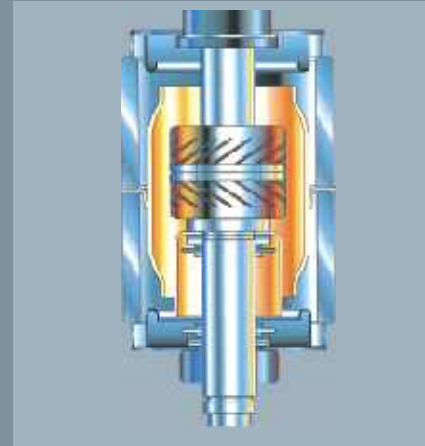


ISO 9001, ISO 14001 Certification



Would you like to find out more ?
Please do not hesitate to contact us at any of the following address:

Siemens Ltd.
Energy Distribution Medium Voltage
International Sales
Kalwa Business Centre, E D MV/EXP
Thane Belapur Road
Thane - 400 601, India
Tel.: +91 22 2762 3635
Fax: +91 22 2762 3723

Siemens AG
Energy Sector
Power Distribution
E D MV1 S
Mozartstr,31c
91052 Erlangen, Germany
Tel.: +49 9131 7-32320
Fax: +49 9131 7-34639

"Product development is a continuous process. Consequently the data indicated in this booklet is subject to change without prior notice.
For latest issue contact our Sales Office."

Siemens Ltd.
PTD-03-152-040-R

8BK80

Class PM Switchgear with **Vacuum Circuit Breaker**
on withdrawable truck upto 12 kV

www.siemens.com/energy

SIEMENS

Class PM Switchgear with Vacuum Circuit Breaker on withdrawable truck upto 12 kV

Construction

- Single busbar air insulated Class PM switchgear
- Vacuum Circuit breaker mounted on withdrawable truck
- Fully factory assembled

Standards

- IS/IEC62271-200 and IS 12729
- IEC 62271-100
- IEC 62271-1

Personnel safety

- All switching operations performed with front door closed
- Earthed metal partitions and shutters prevent contact with live parts

Tolerance to environment

- Full metal enclosure ensures high resistance to ingress and interference under all operating conditions
- Insulators have high anti-tracking qualities

Operational security/ Maintenance

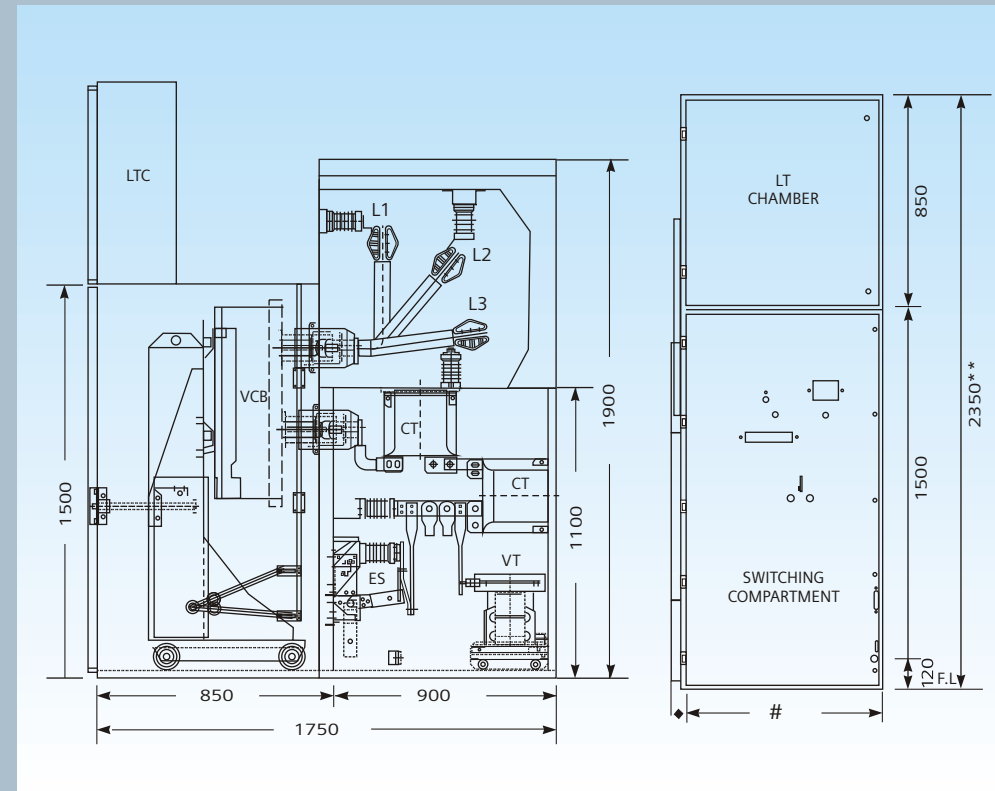
- Full mechanical interlocking
- Access door fully integrated in interlock system
- Service-proven maintenance free vacuum circuit breaker, hermetically sealed vacuum interrupters, low maintenance

Special features

- Circuit breaker mounted on withdrawable truck
- Safe easy truck movement behind closed cubicle door
- Earthed metal partitions and shutters individually padlockable
- Hollow triangular busbars
- Access to cable terminals from the rear and front (optional)
- Guaranteed voltage withstand without conductor insulation
- More HT equipments in same panel depth

- Withdrawable VT possible both on CB truck and in cable chamber from Rear side

Sectional side view



♦60 mm only for end panel, including end cover
(Dimensions not to scale)

Technical data		
Rated Voltage, Frequency (50Hz)	7.2 kV	12 kV
Rated Current of the Feeders	Upto 3150 A ^{***}	Upto 3150 A ^{***}
Rated Current of the Busbar	Upto 4000 A ^{***}	Upto 4000 A ^{***}
Rated Power Frequency Withstand Voltage (RMS) 1min	20 kV	28kV*
Rated Lighting Impulse withstand Voltage (peak) 1.2/50 Micro sec.	60 kV	75 kV*
Rated Short Circuit Breaking Current	Upto 44 kA	Upto 44 kA
Rated Short Time Withstand Current (3 sec)	Upto 44 kA	Upto 44 kA
Rated Short Circuit Making Current (peak)	Upto 110 kA	Upto 110 kA
Dimensions (standard)		
Width (mm)	600/ 700/ 800 [#]	600/ 700/ 800 [#]
Height (mm)	2350 ^{**}	2350 ^{**}
Depth (mm)	1750 ^{**}	1750 ^{**}

* 38/95 kV BIL on request
** LV chamber/panel height/depth variable as per number of equipments to be mounted
*** Higher values on request

Classification of 8BK80 Switchgear According to IS/IEC 62271-200

Resistance to internal arc	
Classification	IAC
Accessibility	
- Front	Type A
- Lateral	Type A
- Rear	Type A
Test current	40kA
Test duration	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	Tool-based

Standards, specifications, guidelines

Terms
"Make proof earthing switches" earthing switches with short-circuit making capacity according to IEC 62271-102

Resistance to internal arc faults

- Safety of operating personnel ensured by tests to verify resistance to internal arc faults.
- Internal arc tests in accordance with IEC 62271-200, Annex A.
- The switchgear complies with criteria 1 to 5 specified in the mentioned standards for the basic version up to 40 kA with room mockup and roof

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**
Both horizontal and vertical 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.

Current-carrying capacity

- According to IEC 62271-200 current-carrying capacities refer to the following ambient temperatures:
- Maximum of 24-hour mean +35°C
- Maximum +40°C
- The current-carrying capacity of the panels and busbars depends on the ambient temperature outside the enclosure.
- To attain the maximum rated normal currents, the panels may be provided with natural or forced ventilation.

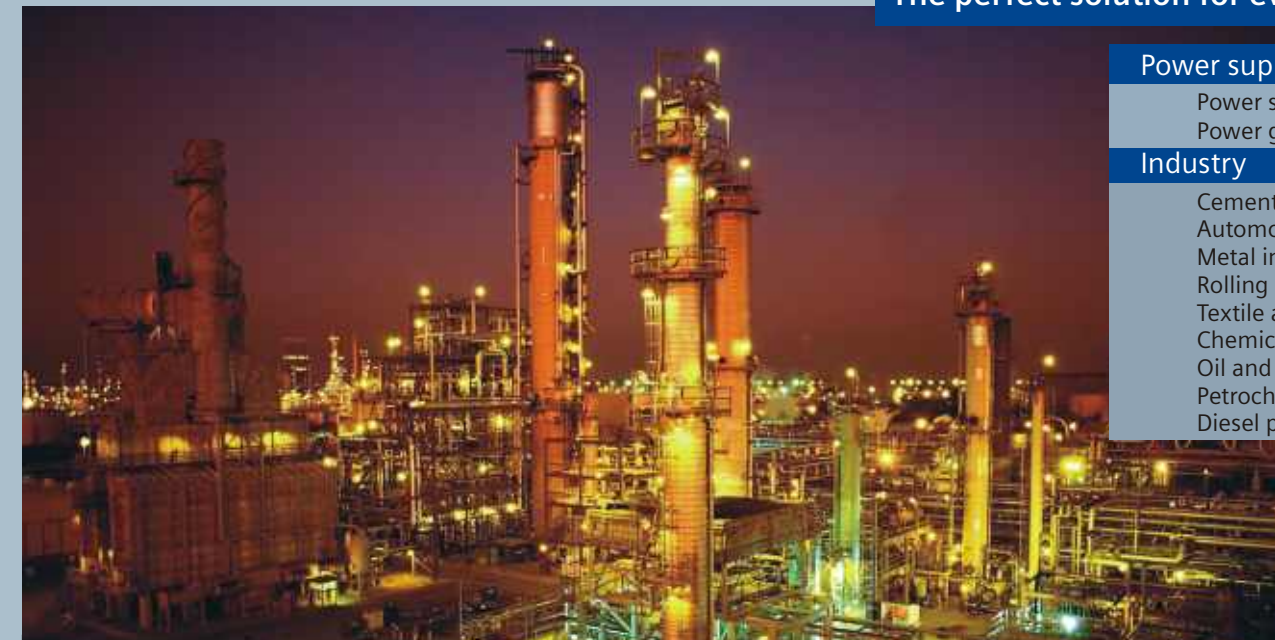
Protection against solid foreign bodies, electric shock and ingress of water.

8BK80 switchgear fulfills acc. to the standards
-IEC 62271-200
-IEC 60529.

The following degrees of Protection:
- Enclosure: IP4X*
- Compartments: IP2X

*IP 5X on request or IP X1 on request

The perfect solution for every application



Power supply systems

Power supply companies
Power generation companies

Industry

Cement industry
Automobile industry
Metal industry
Rolling mills
Textile and food industries
Chemical and fertilizer
Oil and Gas
Petrochemical plants
Diesel power plants