



BGS-40.5

SF6 Free Ring Main Unit up to 40.5kV 1250A 31.5kA

Brochure

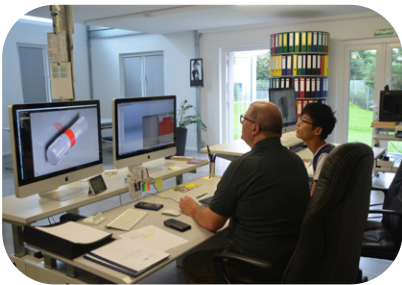
2024



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Brunstock



Innovative Technology, SF6 Free RMU

Originating in Switzerland, the Brunstock brand represents power distribution systems and solutions for the global IEC market. Our innovative environmentally friendly medium voltage switchgear is free from greenhouse gases. It is available in secondary ring main units (RMU) ranging from 12kV to 40.5kV, 1250A, 31.5kA.

The BGS-40.5 (**B**runstock **G**as-insulated **S**econdary switchgear rated in **40.5kV**), adopts vacuum switching and SF6 free insulation technology, seals its main circuit/high-voltage components in the gas tank, is suitable for operation under harsh environmental conditions, such as dust, humidity, saline air and even high altitude.

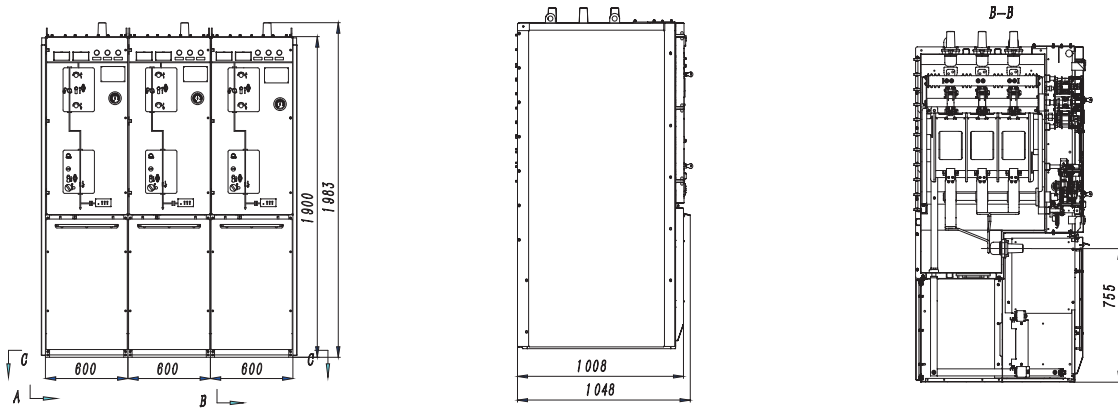
The product has the standardised unit width of 600mm and a depth of 1000mm. Its compact footprint makes it a flexible solution that can be widely applied. You will find it in all kinds of kiosks in renewable wind/solar farms, utility, airports and railways.

Benefits of BGS-40.5

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



Typical Configuration by circuit breaker



Technical Data

Rated voltage	kV	40.5
Rated main busbar current	A	1250
Rated circuit breaker current	A	630, 1250
Power frequency withstand voltage	kV (1 min)	95
Lightning impulse voltage	kV Peak	185
Short-time withstand current	kA/s	31.5/4
Peak withstand current (50Hz)	kA	80
Rated filling pressure at 20°C	MPa	0.13
Gas leakage	%/year	≤ 0.01
Rated operating sequence		O-0.3s-CO-180s-CO
Internal arc classification	kA/s	AFLR 31.5/1
Partial discharge (interval)	pC	≤ 20@ 1.1 Ur

Environmental conditions

Ambient temperature	°C	-25 to +40 *
Altitude	m	≤3,000 above sea level *
Relative humidity	%	Daily Average ≤98

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

Dimensions

Width	600mm
Depth	1000mm
Height	2250mm

Performance Features

- Type tested according to IEC62271-100, IEC62271-200
- Metal enclosed, partition class PM
- Loss of service continuity category: LSC2
- Protection index: Gas tank IP67, enclosure IP4X
- Mechanical endurance: circuit breaker 20,000 times, three-position disconnect/earthing switch 3,000 times.



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





Applications

Renewable energy is at the forefront of saving the planet. Technological innovation in green switchgear and power transformers is key, and this is at the heart of the Brunstock offering. BGS-40.5 is one of our SF6-free gas insulated switchgear series, which paves the way for you to enjoy a cleaner, greener footprint in your power, distribution, storage and utilisation projects.

Our representatives service the renewables, utilities, infrastructure, oil and gas, and mining industries with Brunstock's packaged solutions customised to suit their project timeframes and budgets. We love using our deep understanding of power engineering and manufacturing to offer world-class renewable energy products.



Secondary collector station

Doc. No: BRMK 550001

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