BGS-12

Gas-insulated Ring Main Unit up to 12kV

Brochure | Substation Portfolio

2025

SF6-FREE GREEN GIS

Brunstock

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As an innovator in the energy industry, Brunstock represents environmentally friendly electric power system technologies. Led by a team of global power grid experts, Brunstock brings new technology to the world's energy systems. Our range includes innovative SF6-free substation products: green RMUs and green primary GIS. Brunstock is proud to represent substation switchgear that is free from the greenhouse gas sulfur hexafluoride (SF6). Our secondary switchgear ranges from 12kV to 36kV, 1250A 31.5kA.

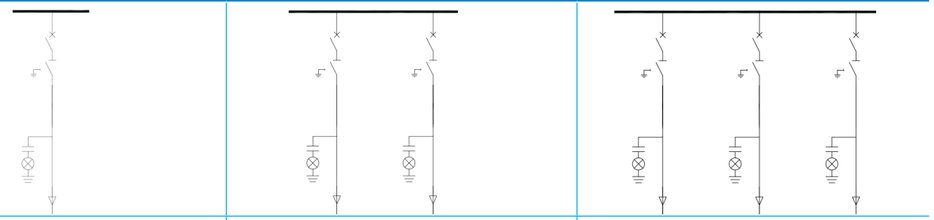
The BGS-12 (Brunstock Gas-insulated Secondary switchgear rated to 12kV) features vacuum switching and SF6-free sealing technology. The main circuit/high-voltage components are sealed in a gas tank. It is suitable for operation under harsh environmental conditions, such as dust, humidity, saline air and even at high altitude.

The standard size of BGS-12 is 450mm wide x 800mm deep. Its compact footprint makes it a flexible solution that can be widely applied. You will find it in the switchroom kiosks of renewable energy sites, such as wind and solar farms, as well as in utility and infrastructure applications.

Benefits of BGS-12

- Environmentally friendly
- Cost efficient
- Maintenance free
- Safe and reliable
- Compact
- Operational continuity
- Fast delivery

Typical Solutions



V	VV	VVV

Technical Data

Rated Voltage	kV	12
Rated Main Busbar Current	A	630
Rated Circuit Breaker Current	A	630
Power Frequency Withstand Voltage	kV (1 min)	42
Lightning Impulse Voltage	kV Peak	95
Short-time Withstand Current	kA/s	20/3
Peak Withstand Current (50Hz)	kA	50
Rated Filling Pressure at 20°C	MPa	0.32
Gas Leakage	%/year	≤ 0.01
Rated Operating Sequence		O-0.3s-CO-180s-CO
Internal Arc Classifcation	kA/s	AFLR 20/1
Partial Discharge (interval)	pC	≤ 10

Environmental Conditions

Ambient Temperature	°C	-5 to +40 *
Altitude	m	≤2,000 above sea level *
Relative Humidity	%	Daily Average ≤98

Dimensions

Width	450mm
Depth	800mm
Height	2250mm

* Note: for further ambient temperature range or higher altitude, please consult your Brunstock representative.

Performance Features

- Type tested according to IEC62271-100, IEC62271-200
- Metal enclosed, partition class PM
- Loss of service continuity category: LSC2B
- Protection index: Gas tank IP67, enclosure IP4X
- Mechanical endurance: Circuit Breaker 10,000 (M2), three-position disconnector/earthing switch 5000 (M2)

IEC 62271-100
62271-103
62271-105
62271-200

Applications of Brunstock's Gas-insulated Secondary Switchgear

Renewable energy is at the forefront of saving the planet. Technological innovation in switchgear and power transformers is key, and this is at the heart of the Brunstock Electric offering. BGS-12 is one of our SF6-free gas insulated switchgear, a range that paves the way for you to enjoy a cleaner, greener footprint in your power transformation, distribution, storage and utilisation projects.

Our representatives service the renewables, utilities, infrastructure, oil and gas, and mining industries with power conversion and distribution solutions to suit their project timeframes and budgets. We use our deep understanding of power engineering and manufacturing to offer world-class renewable energy products.

Secondary collector station (MV substation kiosk)

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