



**SIEMENS**

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## Gas-insulated switchgear type 8DQ1, 420 kV, 80 kA

### The outperformer – 80 kA down cold

- economic efficiency
- high reliability
- long service life
- safe encapsulation
- very high degree of gas-tightness
- low life cycle and maintenance costs
- easy access and ergonomic design
- high availability
- reliable operation even under extreme environmental conditions
- suitable for indoor and outdoor installation
- flexible, modular design for all bus schemes, such as single, double, and multiple busbar, 1 1/2 breaker, ring, and others
- high-current version for up to 6,300 A available

**Answers for energy.**

# Technical data

| Switchgear type                                               | 8DQ1        |                                       |
|---------------------------------------------------------------|-------------|---------------------------------------|
| Rated voltage                                                 | up to       | 420 kV                                |
| Rated frequency                                               |             | 50/60 Hz                              |
| Rated power frequency withstand voltage (1 min)               |             | 650 kV                                |
| Rated lightning impulse withstand voltage (1.2/50 $\mu$ s)    |             | 1,425 kV                              |
| Rated switching impulse withstand voltage (250/2,500 $\mu$ s) |             | 1,050 kV                              |
| Rated normal current busbar                                   | up to       | 6,300 A                               |
| Rated normal current feeder                                   | up to       | 5,000 A                               |
| Rated short-circuit breaking current (< 2 cycles)             | up to       | 80 kA                                 |
| Rated peak withstand current                                  | up to       | 216 kA                                |
| Rated short-time withstand current (3s)                       | up to       | 80 kA                                 |
| Leakage rate per year and gas compartment                     | type-tested | $\leq 0.1\%$                          |
| Bay width                                                     |             | 3,600 mm<br>141.73"                   |
| Height, depth                                                 |             | depending on<br>bay arrangements      |
| Driving mechanism of circuit-breaker                          |             | stored-energy spring                  |
| Rated operating sequence                                      |             | O-0.3 s-CO-3 min-CO<br>CO-15 s-CO     |
| Rated supply voltage                                          |             | 60–250 V DC                           |
| Expected lifetime                                             |             | > 50 years                            |
| Ambient temperature range                                     |             | –30 °C to +55 °C<br>–22 °F to +131 °F |
| Standards                                                     |             | IEC/IEEE                              |

Other values on request

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