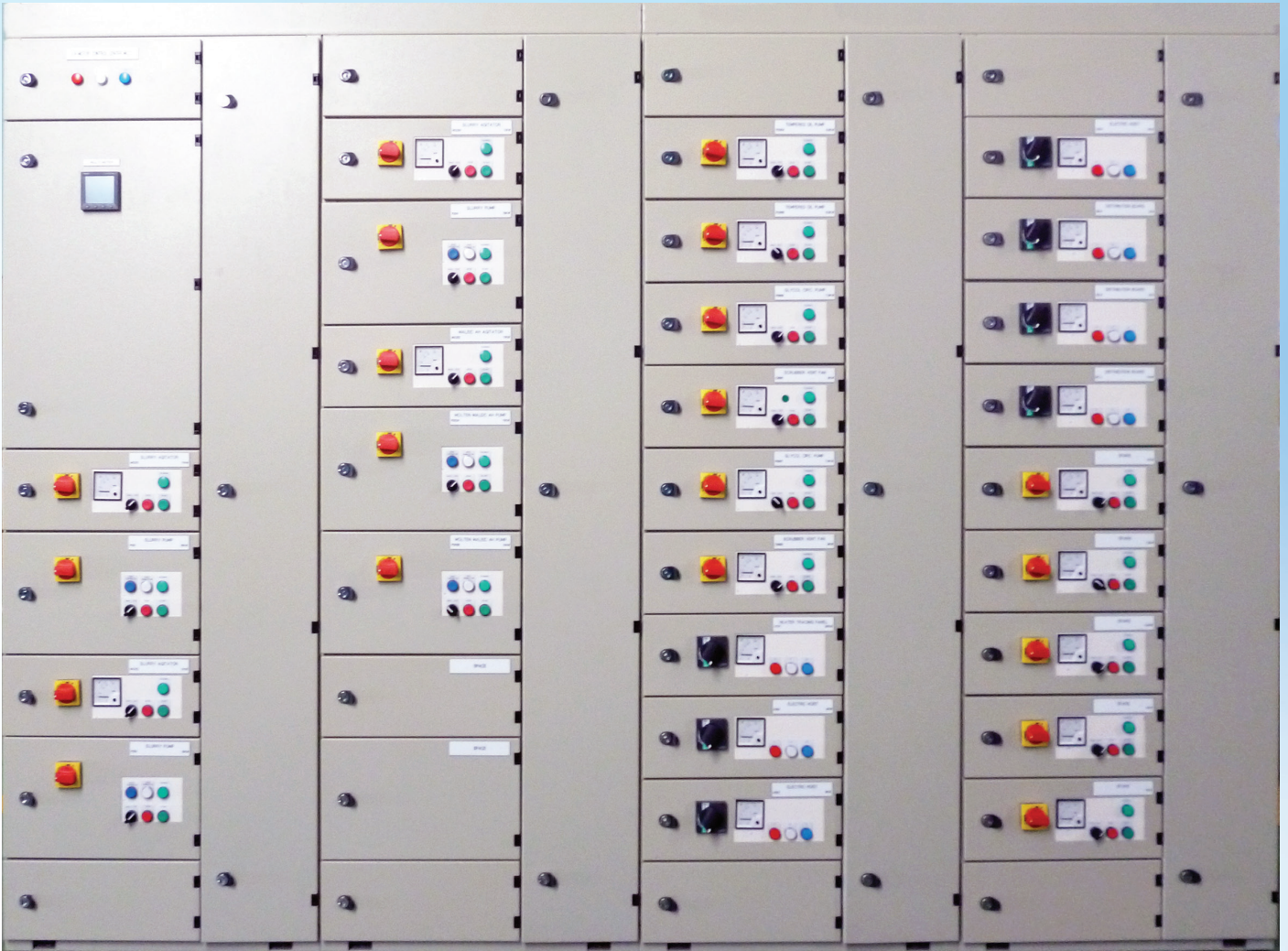
MCC panels are manufactured, assembled, wired and tested as a complete free standing system. They can be combined or connected on site with the minimum outlay of time and cost.



MCC panel's also offer outstanding simplicity in the connection of cables. All components are pre-wired and connected to terminals ready for operation onsite.

The overall design of a Motor Control Centre allows for a large measure of flexibility, providing for a wide range of variations and configurations to satisfy a customer's project requirements.

- High degree of protection and safety for operating and maintenance personnel by means of door interlocked circuit breaker or fused switches. Transparent door for distribution boards optional.
- All usually required switchgear, control gear and instrumentation can be fitted.
- Maximum transport sections = 3200mm (4 sections)
- Modules powder coat paint finishing, Hong Tinh standard RAL 7032 Rough type, other colors in optional.



GENERAL SPECIFICATION

Specification

Standard conformity
Voltage rate
Current rate incoming

Short circuit rating on Man busbars
Short circuit rating on Dropper bars

IP Protection
Design concept
Load module
Wiring control
Arrangement
Future extension
Cable entry

Option
Option

Standard

IEC 61439 part 1&2
Up to 1000V 50Hz AC
Up to 6300A Main busbars
Up to 800A vertical dropper bars
Option 1200A dropper bar for distribution sections available
65KA/1s or 50KA/3s
50KA/1s standard
Option 65KA/1s
Standard is IP43 up to IP54 on your request
Compact design. Easy, time saving assembly from self-supporting sections
Fixed or draw-out
Wired and functionally tested ready for connection on site
Single front arrangement or Back-to-back arrangement for space saving
Easily extendable without the needing of cutting or drilling tools
Top and bottom, ample cabling room and fixing facilities in cableway
Terminal rails for control and power, terminals in cableway
Bus-duct system entries available
Control cable plugs (if required)

Industrial Process Control Panel

We are leading in manufacture and supply process panels, process meter panel, color MIMIC panels for individual machinery or whole complex systems.

The process PLC base control panels are used in various industries like petrochemicals, chemicals, steels plant, pharmaceuticals, cements, waste water or water supply plant, power plant....

We provide a wide range of process Computerized or PLC base control panel complete with HMI (Stand for Human Machine Interface). The panels are widely used for various purpose sequentially process controls.

Panel structures are designed easily for trouble shooting, monitor, maintain and less difficult in modifying and future extensional.



GENERAL SPECIFICATION

Specification

Standard conform
Voltage rate
IP Protection
Option
Panel structure
Rate current
Short circuit withstand current
Fixing type
Material
Finishing standard for mild steel material

Standard

IEC 61439/AS 61439/NEMA/JIS
up to 1000V AC/DC
Standard IP43, Dust proof
up to IP65, Water proof
1.5mm/2.0mm T steel sheet, mounting plate with folded edge in
Max 1000A
50KA-1s
free floor standing
Standard Mild steel, other S/S 304/316 on request
Epoxy polyester powder coating, RAL 7032 Rough type. Other colors on request.



Outdoor Panel

Outdoor Panels are made from zinc mild steel sheet with double fold at front and back to stop rain water reaching inside. All the parts of panel are treated and coated with UV resistive Epoxy powder coating system for outdoor use.

Outdoor enclosures are designed with rubber gaskets inside door to create seal to create water proof protection tested and rated to IP65 Standard.



GENERAL SPECIFICATION

Specification

Standard conform
Voltage rate
Rate current
Option
IP Protection
Short Circuit withstand current
Panel structure
Transparent Door
Lifting type
Fixing type
Material
Finishing standard for mild steel material

Standard

IEC 61439/AS 61439/NEMA/JIS
up to 1000V AC/DC
Designed standard 1000A
Up to 6300A, in request
IP65, water proof
50KA-1s, option for request 150KA-1s
1.5mm/2.0mm T steel sheet, mounting plate with folded edge in
Transparent Glass 5mmT c/w seal
Eyelets lifting for easy to install
free floor standing
Standard mild steel, other S/S 304/316 on request
Epoxy polyester powder coating, RAL 7032 Rough type. Other colors on request.



TYPICAL PANEL SIZE

CODE	H	W	D	T	Ver.	IP	Note
EW0642.5MSO-65	600	400	250	1.5	0	65	Wall-mounted
EW0842.5MSO-65	800	400	250	1.5	0	65	
EW0862.5MSO-65	800	600	250	1.5	0	65	
EW10062.5MSO-65	1000	600	250	1.5	0	65	
EF12064MSO-65	1200	600	400	2.0	0	65	
EF14064MSO-65	1400	600	400	2.0	0	65	
EF18064MSO-65	1800	600	400	2.0	0	65	Floors standing
EF18084MSO-65	1800	800	400	2.0	0	65	
EF18094MSO-65	1800	900	400	2.0	0	65	

Scada Design PLC Panel



We are leading in the manufacture in the manufacture and supply process PLC panels, meter panel, color mimic panels for individual machinery or whole complex systems. The process PLC based control panels are used in various industries like petrochemicals, chemicals, steels plant, pharmaceuticals, cements, waste water or water supply plant, power plant...

We provide a wide range of process Computerized or PLC based control panel complete with HMI (Human Machine Interface). Panels are widely used for various purpose logic process controls. Panel structures are designed with the concept of easily to trouble shoot panel problems, monitoring, maintain and less difficulty in modifying and future expansion.

GENERAL SPECIFICATION

Specification

Standard conform
Voltage rate
IP Protection
Option
Panel structure
Rate current
Short circuit withstand current
Fixing type
Material
Finishing standard for mild steel material

Standard

IEC 61439/AS 61439/NEMA/JIS
up to 1000V AC/DC
Standard IP43, Dust proof
up to IP65, Water proof
1.5mm/2.0mm T steel sheet, mounting plate with folded edge in
Max 1000A
50KA-1s
free floor standing
Standard Mild steel, other S/S 304/316 on request
Epoxy polyester powder coating, RAL 7032 Rough type. Other colors on request.



TYPICAL PANEL SIZE

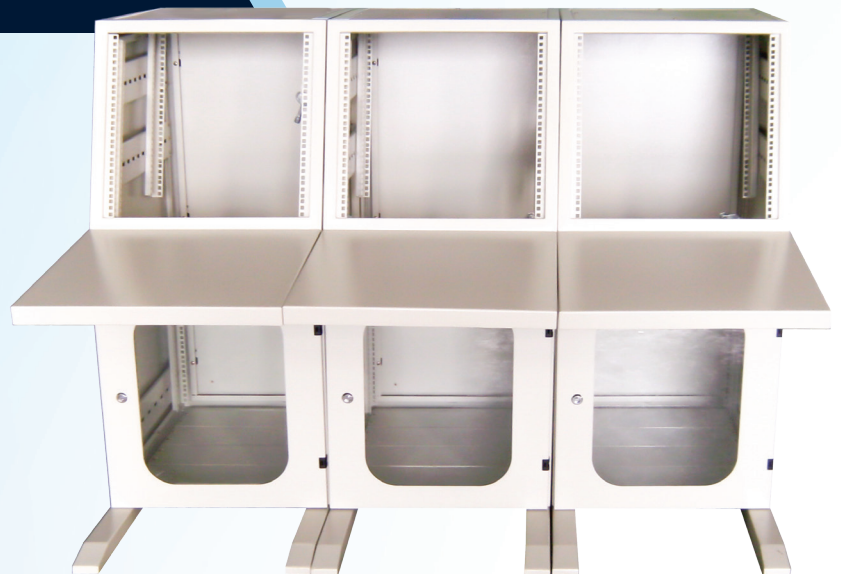
CODE	H	W	D	T	Ver.	IP	Note
EF20864MSO-43	2080	600	400	2.0	0	43	Floors standing
EF20866MSO-43	2080	600	600	2.0	0	43	
EF20874MSO-43	2080	700	400	2.0	0	43	
EF20876MSO-43	2080	700	600	2.0	0	43	
EF20884MSO-43	2080	800	400	2.0	0	43	
EF20886MSO-43	2080	800	600	2.0	0	43	
EF20896MSO-43	2080	900	600	2.0	0	43	
EF208106MSO-43	2080	1000	600	2.0	0	43	

Computer Rack Solutions



We provide complete data center racks, server rack cabinets, enclosure solutions for all size computer rooms. Rack enclosure can combine not only for server computers, switches, hubs, routers but also for UPS power supply, cooling fans, cable management with door lockable.

We offer a multitude of sizes and ranges and accessories for overall solution meet all requirements made of professional data distributors



FEATURES

Doors

Front transparent Glass or acrylic 3mmT viewing panel. Doors can be quick fitted and removed.

Vented roof

Vented roof plate or Solid Roof plate on request.

Utility power supply strips

Available for strip of 240Vac power outlets on the back side.

Side panels

Easy removable and can be lockable

Data cable entry

Top or bottom entry, event side entry design available on request.

19" mounting equipment

4x19" Mounting angles, 2 in front, 2 in rear, are design for mounting all range of 19" size data equipment.

Material

Standard Mild steel, other S/S 304/316 on request

Finishing standard for mild steel material

Epoxy polyester powder coating, RAL 7032 Rough type. Other colors on request.

Custom Enclosure

Box type panel was manufactured follow multi-purports selection. They are blank panel with mounting plate.



Standard	IEC-61439 OR 439-1 : 1992
Body and door manufacture in	1.5mm sheet
Door thickness	1.5, 2.0mm
Mounting plate with folded edge in	2.0mm sheet steel
Finish	Epoxy polyester powder coating <ul style="list-style-type: none"> · Body and door RAL 7032 textured finish · Mounting plate in RAL 2004 smooth finish
Protection IP	Up to IP41, 55 for indoor, IP65 for outdoor

PACKING:

Boxes are complete with:

- Mounting plate
- Gland plate and gasket
- Package with hardware for each connection and screws to mount all components
- Locking system with 3mm double bar key

Degrees of Protection

The degree of protection IP indicates a level of protection provided by the assembly against access to or contact with live parts, against ingress of solid foreign bodies and against the ingress of liquid. The IP code is the system used for the identification of the degree of protection, in compliance with the requirements of Standard IEC 60529.

Unless otherwise specified by the manufacturer, the degree of protection applies to the complete switchboard, assembled and installed for normal use (with door closed). The manufacturer shall also state the degree of protection applicable to particular configurations which may arise in service, such as the degree of protection with the door open or with devices removed or withdrawn.

Elements of the IP Code and their meanings

Numerals Meaning for the Element or letters protection of equipment protection of persons Ref.

1 ST CHARACTERISTIC NUMERAL	2 ND CHARACTERISTIC NUMERAL	ADDITIONAL LETTER	SUPPLEMENTARY LETTER
Against ingress of the solid foreign objects	Against ingress of water with harmful effects	Against access to hazardous parts with	Supplementary information specific to:
0 (non-protected)	0 (non-protected)	a Back of hand	a High voltage apparatus
1 $\geq 50\text{mm}$ diameter (back of hand)	1 Vertically dripping	b Finger	b Motion during water test
2 $\geq 12.5\text{mm}$ diameter (finger)	2 Dripping (15° tilted)	c Tool	c Stationary during water test
3 $\geq 2.5\text{mm}$ diameter (tool)	3 Spraying	d Wire	d Weather conditions
4 $\geq 1.0\text{mm}$ diameter (wire)	4 Splashing		
5 Dust-protected (dust)	5 Jetting		
6 Dust-tight (dust)	6 Powerful jetting		
	7 Temporary immersion		
	8 Continuous immersion		

Form of Separation & Classification of Switchboards

Forms of internal separation

By form of separation it is meant the type of subdivision provided within the switchboard. Separation by means of barriers or partitions (metallic or insulating) may have the function to:

- Provide protection against direct contact (at least IPXXB) in the case of access to a part of the switchboard which is not live, with respect to the rest of the switchboard which remains live;
- Reduce the risk of starting or propagating an internal arc;
- Impede the passage of solid bodies between different parts of the switchboard (degree of protection of at least IP2X).

A partition is a separation element between two parts, while a barrier protects the operator from direct contact and from arcing effects from any interruption devices in the normal access direction. The following tables from Standard IEC 61439-1&2 highlight typical forms of separation which can be obtained using barriers or partitions:

Main criteria Subcriteria Form

