

T168

Gas-Insulated Substations 550 kV, 63 kA, 6 300 A

GE makes the most of 50 years of experience in design, material selection, development, engineering, manufacturing and servicing of gas-insulated substations.

GE's T168-550 kV GIS meet the challenges of networks up to 550 kV for all applications: power generation, transmission and heavy industry.

Availability is critical for 550 kV networks and industrial processes

- Reliability is founded on GE's extensive experience at 550 kV
- Current transformers are outside SF₆
- Controlled switching of the circuit-breaker reduces stress on the equipment

Safety is essential

- Accessibility: all drives and accessories are within easy reach

T168-550 kV leverages more than 50 years of GIS experience

- More than 570 bays of 550 kV GIS installed in 13 countries



Compact 550 kV GIS

- Bay volume reduced by 12% vs previous version
- Low Cost of Land and Civil Works

Optimized Asset Utilization

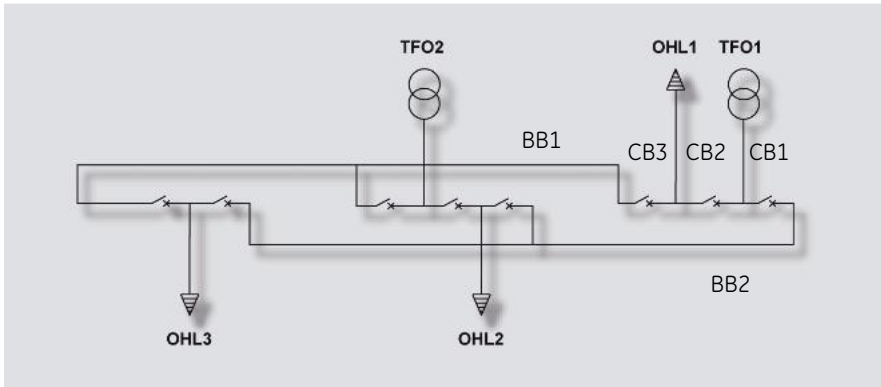
- Full-digital monitoring, control and protection
- Advanced monitoring systems enhance management by anticipating events

Environmental Friendliness

- Gas mass reduced by 6 % compared with previous version
- State-of-the-art and patented sealing system to prevent gas emissions
- Digital gas monitoring system enables to keep gas emissions at the lowest



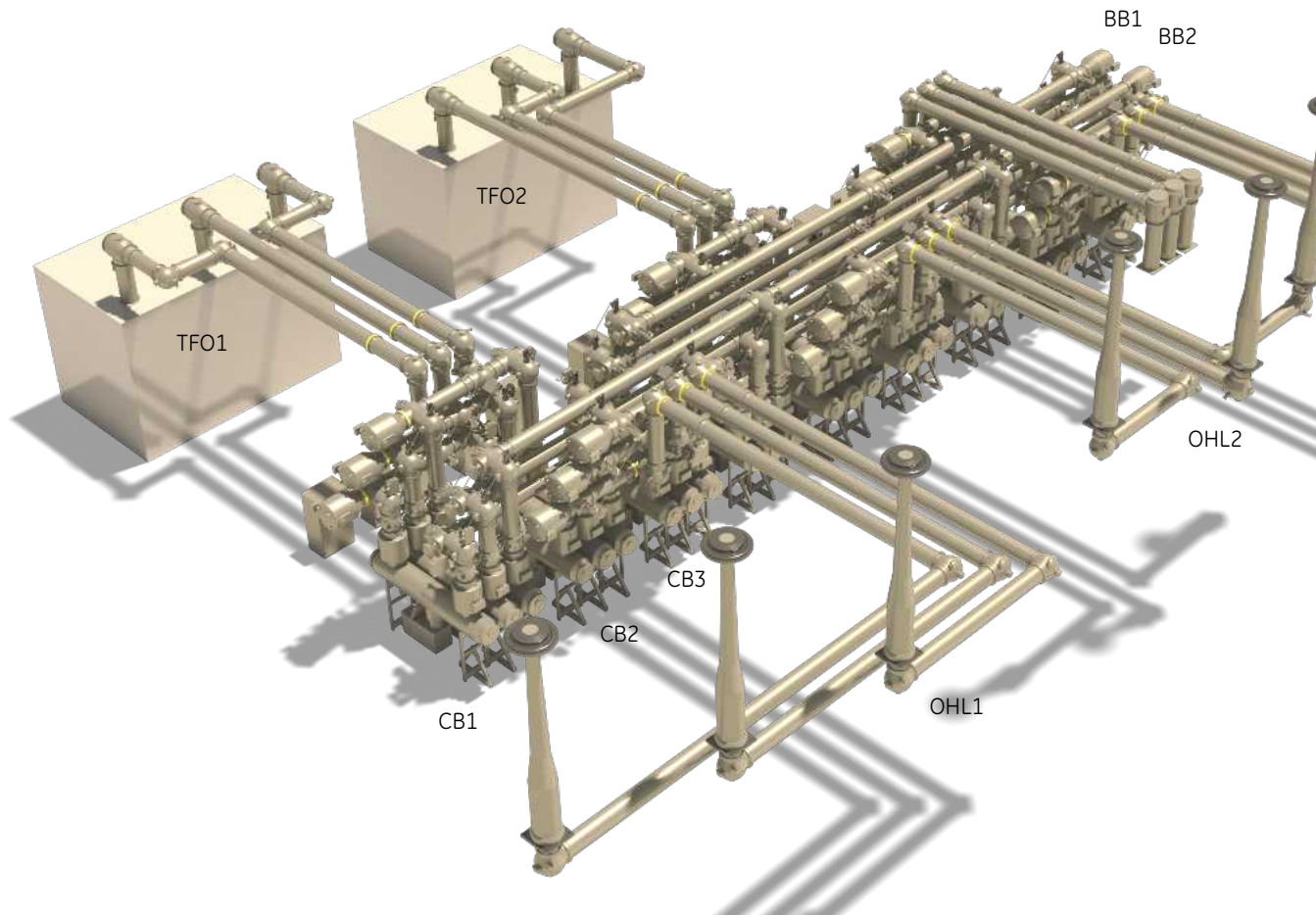
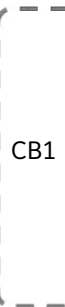
T168-550 kV, 63 kA, 6 300 A - One-and-a-half circuit-breaker diagram

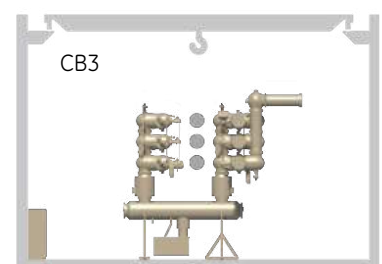
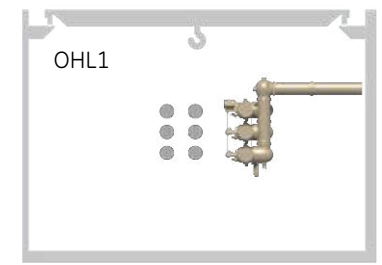
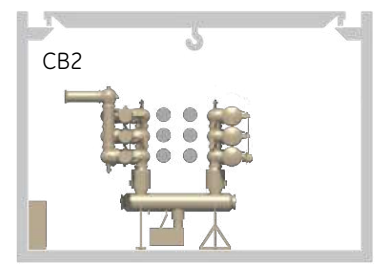
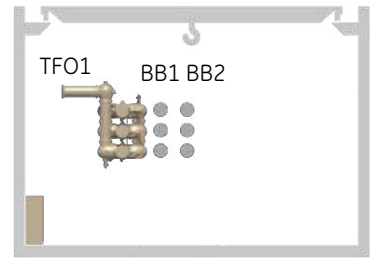
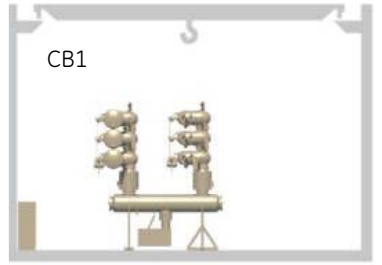
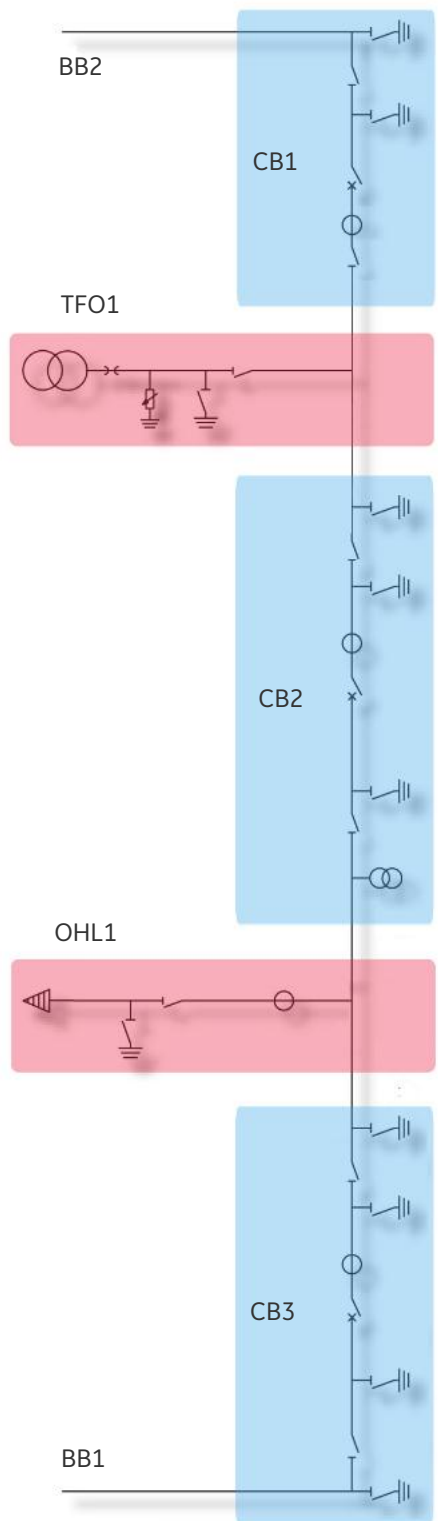
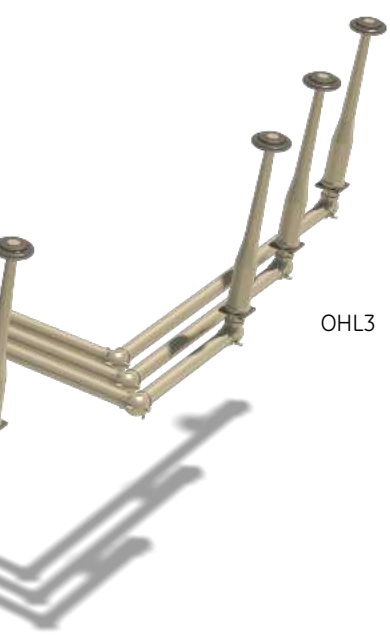
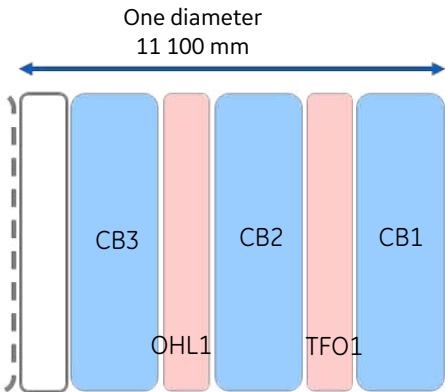


Bay width: 2 700 mm

Also available :

- Other single-line diagrams
- Specific layouts





Ratings

Bay		
Reference electrotechnical standards		IEC / GB
Voltage	kV	550
Withstand voltages		
Short-duration power-frequency, phase-to-earth / across open switching device	kV	740 / 740 (+315)
Switching impulse, phase-to-earth / across isolating distance	kVp	1 300 / 1 175 (+450)
Lightning impulse, phase-to-earth / across open switching device	kVp	1 675 / 1 675 (+450)
Frequency	Hz	50 / 60
Continuous current	A	up to 6 300
Short-time withstand current	kA	63
Peak withstand current	kAp	170
Duration of short-circuit	s	3
Installation		indoor / outdoor

Circuit-Breaker

First-pole-to-clear factor		1.3
Short-circuit breaking current	kA	63
Short-circuit making current	kAp	170
Operating sequence		O - 0.3 s - CO - 3 min - CO / CO - 15 s - CO
Capacitive switching	class	C2

Disconnecter and Low-Speed Earthing Switch

Capacitive current switching	A	0.5
Bus-transfer current switching capability	A / V	up to 4000 / 100

Make-Proof Earthing Switch

Making current capability	kAp	170
Switching capability - electromagnetic coupling	A / kV	up to 200 / 25
Switching capability - electrostatic coupling	A / kV	up to 50 / 50

Other data available on request.

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Imagination at work