MV Switchgear for Distribution Network Solutions

ga

Fully gas insulated compact (RMU) system

Up to 24 kV

IEC Standards

Reliable innovation. Personal solutions.
Preface

The first ga was launched in 1985 as the most robust and compact ring main unit (RMU) range for secondary distribution networks up to 24 kV.

Since then, ga system has been continuously evolving into a more extended range with higher ratings based on our customers’ demands.

ga system is probably one of the most well-known gas insulated switchgear worldwide. Currently more than 385,000 ga functional units have been in service in more than 60 countries.

Standards

**IEC**

IEC 62271-1
IEC 62271-200
IEC 62271-100
IEC 62271-102
IEC 62271-105
IEC 61243-5
IEC 60265-1
IEC 60529

Design

1. Gas tank
2. Switching and breaking devices
3. Driving mechanism and operator interface
4. Cable compartment
5. Control box

Family

Technical data

**General**

<table>
<thead>
<tr>
<th>Rated values</th>
<th>7.2-12-17.5-24 kV</th>
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<tbody>
<tr>
<td></td>
<td>630 A</td>
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<tr>
<td></td>
<td>20 kA 1-3 s</td>
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<td>50/60 Hz</td>
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Type-tested, factory-built, metal-encapsulated enclosed, single busbar
Indoor use up to 1000* m altitude

**Ambient temperature**

Standard -5°C to +40°C*

**Loss of service continuity**

LSC 2A

**Partition class:** PM

**Internal arc class**

IAC AFL 20 kA 1s

**Functions**

1ts1a1, 1ts1a2, 1k1ts-b, 3k, 2k1ts, 2k1lsf, 4k, 3k1ts, 2k2ts

(*) Other conditions under consultation

Safety

» Internal arc tested (IAC AFL 20 kA 1s)
» Optional passive & maintenance free arc absorber technology
» All live components are inside a hermetically sealed gas tank
» Anti-reverse, mechanical / electrical interlocks to prevent unsafe operations
» Switch position and capacitive voltage presence indicators

Reliability

» Fully insulated & sealed for life
» Screened cable connectors
» Completely designed in Germany
» 100% routine tested at the factory

Efficiency

» Compact design up to four functions per gas tank
» Small size and light weight
» Easy frontal access to install and to test MV cables and fuses
» Customized protection & automation system (client specifications)

Sustainability

» End-of-life management
» Use of highly recyclable material
» No use of SF6 during installation
» Extensible units to be extended with modular versions (gae)

Continuous innovation

» Ambient temperature -5 / -25 °C
» New modules for 24 kV 20 kA 4 s
» Smart grid ready system

Note: Standard cubicle is 1400 mm height, "-C" version is 1050 mm height