Built on innovation and experience

GHA gas-insulated switchgear up to 40.5 kV

Explore

Life Is On | Schneider Electric

Meet GHA, the “simply reliable” switchgear

GHA is not a common switchgear. It combines simplicity, intuitiveness, and high reliability in a single package, bringing improved safety and performance to MV distribution in practically any business.

GHA is designed for environmental friendliness and recyclability, making full life-cycle planning easier. It also incorporates a number of innovative features that simplify installation and operation.

The sum of these features and benefits is a switchgear that reliably does its job and simplifies yours, reducing your total cost of ownership. Which is simply good for business.

GHA at a glance

GHA switchgear is a perfect fit for:

- Mining, Minerals & Metals
- Public Utilities & Network Operators
- Oil & Gas
- Offshore Wind
- Railway
- Industry
- Buildings

Meet GHA, the “simply reliable” switchgear

GHA at a glance

- Gas-insulated switchgear for primary distribution
- Rated up to 40.5 kV, 2500 A, 40 kA-3s
- Single or double busbar
- Designed for “next to wall” installation
- Delivered ready to connect
- Innovative B-Link busbar
- Inner and outer cone cable connection
- Current and voltage transformer on busbar and cable side
- Available as an 1- and 2-phase solution for Railway application
- Intelligent Gas Density Information System (IDIS)

What does GHA offer your business?

Compact and modular, with vacuum circuit breaker technology, the innovative GHA switchgear brings a host of benefits to owners and operators of MV distribution networks. These include:

Simplicity

- Ready-to-connect
- Innovative B-Link busbar
- Cable outer-cone connection system

Compactness

- Compact footprint
- Optimised dimensions

Safe, reliable performance

- Safe, intuitive operation
- Intelligent Gas-Density System
- Mechanical interlocks

Environmental friendliness

- Tightness test in the manufacturing site
- No gas-handling on site
- Recovering valve

Reduced total cost of ownership

GHA SBB

GHA DBB

GHA Rail

A convenient, innovative switchgear solution

GHA is 100 per cent factory assembled, with all testing performed prior to delivery. For example, no O-ring or gas handling is needed on site thanks to a routine tightness test. That means you get a ready-to-connect switchgear, with no on-site assembly required, increasing the safety and simplicity of installation and commissioning.

Here are two innovative elements of GHA's design that make it even easier to add to your network:

- The B-Link busbar link
- The inner/outer-cone cable connection system

GHA is ready to connect

without on-site assembly

GHA arrives ready-to-go

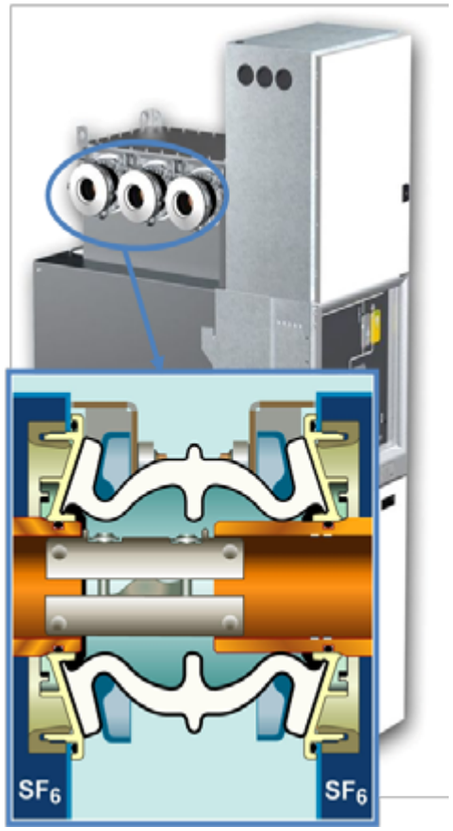
Busbars done right

The GHA busbar link, the B-Link, is a smarter, simpler approach to connecting both single- and double-busbar switchgear. The busbar system, just like the gas-filled compartments, does not require any on-site maintenance – the switchgear is routinely tested for tightness and delivered “sealed for life”.

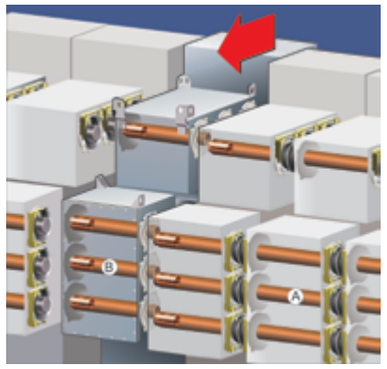
B-Link also makes installation easier and safer in harsh environments. Its durable insulation helps ensure high availability throughout its service life.

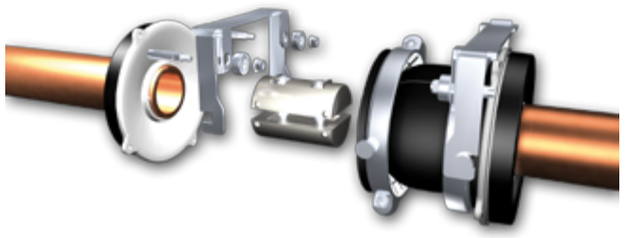
The potential-controlled, externally grounded and flexible connecting sleeves of the B-link system boast an outstandingly simple assembly and minimum electrical field intensities in the high-quality electrical joints.

In case of a serious malfunction, a quick re-commissioning of the “sound” busbar sections can be performed.



B-Link busbar link


B-Link lets you move a switchgear panel within the switchboard row without gas handling

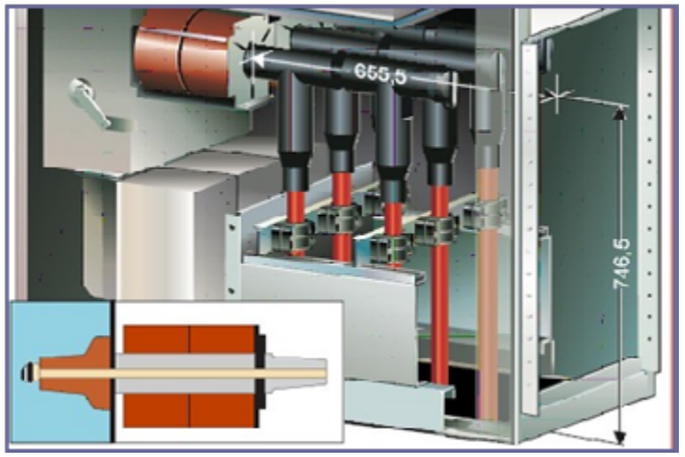

Rapid assembly: B-Link assembles in a blink

Flexible options for cable connections

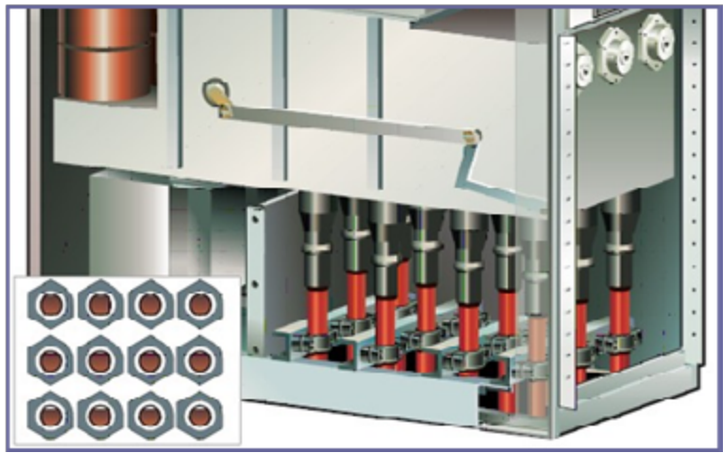
GHA switchgear offers two types of cable connection to fit your needs: outer-cone and inner-cone.

The outer-cone type offers state-of-the-art technology for MV distribution up to 36 kV. Outer-cone connections also improve accessibility and ease of operation, thanks to the convenient height of the cable connection and flexibility in number of cables used.

For special applications, the GHA can be equipped with inner-cone cable connection.



Outer-cone connection



Inner-cone connection

Enhanced safety and reliable performance

GHA switchgear are designed for safe, reliable performance in practically any environment. All high-voltage components are gas-insulated and hermetically sealed, increasing availability and enhancing safety for both operators and equipment.

Here are two ways GHA switchgear contribute to safety and reliability of any operation.

Tested 40 kA-1s
internal arc classification
for personal safety

- Intuitive operation
- Intelligent gas-density information system
- Performance ratings for GHA switchgear

GHA switchgear are designed for easy monitoring and maintenance

Enhanced safety and reliable performance

GHA switchgear, rated performance

Rated voltage	kV	12	17.5	24	36	38	40.5
Rated lightning impulse withstand voltage	kV	75	95	125	170	170	185 (190)
Rated power frequency withstand voltage	kV	28	38 (42)	50	70	80	85 (95)
Rated peak withstand current, max	kA	100					
Rated short-time current, t=3 s, max	kA	40					
Rated current of busbar, max	A	2500*					
Rated current of outgoing feeders, max	A	2500					
Internal arc classification IAC AFL or AFLR duration 1 second	kA	40					

*higher data on request

Standard and complaince information:
IEC & IEEE, ENA (UK), CSA (Canada), UL (USA), INAIL (Italy), Taiwan 401, GOST (Russia), Shell DEP, Railway standards Seismic and Vibration tested, others on request

An intuitive, user-friendly interface

With its intuitive, simple interface situated at a convenient height, GHA is highly user-friendly. All functions and indicators are easy to access, while operating status is clearly indicated on the front of the switchgear:

- Circuit breaker ON / OFF
- Three position switch: connected, isolated, earthed

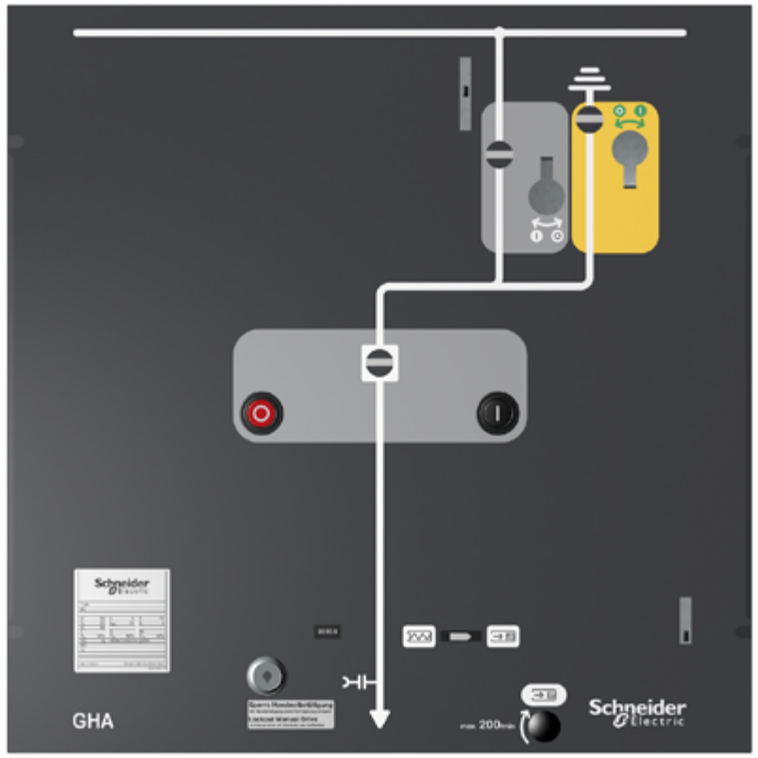
The comprehensive interlocking system significantly reduces the potential for operator error. An optional exhaust duct, available for both single- and double-busbar models, brings an additional level of safety.

GHA SBB

GHA double busbar

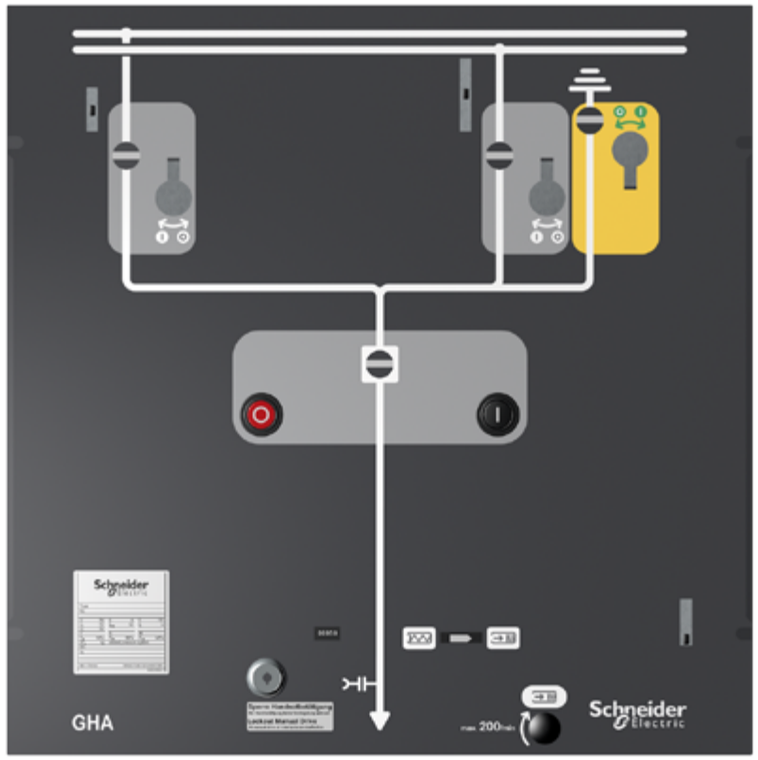
GHA DBB

An intuitive, user-friendly interface



GHA single busbar

An intuitive, user-friendly interface



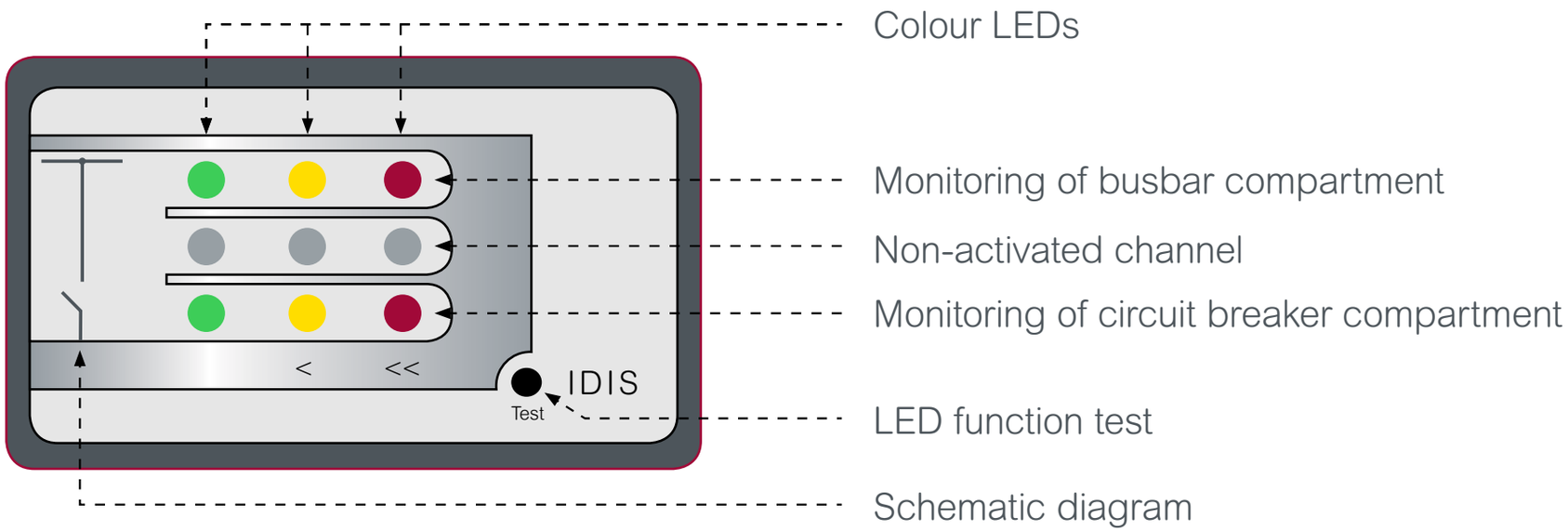
GHA double busbar

Intelligent gas monitoring

GHA's intelligent gas-density information system (IDIS) gives operators enhanced visibility of the switchgear's condition. IDIS monitors each gas-filled compartment using pressure sensors and displays the status of each compartment separately.

Thanks to this system, there's no need for gas pipes within the panel or between panels.

Fully leakage tested
prior to delivery

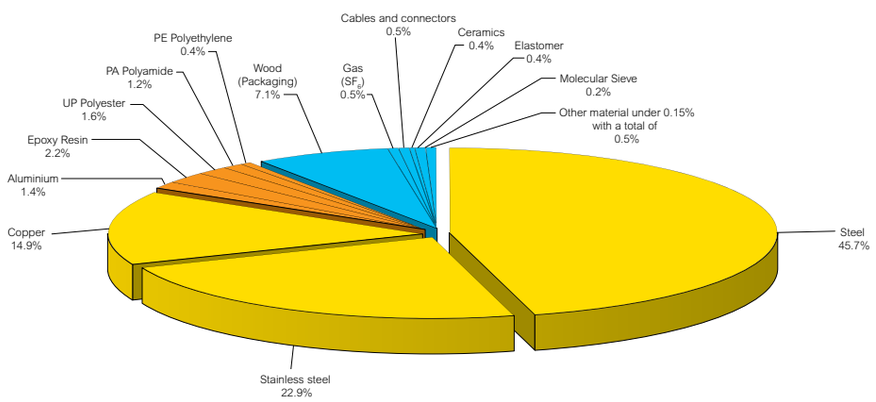


Designed to minimise environmental impact

From the beginning to the end of its life cycle, a GHA switchgear has a minimal environmental impact. Each unit is sealed, tested, and validated for leakage prior to delivery, helping to ensure that no environmentally harmful leakage occurs during installation or operation.

Although designed for a long service life, GHA is manufactured with end-of-life planning in mind. Most of the equipment is fully recyclable, and it is delivered with Product Environmental Profile documentation. The hermetically sealed gas-filled chambers include a gas recovery valve for end-of-life disposal.

Optimised material and energy consumption during manufacturing boost GHA's green credentials

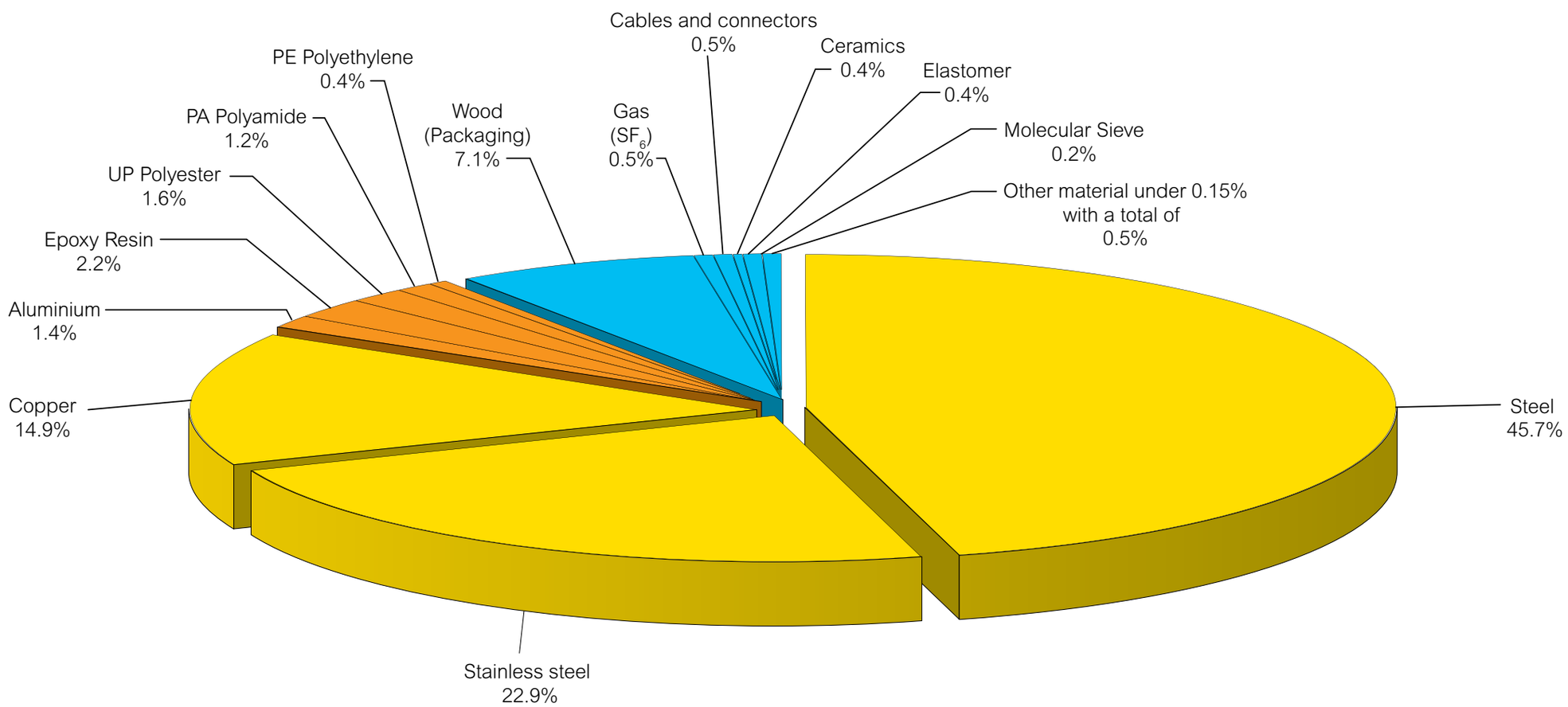


GHA gas-insulated switchgear constituent materials

Click here to download the full Product Environmental Profile of the GHA gas-insulated switchgear.

Designed to minimise environmental impact

GHA gas-insulated switchgear constituent materials



A natural fit for your business

GHA switchgear are compact and designed for standard wall-mounting, without an assembly aisle. All operating and maintenance actions can be performed from the front side.

A natural choice to replace older switchgear, GHA units fit into both existing and new electrical rooms with ease. Their reduced footprint also helps optimise investment costs.

Click variants to see dimensions:

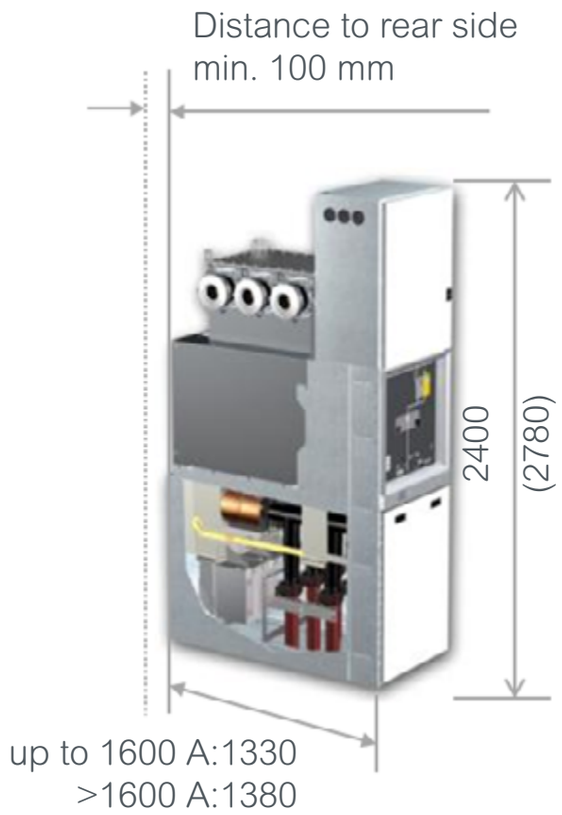
- Single busbar for rear wall installation
- Single busbar with exhaust duct for free-standing installation
- Double busbar for rear wall installation
- Double busbar with exhaust duct for free-standing installation

Dimensions single busbar (SBB)

Circuit-breaker feeder for rear wall installation

Feeder current	Width in mm			
	Feeders with cable connection		Bus-coupler	Bus sectionalizer (1)
	Outer cone	Inner cone	in 1 panel width	
				
up to 1250 A	600	600	800	600
> 1250 A up to 2000 A	800			
2500 A	900	900	1000	

(1) Bus sectionalizer with 1 disconnector



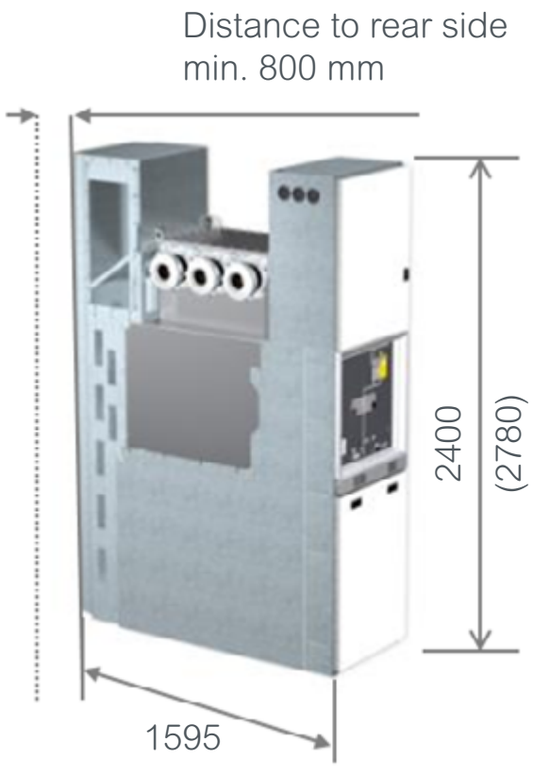
GHA SBB

Dimensions single busbar (SBB)

Circuit-breaker feeder with exhausting duct for free-standing installation

Feeder current	Width in mm			
	Feeders with cable connection		Bus-coupler	Bus sectionalizer (1)
	Outer cone	Inner cone	in 1 panel width	
				
up to 1250 A	600	600	800	600
> 1250 A up to 2000 A	800			
2500 A	900	900	1000	

(1) Bus sectionalizer with 1 disconnector

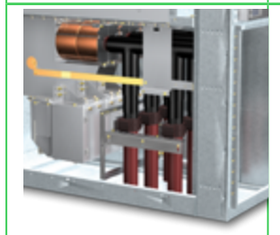
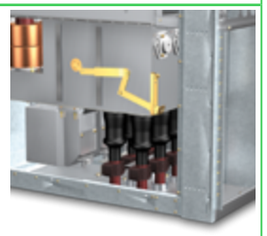


GHA SBB

A natural fit for your business

Dimensions double busbar (DBB)

Double busbar for rear wall installation

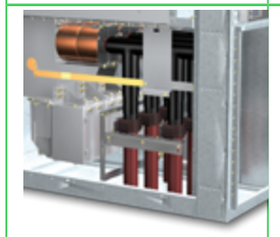
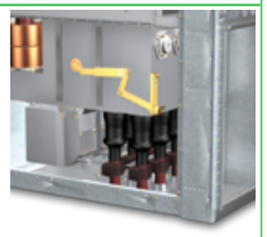
Feeder current	Width in mm			
	Feeders with cable connection		Bus-coupler	Bus sectionalizer (1)
	Outer cone	Inner cone	in 1 panel width	
				
up to 1250 A	600	600	800	800
> 1250 A up to 2000 A	800			
2500 A	900	900	1000	1000

(1) Bus sectionalizer with 1 disconnector

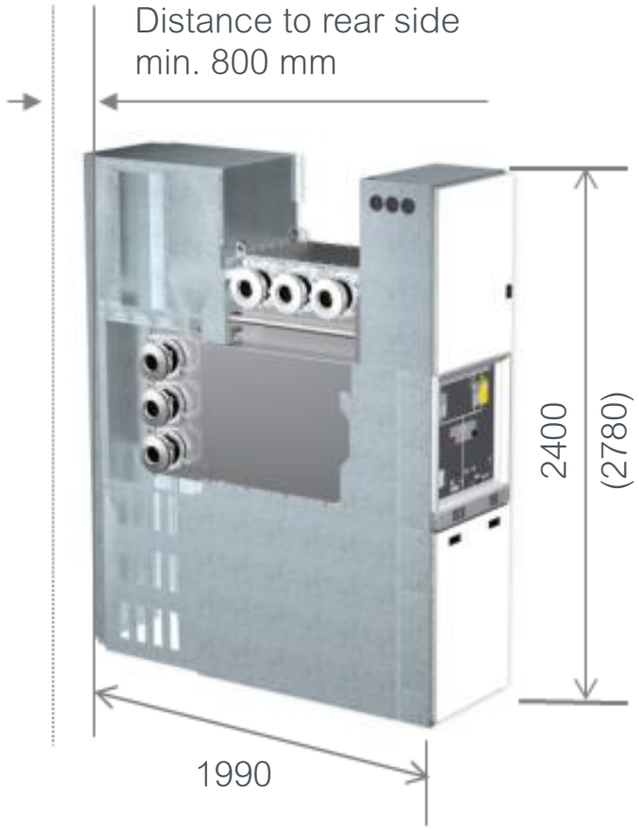
GHA DBB

Dimensions double busbar (DBB)

Circuit-breaker feeder with exhausting duct for free-standing installation

Feeder current	Width in mm			
	Feeders with cable connection		Cross-coupler	Bus coupler (1)
	Outer cone	Inner cone	in 1 panel width	
				
up to 1250 A	600	600	600	800
> 1250 A up to 2000 A	800			
2450 A	900	900	900	1000

(1) Bus coupler with 1 busbar system



GHA DBB

Find out more about GHA gas-insulated switchgear, now!

Discover Schneider Electric's comprehensive offer for medium voltage distribution!

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