

AUTOMATE

POWER DIVISION



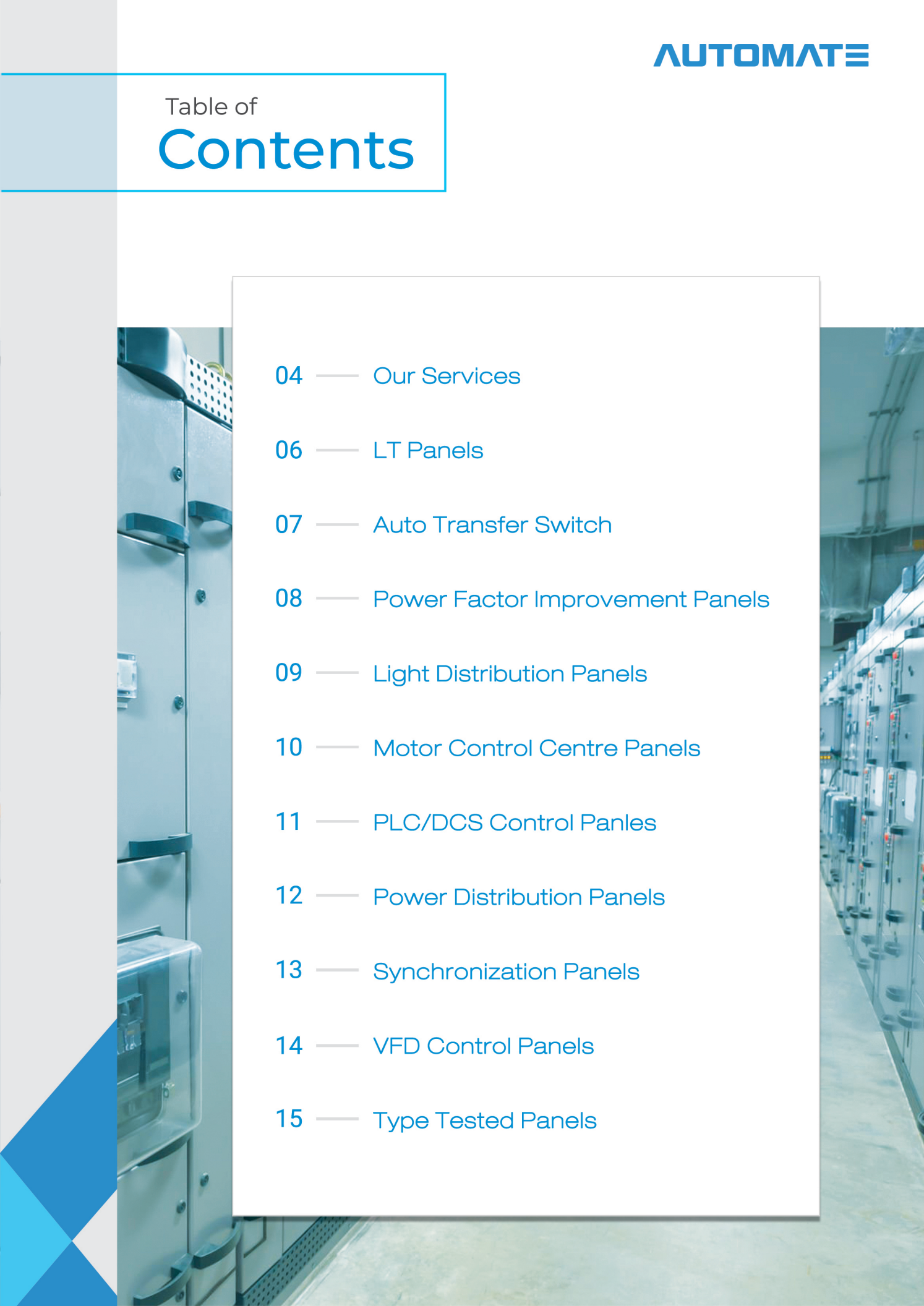
www.automateinternational.com.pk

LV/MV Switchgear Catalogue

Manufacturer of a wide range of products which includes low-voltage and medium-voltage electrical switchgear solutions.



Table of
Contents

The background of the page features a photograph of industrial electrical cabinets, likely in a factory or power plant setting. The cabinets are tall and metallic, with various doors and panels. The image is slightly blurred, giving it a professional, technical feel. The text is overlaid on a white rectangular area in the center of the page.

04	—	Our Services
06	—	LT Panels
07	—	Auto Transfer Switch
08	—	Power Factor Improvement Panels
09	—	Light Distribution Panels
10	—	Motor Control Centre Panels
11	—	PLC/DCS Control Panels
12	—	Power Distribution Panels
13	—	Synchronization Panels
14	—	VFD Control Panels
15	—	Type Tested Panels

OUR SERVICES

Automate from its beginning tends to be best performer of Manufacturing of low-voltage/medium-voltage switchgear for all kind of Industrial, Commercial & Domestic Applications.



We have experience in the design & manufacturing of Panels for all kind of Industries with compliance to IEC Standards. We can assure you the highest quality and commitment to excellence.

To assure
The Best Quality
of Panels
We offer Design,
Manufacturing,
Installation &
Commissioning

We manufacture low-voltage/medium-voltage switchgear, PFI Panels, Control Panels & Motor Control Centers (MCC) Panels for Industries.



**Panel
Fabrication**



**Panel
Dry & Wet Test**



**Panel
Commissioning**

We fabricate customized panels based on specific requirements, and design a full set of drawings according to specifications to satisfy needs.

▶ A-LTP

LT Panels

In any installed network of electrical distribution, main L.T panels are regarded as the heart of the electrical supply system. Its major objective is to effectively distribute electricity to other sub-distribution panels and essential loads. Typically consists mostly of bus couplers, isolators, and circuit breakers.

In compliance with IEC Standards, the customer's specifications and essential safety requirements, we design, manufacture, and supply high-quality L.T panels. Major components made by Schneider Electric are used in these L.T panels.



ADVANTAGES

Efficient Power Management, Low Maintenance & Easy Installation

SPECIFICATION

Voltage	380/415/440V, 50 HZ, 3 Phase, 4 Wire AC System
Construction Type	Cubicle Design/ Floor Standing/ Wall Mounted
Enclosure	1.6mm/2mm MS Powder Coated Sheet or SS Sheet (304, 316)
Degree of Protection	Upto IP 55
Busbar	99.99% Copper
Enclosure Color	RAL 7032 Shade (Industrial Standard) or as per requirement

APPLICATIONS

Oil & Gas/Chemical Industry, Energy Sector, Commercial & Residential Building etc.

▶ A-AMF/ATS

Auto Transfer Switch

This panel's primary function is to turn on backup generators in the event that the main grid's power supply fails. As a result, the AMF panel receives electricity from the generator, supplying power to the loads. After a significant amount of cooling time, the AMF panel switches back from the generator supply to the main supply when the main grid power is restored, thus shutting off the generator. The AMF panel makes sure that the switch from the main supply to the generator and back again is seamless. Depending on the needs of the site, this can be done in both automatic and manual mode.



ADVANTAGES

Easy Switchover, Easy Installation, Prevents Critical Electrical Equipment Shutdown

SPECIFICATION

Voltage	380/415/440V, 50 HZ, 3 Phase, 4 Wire AC System
Construction Type	Wall Mounted/ Floor Standing/ Floor Mounted
Enclosure	1.6mm/2mm MS Powder Coated Sheet or SS Sheet (304, 316)
Degree of Protection	Upto IP 55
Busbar	99.99% Copper
Enclosure Color	RAL 7032 Shade (Industrial Standard) or as per requirement

APPLICATION

Chemical/Oil & Gas Plants having critical loads, Commercial & Residential building

▶ A-PFI**Power Factor Improvement Panels**

The purpose of the power factor correction panels is to increase the power factor in electrical systems while guaranteeing cost and energy effectiveness. They are suitable for various processing plants with fluctuating loads.

**ADVANTAGES**

Smooth Operation, Reliable Performance, Consumes Low Power

SPECIFICATION

Voltage	380/415/440V, 50 HZ, 3 Phase,
Construction Type	Floor Mounted/ Floor Standing
Enclosure	1.6mm/2mm MS Powder Coated Sheet or SS Sheet (304, 316)
Degree of Protection	Upto IP 55
Busbar	99.99% Copper
Enclosure Color	RAL 7032 Shade (Industrial Standard) or as per requirement

APPLICATIONS

Steel Plants, Chemical Plants, Paper Mills, Automotive Plants, Food & Beverage

▶ A-LDB**Light Distribution Panels**

Lighting Distribution Boards (LDB) are a fundamental and necessary aspect of any project since they are used to distribute power to lighting facilities throughout the plant and offices, and they must be designed, manufactured, and installed in line with safety requirements.

**ADVANTAGES**

Easy Installation, Convenient Use, Reliable

SPECIFICATION

Voltage	380/415/440V, 50 HZ, 3 Phase
Construction Type	Floor Mounted/ Floor Standing/Wall Mounted
Enclosure	1.6mm/2mm MS Powder Coated Sheet or SS Sheet (304, 316)
Degree of Protection	Upto IP 55
Busbar	99.99% Copper
Enclosure Color	RAL 7032 Shade (Industrial Standard) or as per requirement

APPLICATIONS

Apartment, Station, Hospital, Port, Commercial Building, Enterprises, Plants

▶ A-MCC

Motor Control Centre Panels

Motor Control Centre (MCC) Panel is the combination of motor starters which typically includes feeders for pumps, motors & blowers. Depending on the application it will serve or as per client's needs, we design and manufacture high-quality MCC panels. We offer auto, manual, and remote provision for MCC panels, making it simple to operate them as necessary.



ADVANTAGES

High Performance, Low Maintenance, Easy Operation, Highly Safe & Reliable

SPECIFICATION

Voltage	380/415/440V, 50 HZ, 3 Phase, 4 Wire AC System
Construction Type	Wall Mounted/ Floor Standing/ Floor Mounted
Enclosure	1.6mm/2mm MS Powder Coated Sheet or SS Sheet (304, 316)
Degree of Protection	Upto IP 55
Busbar	99.99% Copper
Enclosure Color	RAL 7032 Shade (Industrial Standard) or as per requirement

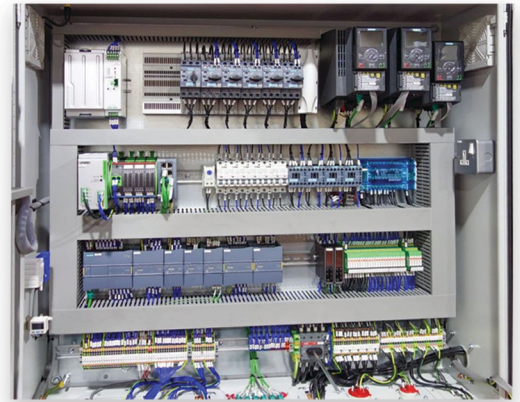
APPLICATIONS

Cement Plants, Chemical Plants, Hydropower Plants, Textile Plants etc.

► **A-PLC/DCS**

PLC/DCS Control Panels

PLC automation panels, sometimes referred to as PLC control panels, are one of the most important and effective categories of control panels. They are often utilized in a wide range of electrical and electronic circuit connections. Our Control Panels are extremely capable of providing increased output while using less power. Additionally, we provide customized PLC/DCS control panels as per client's needs.



ADVANTAGES

Easy Installation, User Friendly Operation, Flexibility

SPECIFICATION

Voltage	24 VDC
Construction Type	Wall Mounted/ Floor Standing
Enclosure	1.6mm/2mm/2.5mm MS Powder Coated Sheet or SS Sheet (304, 316)
Degree of Protection	Upto IP6X
Busbar	99.99% Copper
Enclosure Color	RAL 7032 Shade (Industrial Standard) or as per requirement

APPLICATIONS

Chemical Plants, Power Generating Stations, Pharmaceutical Manufacturing, Oil and Gas Industries

▶ A-PDP

Power Distribution Panel

A power distribution box, often known as a power distribution unit ('PDU') or simply a distro, is used to safely distribute energy from a power source to other devices on a circuit. It usually has one input and numerous outputs, enabling multiple devices to be connected to the distro rather than the power source directly. This improves safety, efficiency, and convenience.



ADVANTAGES

Reduces the chances of blown fuses or even dangerous short-outs.

SPECIFICATION

Voltage	380/415/440V, 50 HZ, 3 Phase, AC System
Construction Type	Wall Mounting/ Floor Standing
Enclosure	1.6mm/2mm MS Powder Coated Sheet or SS Sheet (304, 316)
Degree of Protection	Upto IP6X
Busbar	99.99% Copper
Enclosure Color	RAL 7032 Shade (Industrial Standard) or as per requirement

APPLICATIONS

Oil and Gas, Chemical Plants, Commercial Building etc.

A-SP**Synchronization Panels**

Synchronization panels are primarily designed and used to satisfy power system needs. These panels can be operated manually or automatically for two or more generators. They are commonly utilized in synchronizing generators and providing multiplex solutions.

**ADVANTAGES**

Easy Installation, Reliability, Cost Effective

SPECIFICATION

Voltage	380/415/440V, 50 HZ, 3 Phase, AC System
Construction Type	Wall Mounting/ Floor Standing
Enclosure	1.6mm/2mm MS Powder Coated Sheet or SS Sheet (304, 316)
Degree of Protection	Upto IP6X
Busbar	99.99% Copper
Enclosure Color	RAL 7032 Shade (Industrial Standard) or as per requirement

APPLICATIONS

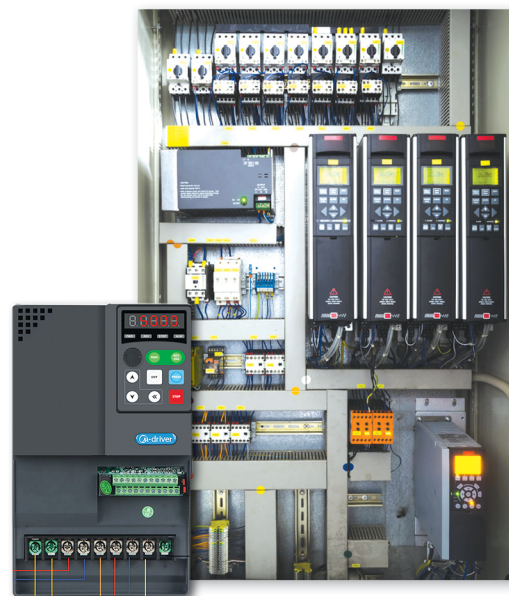
Oil and Gas/Chemical Industry, Commercial & Residential Building etc.

▶ A-VFD

VFD Control Panel

The VFD Control Panel (Variable Frequency Drive Panel) is used to regulate the speed of the feed pump and electric motor.

It is a power conversion device that converts the input power from fixed voltage and fixed frequency to variable voltage and variable frequency. They are widely utilized in drilling, pumping, and other large machine applications, such as compressor and conveyor.



ADVANTAGES

Energy Saving, Smooth operation, High Power Factor, Easy Installation

SPECIFICATION

Voltage	380/415/440V, 50 HZ, 3 Phase, 3 or 4 Wire AC System
Construction Type	Floor Mounted/ Floor Standing
Enclosure	1.6mm/2mm MS Powder Coated Sheet or SS Sheet (304, 316)
Degree of Protection	Upto IP6X
Busbar	99.99% Copper
Enclosure Color	RAL 7032 Shade (Industrial Standard) or as per requirement

APPLICATIONS

Rolling Industry, Food & Beverage, Pharma, Textile, Tube & Cable Industry etc.

▶ A-TTP

Type Tested Panel

Panel type testing entails determining whether a panel meets specific standards for operation in a specific place or purpose. Internationally recognized standards such as ANSI, IEC, and others, as well as local national standards, can be used. Type tests include short circuit, temperature rise, electromagnetic compatibility, creepage, clearance, ingress protection, mechanical performance, and other tests.

While type testing of panels is costly and time consuming, it is required to assure the panel's safe and reliable performance. In the event of an accident, the installation and operation of panels that have not been type tested can result in the loss of lives, equipment etc.



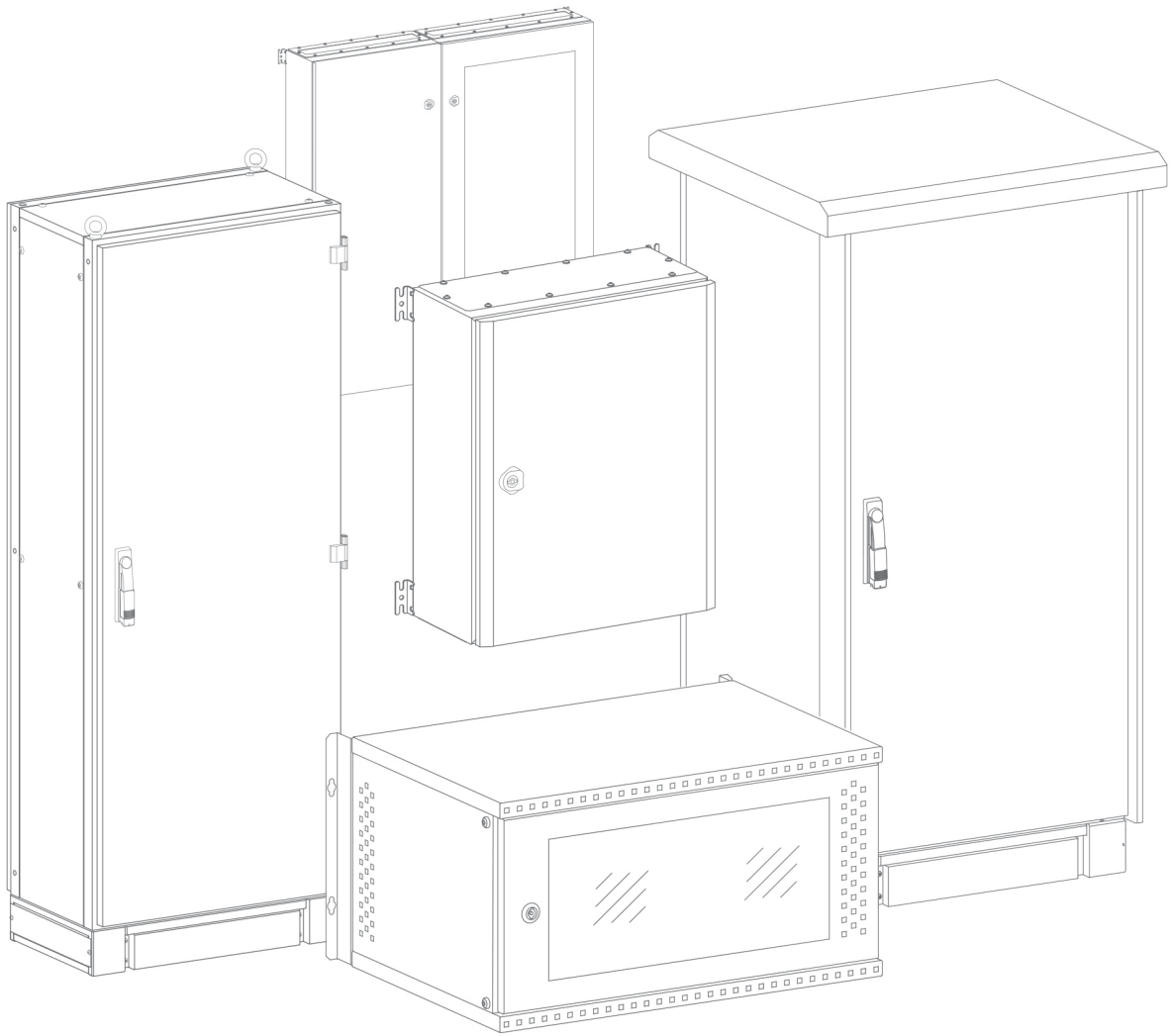
SPECIFICATION

Rated Voltage	Upto 690V AC	Frame Work	Painted 2 mm Galvanized Steel
Form	Up to Form 4B	Enclosure Color	RAL 7035 Epoxy Polyester Powder Paint
Rated Current of the Busbars	Upto 5000A	Protection against Mechanical Impact	IK 10
Rated short time with-stand current	Upto 70 KA	Degree of Protection	Upto IP 6X

- Standards**
- IEC/EN 62208 Empty enclosures for LV switchgear & controlgear assemblies
 - IEC/EN 61439-1/2 LV Low-voltage switchgear and controlgear assemblies
 - IEC/60529 Degrees of protection provided by enclosures (IP Code)
 - IEC 60068 and IEEE-693/2005 Seismic qualification
 - IEC 61641 Internal Arc Test

TYPES OF PANEL

- Motor Control Centre (MCC) Panels
- Power Control Centre (PCC) Panels
- Automatic Power Factor Correction (APFC) Panels
- PLC & Intelligent Motor Control Centre Panel
- Diesel Generator Synchronization Panels
- Automatic Mains Failure (AMF) Panels
- Power & Lighting Distribution Boards



AUTOMATE

Automate International (Pvt) Ltd.

Pakistan


Head Office:

11-Usman Block, New Garden Town,
Lahore - Pakistan.

Tel: +92-42-3586-3147

Fax: +92-42-3586-5192

Karachi Multan Islamabad

 /automate.official

 /automate-international

Middle East
Dubai, UAE

China



www.automateinternational.com.pk
info@automateinternational.com.pk