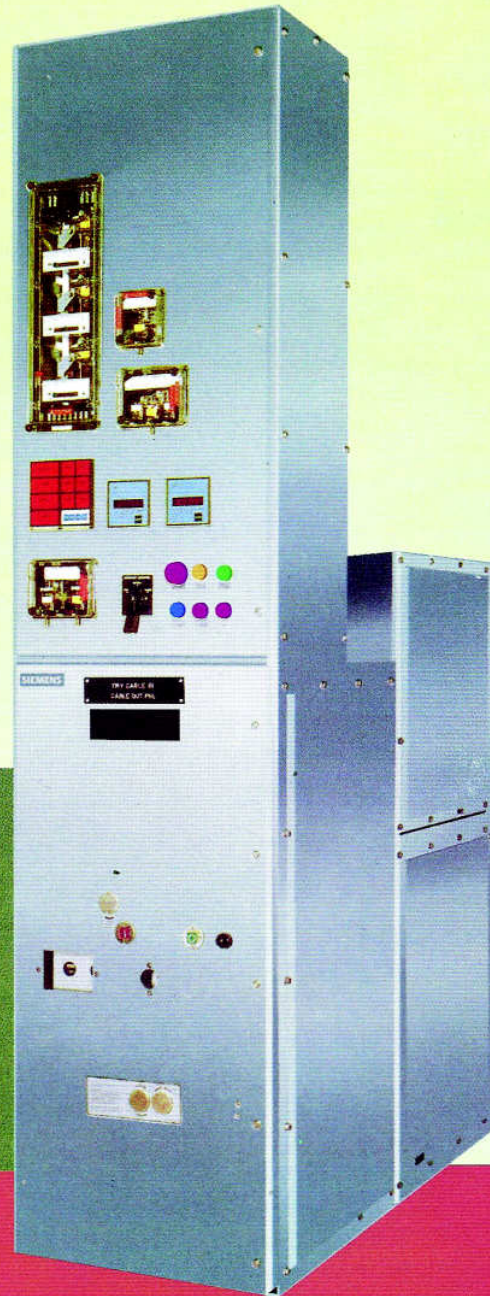


8MV88PLUS

**Compact Metal-clad
switchgear upto 12kv**



**Power Transmission
and Distribution**

SIEMENS

SYSTEMS INTEGRATOR:
ELECTRO ALLIED PRODUCTS

8MV 88Plus Air insulated Metal-clad Switchgear with Vacuum Circuit Breaker on withdrawable truck



Construction :

- Single busbar air insulated metal-clad switchgear.
- Circuit breaker mounted on withdrawable truck.
- Simple and rugged shutter mechanism.
- Encapsulated feeder connections.

Standards :

- IS 3427 and IS 12729.
- IEC 60298 and IEC 60694.
- IEC 62271-200

Personal safety :

- All switching operations performed with breaker compartment door closed.
- Earthed metallic partitions and shutters prevent contact with live parts.
- Individual high voltage compartment tested for internal arc fault.

Tolerance to environment :

- Full metallic enclosure ensures high resistance to ingress and interference under all operating conditions.

Salient features :

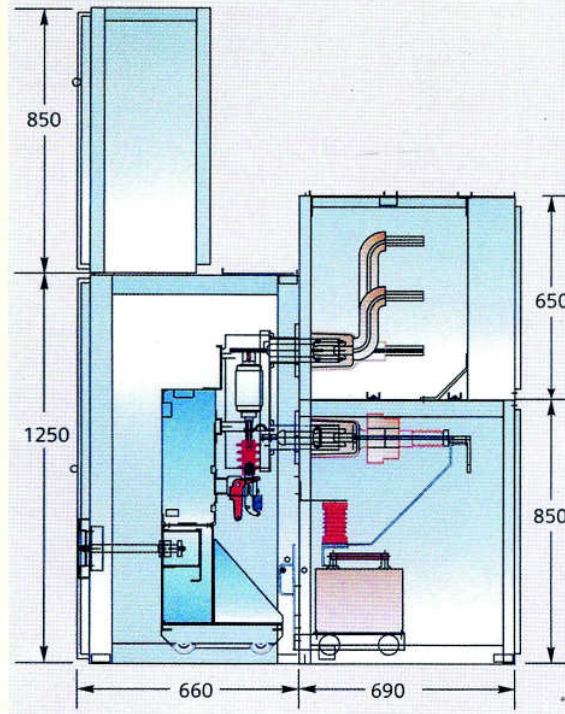
- No separate maintenance trolley required.
- Safe and easy truck movement behind closed cubicle door.
- Separately padlockable shutter for bus and cable side fixed contacts.
- Automatic dropping ramp for facilitating truck removal.

Optional :

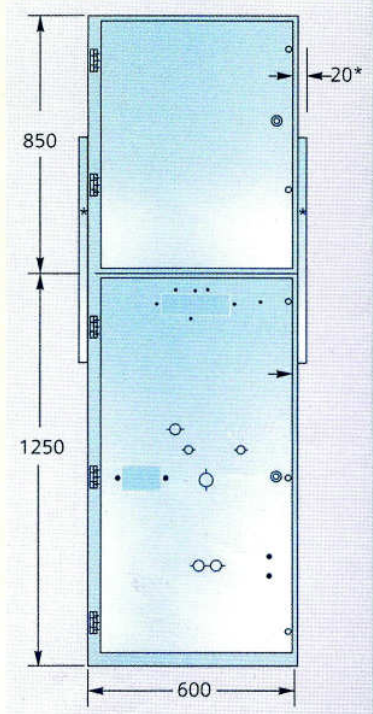
- Wound primary/Torroidal CTs.
- Withdrawble/fixed type PTs in cable chamber.

- Fully type tested including internal arc fault test
- Belongs to 8MV series with all safety features.

Selection Side View



Front View



* 20MM ONLY FOR END PANEL INCLUDING END COVER (Dimensions not to scale)

Technical Data

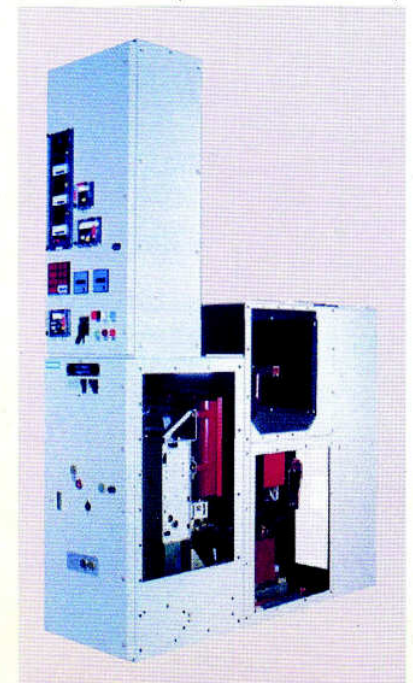
Rated Voltage (frequency 50Hz)	12 kV
Rated current of feeders	upto 1600 A
Rated current of the busbar	2000A
Rated power frequency withstand voltage (rms) 60 sec.	28 kV
Rated lighting impulse withstand voltage (peak) 1.2/50 microsec.	75 kV
Rated short circuit Breaking current (rms)	26.3 kA
Rated short time current (rms) withstand (3 sec.)	26.3 kA
Rated short Circuit Making current (peak)	66 kA
Internal arc fault withstand capacity (0.1 sec)	26.3 kA

Dimension (Standard)

Width (mm)	600
Height (mm)	2100*
Depth (mm)	1350*

Maximum values indicated.

* LV chamber / panel height / depth variable as per number of equipments to be mounted.



Classification of 8MV88 Plus Switchgear according to IEC 62271-200

Resistance to internal arcs

Classification	IAC
Accessibility	
- Front	Type A
- Rear	Type A
- Lateral	Type A
Test current	26.3 kA
Test duration	0.1 Sec

Construction and design

Class of partitions	PM
Service continuity category	LSC2B
Compartment accessibility (standard)	
- Busbar compartment	Tool-based
- Switching-device compartment	Interlock-based
- Low-voltage compartment	Tool-based
- Connection Compartment / Rear Connection	Tool-based

Resistance to internal arc faults

■ Safety of operating personal ensured by tests to verify resistance to internal arc faults.

■ Internal arc tests in accordance with IEC 62 271-200, Annex A.

■ The switchgear complies with criteria 1 to 5 specified in the mentioned standards for the basic version up to 26.3 kA.

Definitions of criteria:

● Criterion 1

Correctly secured doors and covers do not open. Deformations are accepted conditionally.

●

● Criterion 2

No fragmentation of enclosures occurs within the time specified for test. Projections of small parts up to 60g are accepted.

● Criterion 3

Arcing does not cause holes in the accessible sides up to a height of 2m.

● Criterion 4

Indicators do not ignite due to the effect of hot gases. Ignition caused by glowing particles rather than hot gases is allowed. Ignitions as a result of paint or sticker burning are also excluded.

● Criterion 5

The enclosure remains connected to its earthing point.

3AH0 Vacuum Circuit Breaker-The right choice for varied tasks

Construction :

■ Light weight and compact vacuum circuit breaker consisting of three encapsulated vacuum interrupter poles and a drive mechanism housing which forms a sturdy base for poles.

■ Operating mechanism is of stored energy type and suitable for auto reclosing duty. It can be manual/electrical as desired

■ Fully integrated contact arms with tulip type contacts

Standards :

IS 13118.
IEC 62271 100

Salient features :

■ Conforms to IS/IEC standards and is fully type tested.

■ Simple and compact design.

■ Totally restrike free.

■ Suitable for rapid autoreclosing duty.

■ Highly reliable operation.

■ Suitable for all environments.

■ High switching capability.

■ Matching drive and interrupter characteristics.

■ All type tests carried out with VCB mounted inside the panel.

Advantages of vacuum over other interrupting media :

■ Highest dielectric strength over a small contact gap.

■ Constant low contact resistance.

■ Fastest recovery strength.

■ Lowest arc energy dissipation.

■ Lowest drive energy requirements.

■ Minimum contact erosion.

■ No fire hazards or explosion risk.

■ VCB has least number of moving parts and hence highest reliability.

Freedom from maintenance :

■ Maintenance free with new generation siemens vacuum interrupters.

■ The gear box is sealed and lubricated for life.

■ Free from chain snapping problem of conventional operating drive mechanism.

Environmental compatibility :

■ The vacuum circuit breaker has no effect on the environment during and after the switching operations.

Technical Data

Rated Voltage (frequency 50Hz)	12 kV
Rated current	upto 1600 A
Rated power frequency withstand voltage (rms) 60 sec.	28 kV
Rated lightning impulse withstand voltage (peak) 1.2/50 microsec.	75 kV
Rated short circuit breaking current (rms)	26.3 kA
Rated short time current (rms) withstand (3 sec.)	26.3 kA
Rated short circuit making current (peak)	66kA

OPERATIONS

