



# BGS-40.5

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

Brochure

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### 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.

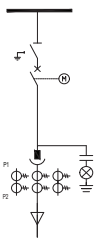
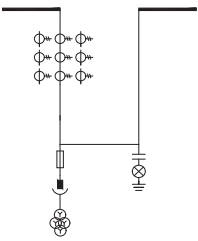
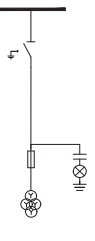
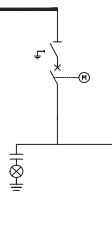
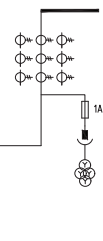
This switchgear panel has a usual width of 600mm and a depth of 1000mm. Its compact footprint makes it a flexible solution that can be widely applied, including in all kinds of substation kiosks in renewable energy plants, utility applications, airports and railways.

#### Benefits of BGS-40.5

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



## Typical Configuration

Names	V	M	PT	Bus Section	Bus Riser
Size (W*D*H)	600*1300*2200	800*1300*2200	800*1300*2200	600*1300*2200	800*1300*2200
Functions	Circuit-breaker	Metering	Busbar VT	Bus section	Bus riser
					

## Technical Data

Rated voltage	kV	40.5
Rated main busbar current	A	1250
Rated circuit breaker current	A	1250
Power frequency withstand voltage	kV (1 min)	95/118
Lightning impulse voltage	kV Peak	185/215
Short-time withstand current	kA/s	31.5/4
Peak withstand current (50Hz)	kA	80
Rated filling pressure at 20°C(abs)	MPa	0.32
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	≤ 10@ 1.1 Ur

## Environmental conditions

Ambient temperature	°C	-40 to +55 *
Altitude	m	≤5,500 above sea level *
Relative humidity	%	Daily Average ≤95

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

## Dimensions

Width	600mm
Depth	1300mm
Height	2200mm

## Performance Features

- Type tested according to IEC62271-100, IEC62271-200
- Metal enclosed, partition class PM
- Loss of service continuity category: LSC2A
- Protection index: Gas tank IP67, enclosure IP4X
- Mechanical endurance: Circuit Breaker 10,000 (M2), three-position disconnect/earthing switch 5000 (M1)



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 project.

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.



Switchgear inside a secondary substation kiosk

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