

**SIEMENS**

# Cost-Efficient Solution for Power Distribution

Ring Main Unit 8DJH ST: Safe, Compact and Reliable

[www.siemens.com/mediumvoltage](http://www.siemens.com/mediumvoltage)



Answers for infrastructure and cities.





#### Your benefits at a glance

- Comprehensive supply of gas-insulated switchgear for secondary distribution grids
- High cost-efficiency by climate- independent, durable and maintenance-free switchgear
- High switchgear availability and personal safety
- Minimized space requirements by compact dimensions
- High product quality from one of the pioneers of gas-insulated switchgear
- Protection of investment by possible integration in smart distribution grids
- Reliable and competent support on site – from planning to operation

#### Maximum functionality on minimum space – also for intelligent transformer substations

At a time of growing cost and performance pressure it is even more important to decide on the right technology, above all because switchgear represents an investment for the next decades

Compactness, performance, climatic independence and cost efficiency add to the central aspects of gas-insulated medium-voltage switchgear from Siemens in order to provide a future-proof investment: optimal personal and functional safety, as well as reliable, maintenance-free operation.

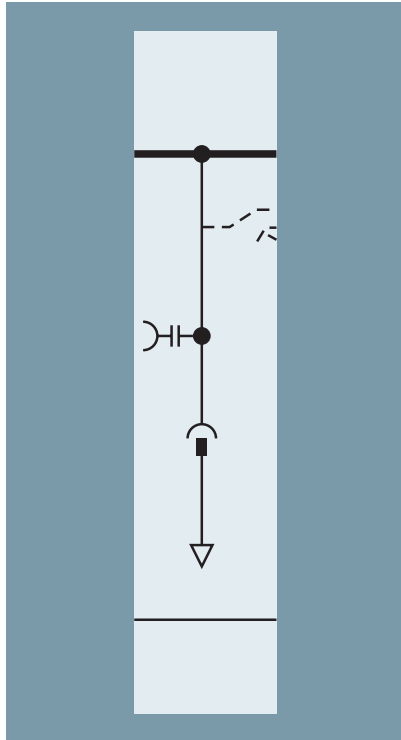
# Technical data



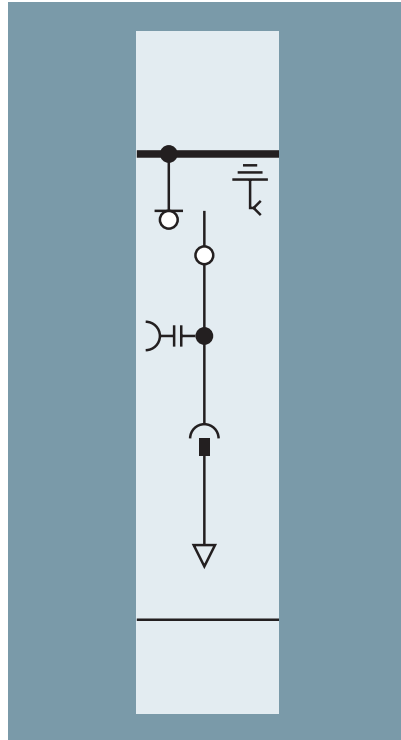
Technical features		
Rated values up to	12kV, 21kA, 3s	
Rated frequency	50 Hz	
Busbar current up to	630 A	
Feeder current up to	630 A	
Busbars	Single busbar	
Rated power frequency withstand voltage	28kV	38kV
Rated lightning impulse withstand voltage	75kVp	95kVp
Insulation	Gas-insulated	
Switchgear vessel	Hermetically enclosed	
Type of switchgear	Factory-assembled, type-tested, metal-enclosed switchgear according to IEC 62271-200 Panel blocks consisting of 2, 3, 4 or 5 panels	
Classification according to IEC 62271-200		
Partition class	PM	
Loss of service continuity category	LSC 2	
Accessibility to compartments	Busbar compartment: Non-accessible Switching-device compartment: Non-accessible Cable compartment: Interlock-controlled	
Degree of protection	For switchgear enclosure [Indoor]: IP3X For switchgear enclosure [Outdoor]: IP54 For gas filled vessel: IP67	
Internal arc classification	IAC A FLR 21kA, 1.0s	
Dimensions		
Block width depending on number and type of panels	645mm, 955mm, 1265mm, 1575mm	
Panel height	1620 mm	
Panel depth	Bottom explosion: 820 mm	Top explosion: 918 mm
Standards		
Switchgear	IEC 62271-1 IEC 62271-100	
Devices	Circuit breakers	IEC 62271-200
	Disconnecter & earthing switch	IEC 62271-102
	Switch-disconnector	IEC 62271-103
	Voltage detection systems	IEC 61243-5
Degree of protection	IEC 60529	
Insulation	IEC 60071	
Instrument transformers	Current transformer	IEC 61869-2
	Voltage transformer	IEC 61869-3
Installation, erection	IEC 61936-1	

# Product range for panels

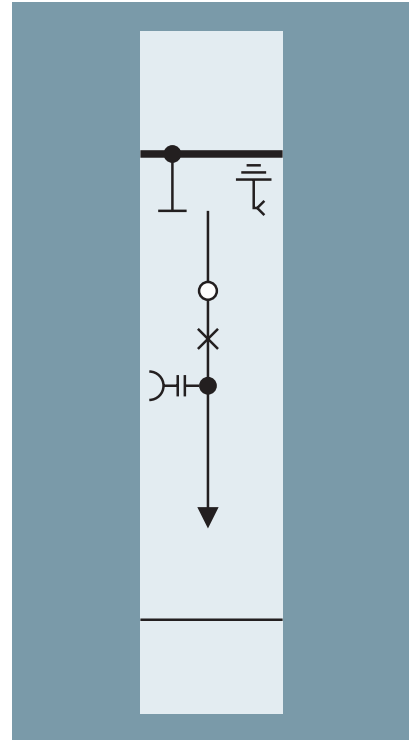
Cable connection [K]



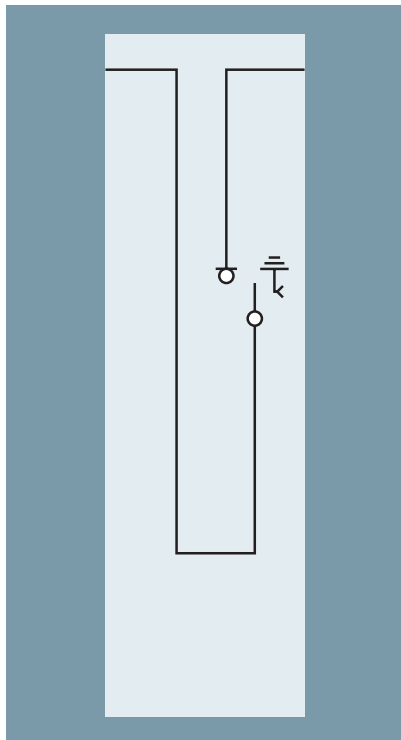
Ring main [R]



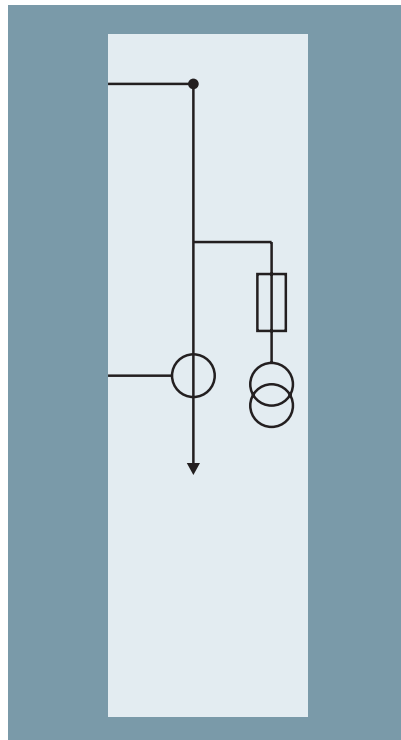
Vacuum Circuit Breaker [L]



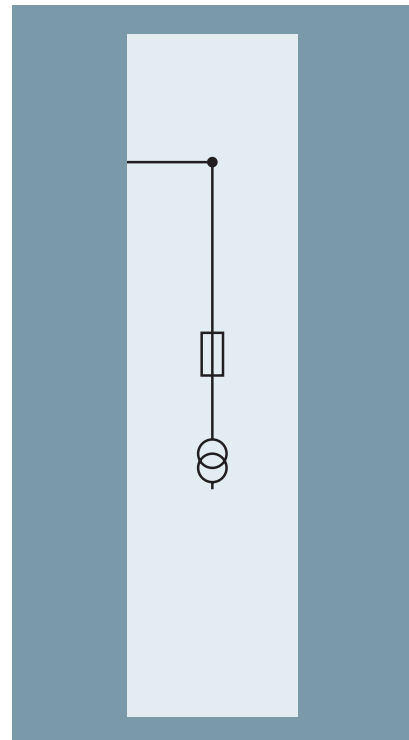
Bus coupler [S]



Line metering [ME1]



Bus metering [ME2]



# Product Range, Schemes and Dimensions

Typicals						
Extensible			RH With ME		Non Extensible	Panel Width (Only Vessel)
Both Side	Left Side	Right Side	Extensible	Non Extensible		
☐ -R-	☐ -R	☐ R-	☐ -R-	NA	NA	310
☐ -L-	☐ -L	☐ L-	☐ -L-	☐ L-	NA	310
☐ -L430-	☐ -L430	☐ L430-	☐ -L430-	☐ L430-	NA	430
☐ -K-	☐ -K	☐ K-	☐ -K-	NA	NA	310
☐ -S-	NA	NA	NA	NA	NA	620
☐ -RK-	☐ -RK	☐ RK-	☐ -RK-	☐ RK-	☐ RK	620
☐ -RR-	☐ -RR	☐ RR-	☐ -RR-	☐ RR-	☐ RR	620
☐ -RL-	☐ -RL	☐ RL-	☐ -RL-	☐ RL-	☐ RL	620
☐ -LK-	☐ -LK	☐ LK-	☐ -LK-	☐ LK-	☐ LK	620
☐ -RRR-	☐ -RRR	☐ RRR-	☐ -RRR-	☐ RRR-	☐ RRR	930
☐ -RRL-	☐ -RRL	☐ RRL-	☐ -RRL-	☐ RRL-	☐ RRL	930
☐ -RLR-	☐ -RLR	☐ RLR-	☐ -RLR-	☐ RLR-	☐ RLR	930
☐ -RRRR-	☐ -RRRR	☐ RRRR-	☐ -RRRR-	☐ RRRR-	☐ RRRR	1240
☐ -RRRL-	☐ -RRRL	☐ RRRL-	☐ -RRRL-	☐ RRRL-	☐ RRRL	1240
☐ -LRRL-	☐ -LRRL	☐ LRRL-	☐ -LRRL-	☐ LRRL-	☐ LRRL	1240
☐ -RRRRR-	☐ -RRRRR	☐ RRRRR-	☐ -RRRRR-	☐ RRRRR-	☐ RRRRR	1550
☐ -LRRLR-	☐ -LRRLR	☐ LRRLR-	☐ -LRRLR-	☐ LRRLR-	☐ LRRLR	1550
☐ -LLLLL-	☐ -LLLLL	☐ LLLLL-	☐ -LLLLL-	☐ LLLLL-	☐ LLLLL	1550
NA	☐ ME1*	NA	NA	NA	NA	630
NA	☐ ME2*	NA	NA	NA	NA	630

"-" indicates extensibility/coupling side.

\* Panel combinations with metering will always be with "ME" panel on extreme right side. No further right side extensibility is possible

# Customer Benefits, Technical Data, Design & Construction



## Customer Benefits:

### ■ Peace of mind

- Gas insulated, metal enclosed, indoor/outdoor, Extensible/non- extensible factory assembled type tested switchgear as per new IEC 62271-100/200.
- Stringent quality standards as per ISO9001 and 14001.

### ■ Saves Lives

- Internal arc fault tested switchgear including cable compartment.
- Capacitive voltage detection system for verification of safe isolation from supply.

### ■ Increases Productivity

- All switching operations and cable access from the front.
- Safe to touch and hermitically sealed, gas tight, welded stainless steel primary enclosure, independent of environmental effects (dust, moisture, vermins etc.).
- Extensible on either sides.

### ■ Saves Money

- Single switching element for load breaking, disconnecting and earthing.
- Maintenance free operating mechanism accessible outside the high voltage enclosure.
- Most compact individual panel/ block type construction, ensuring minimum space requirement.

### ■ Design and Construction

- Ring feeders with three position switch disconnectors (option: with auxiliary switch).
- Circuit breaker feeder with combined Vacuum interrupter Dis-connector and earthing switch.
- Capacitive voltage detection system for all feeders.
- Protective self-powered relay & current transformers for transformer protection.
- Individual panel / block type construction.
- Manual operating mechanism (option: with motor).
- Cable connection from front.
- Logical mechanical interlocks.
- Gas pressure monitoring via Manometer.

### ■ Options

- Short circuit / earth fault indicators for ring feeders.
- Shunt release for VCB feeders.
- Motor-operated ring & VCB feeders.
- Local/remote selector switch for motorized feeders.
- Provision for two runs of cable connection max up to 3Cx300 sq.mm.