

Medium-Voltage Switchgear

Product information for five Schneider Electric medium-voltage switchgear products

This sheet covers three ranges. The **SM6-24** and **SM6-36** are modular units for secondary distribution, **PremSet** is a compact SF6-free switchgear using shielded solid insulation, and the **MCset 17.5 kV** and **MCset 24 kV** are withdrawable air-insulated switchboards for primary distribution.

At a glance

Product	Insulation	Rated voltage	Rated current	Short-time withstand
SM6-24	Air busbars, SF6 switching	Up to 24 kV	400 to 1,250 A busbar; 630 / 1,250 A units	12.5, 16 or 20 kA, 1 s*
SM6-36	Air busbars, SF6 switching	Up to 36 kV	630 or 1,250 A	16 kA, 1 s
PremSet	Solid (SSIS), SF6-free	7.2, 12 and 17.5 kV	Up to 1,250 A	Up to 25 kA, 1 s**
MCset 17.5 kV	Air	Up to 17.5 kV	Up to 4,000 A busbar	25 to 50 kA, 3 s***
MCset 24 kV	Air	24 kV	Up to 2,500 A busbar	16, 25 or 31.5 kA, 3 s***

Common features

- Metal-enclosed indoor switchgear designed to IEC 62271-200, with internal arc tested versions
- SM6: modular functional units for transformer substations, buildings, infrastructure and industry
- PremSet: shielded solid insulation, vacuum switching and no SF6 gas
- MCset: withdrawable circuit-breakers for primary distribution, industrial plants and utilities

Product profiles

SM6-24

Air-insulated modular switchgear, up to 24 kV

Modular secondary distribution switchgear built from functional units that are extended side by side. It is used in MV/LV transformer substations and industrial distribution.

- Busbar current 400, 630 or 1,250 A; functional units rated 630 or 1,250 A
- Internal arc versions: 12.5 kA (A-FLR), 16 kA and 20 kA (A-FL and A-FLR)
- Functional units include switches (IM, IMC), fuse-switches (QM, QMC), SF6 and vacuum breakers (DM1, DMV) and metering (CM)
- Unit width 375 to 1,500 mm; height 1,600 to 2,250 mm; depth 840 to 1,400 mm
- Designed to IEC 62271-200

SM6-36

Air-insulated modular switchgear, up to 36 kV

The 36 kV version of the SM6 range, for MV distribution networks, utilities, infrastructure and industrial applications.

- Busbar current 630 or 1,250 A; functional units rated 630 or 1,250 A
- Short-time withstand 16 kA for 1 s; internal arc class IAC A-FL (optional 12.5 kA)
- Same modular functional-unit concept as the SM6-24
- Designed to IEC 62271-200

PremSet

Shielded solid-insulated switchgear, up to 17.5 kV

Compact modular vacuum switchgear that uses the Shielded Solid Insulation System (SSIS), so no live parts are exposed to air.

- Busbar current up to 1,250 A; 50/60 Hz
- Short-time withstand up to 25 kA for 1 s (20 kA for 4 s)
- Unit width 375 mm (630 A) or 750 mm (1,250 A); depth 910 to 1,208 mm; height 1,350 to 2,195 mm
- Vacuum switch-disconnectors and circuit-breakers (D01N, D02N, D06N, D06H, D12H) plus metering and bus riser units
- Arc-controlled versions up to 25 kA for 1 s (A-FLR); IEC 62271 series

MCset 17.5 kV

Withdrawable air-insulated switchgear, up to 17.5 kV

Withdrawable metal-clad switchgear for primary distribution in industrial plants, utilities and mission-critical facilities.

- Busbar current up to 4,000 A; circuit-breaker ratings of 1,250, 2,500, 3,150 and 4,000 A (4,000 A with fan)
- Short-time withstand current 25, 31.5, 40 or 50 kA for 3 s; internal arc up to 50 kA for 1 s
- Power-frequency withstand 38 kV, lightning impulse 95 kV
- Cubicle about 900 mm wide, 2,300 mm high and 1,550 mm deep (AD type)
- Complies with IEC 62271-1, -100 and -200

MCset 24 kV

Withdrawable air-insulated switchgear, 24 kV

The 24 kV member of the MCset range, for primary MV distribution in heavy industry and energy networks.

- Busbar current up to 2,500 A; circuit-breaker ratings of 630, 1,250 and 2,500 A
- Short-time withstand current 16, 25 or 31.5 kA for 3 s; internal arc up to 25 kA for 1 s
- Power-frequency withstand 50 kV, lightning impulse 125 kV
- Cubicle about 900 mm wide, 2,325 mm high and 1,750 mm deep (AD4 type)
- SF6 puffer-type circuit-breakers in the original design

Notes and sources

* SM6-24 short-time ratings of 12.5, 16 and 20 kA for 1 s are from the SM6 catalogue; the choice depends on the internal arc version.

** PremSet figures are from the IEC 17.5 kV catalogue. Schneider's North American PremSet (UL-listed) is rated to 15 kV, 600 or 1,200 A and 25 kA, so check which version you are quoting.

*** MCset figures are from the original MCset catalogue. Schneider's product page lists the MCset 24 kV as discontinued and shows MCset 17.5 kV as part of the SeT series. The newer MCSeT (12, 17.5 and 24 kV, SF6-free, with EvoPacT HVX breakers) has its own ratings, which were not available in the sources used.

Compiled from Schneider Electric SM6 and PremSet catalogues, MCset catalogues, Schneider product pages and trade press. Confirm against the current Schneider Electric catalogue before quoting or ordering.