

Power Xpert XGIS
Gas-insulated medium voltage switchgear

This small footprint makes a BIG impact

Saving space is just one benefit
of our gas-insulated switchgear.



EATON

Powering Business Worldwide

Big where it matters, small where it counts.

Critical power applications don't leave any room for error. Mistakes or substandard functioning can be costly and dangerous. That's why you need switchgear that is built to perform — and to last. Eaton switchgear products are a compelling, long-term value, backed by over a century of industry experience.

We have expanded our market leading medium voltage switchgear portfolio to give you more options than ever before. Our Power Xpert XGIS™ gas-insulated switchgear is one that is small in size and big in value, benefits that any business can appreciate.

Our system could be your best choice in meeting the precise demands of your application. From its compact design to enhanced safety and low maintenance requirements, you owe it to yourself to see what Power Xpert XGIS switchgear can do for you.

- Compact design enables use in small spaces
- So reliable it's virtually maintenance-free
- Excellent arc protection improves safety
- Reduces installation and operating costs
- Provides a low total cost of ownership

See if Eaton's gas-insulated switchgear is the right fit for your company.

Oil & gas industrials

Power Xpert XGIS switchgear is built to withstand harsh and corrosive environments and to improve safety. Its high reliability and reduced maintenance mean less downtime, one of the most costly issues you face. In addition, the compact footprint creates savings for e-houses and off-shore applications, and the low total cost of ownership offers an overall outstanding value.

Data centers

You invest for the long term. Power Xpert XGIS switchgear's low total cost of ownership improves returns on your data center investment, and the small footprint means you're not wasting revenue-generating space. Designed for greater safety, XGIS lowers risk for your operation.

Utilities

The high reliability and limited maintenance of Power Xpert XGIS switchgear reduces costly downtime. The compact design allows installation in congested areas and saves on e-house costs. The switchgear's gas insulating technology and smart design decreases risk for your operation.

Mining

Power Xpert XGIS switchgear is built to withstand harsh and demanding environments — and designed to enhance safety. With its high reliability, reduced maintenance, and low total cost of ownership, Power Xpert XGIS switchgear offers outstanding long-term value.

Infrastructure

Designed with a focus on safety, Power Xpert XGIS switchgear reduces risk for your operation. The equipment's high reliability and limited maintenance reduces costly downtime, and the small footprint allows installation in tight spaces.

Gas-insulated switchgear features & benefits



**Safer is smarter
for your
operation**



**Virtually
maintenance-free
for maximum
reliability**



**Small footprint
and compact
design**

Design overview

Power Xpert XGIS switchgear provides a winning combination of customers' most-wanted features that give extraordinary value in safety, reliability and space savings — with no sacrifice of functionality.

Front-accessible

IP4X rated enclosure includes space for mounting low voltage protection and metering devices and allows safe access for breaker and switch isolation operations to be performed from the front of the gear.



Arc rated

In the event of an arc flash incident, arc-gases do not need to discharge into the cable vault, reducing the risk of propagating damages, and increasing safety.



Main bus

Shielded and grounded solid insulation main bus system eliminates the need for a second gas tank to house the bus, improving reliability.

Single sealed tank

The breaker, isolating switch and optional ports to connect VTs, are all contained within a single, SF₆-filled, laser welded tank for a high quality seal with no on-site filling required.



Safer is smarter for your operation

Workforce safety is the number one concern for business. By design, construction and operation, Power Xpert XGIS switchgear reduces risk for your operation.

- Robust construction and decreased potential for arc faults provides enhanced safety
- Completed internal arc testing in all medium voltage areas including cable, breaker, switch and main bus compartments
- Certified as arc classification AFLR (31.5kA for 1 sec) to increase safety
- Shielded and grounded, solid-insulated busbars provide phase-to-phase isolation, minimizing the risk of phase-to-phase faults



Safe Handling

Modular busbars are solid-shielded to facilitate connection and removal reducing risk for accidental contact



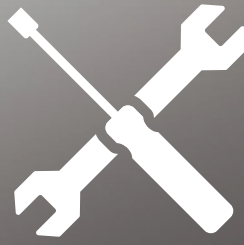
Visible line of site to three position disconnect switch with camera options



Isolated fused or non-fused VTs available for both main bus and cable applications



Interlocked three position disconnect switch for isolating and earthing with electric operation



Virtually maintenance-free for maximum reliability

Downtime is costly especially when unforeseen. Gas-insulating technology dramatically reduces maintenance requirements.

- Virtually maintenance-free solution is an impressive long-term value with a low total cost of ownership
- UL witnessed and STL certified to IEC 62271-100 and -200
- Designed and tested in third-party labs to IEC and IEEE standards
- Expected lifespan is up to 40 years
- Medium voltage parts are enclosed within a sealed gas-insulated tank or encased in grounded solid insulation, protecting them from accidental contact and the environment



Straightforward installation

The laser welded gas tank is factory-filled with no on-site handling of SF6 gas required, making installation quick and less costly.

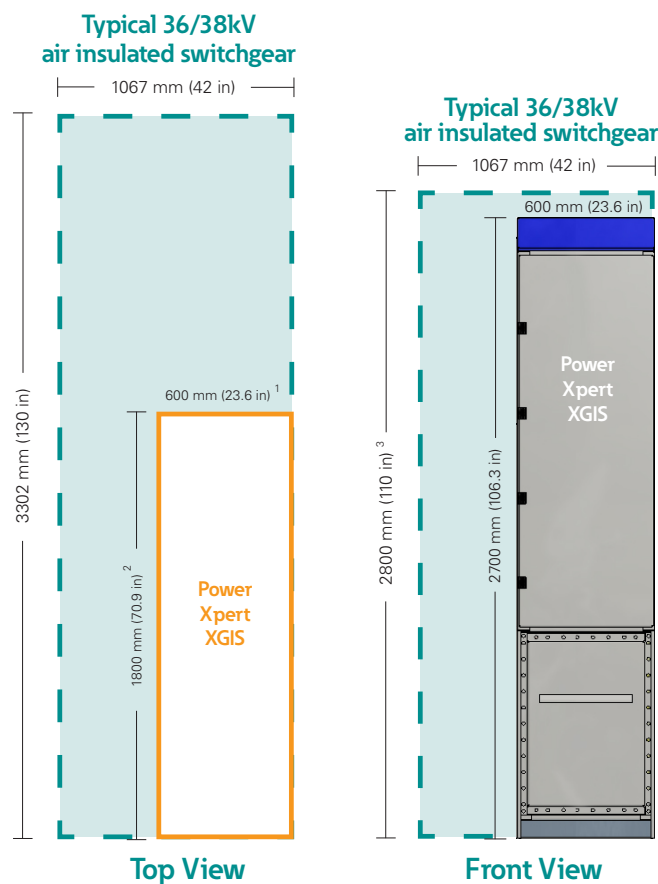


Circuit breaker and three position disconnect switch are housed in a sealed tank design of IP65 rating to ensure highest protection against contamination.

Small footprint

Many applications have limited space to work. Power Xpert XGIS switchgear fits the often tighter spaces of urban and existing buildings.

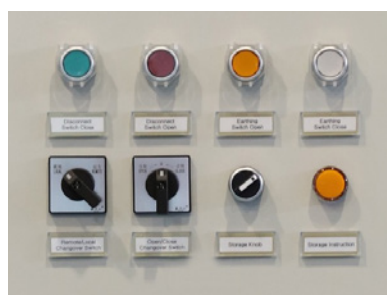
- System's compact design allows installation in areas with minimal floor space
- Small footprint means you don't waste revenue-generating space
- Compact design is suitable for retrofitting into existing locations including urban areas where space is at a premium



¹ Width for 1250A is 600 mm (23.6 in), 2000A is 800 mm (31.5 in), consult factory for higher ratings

² Includes provision for venting potential arc gases to the plenum

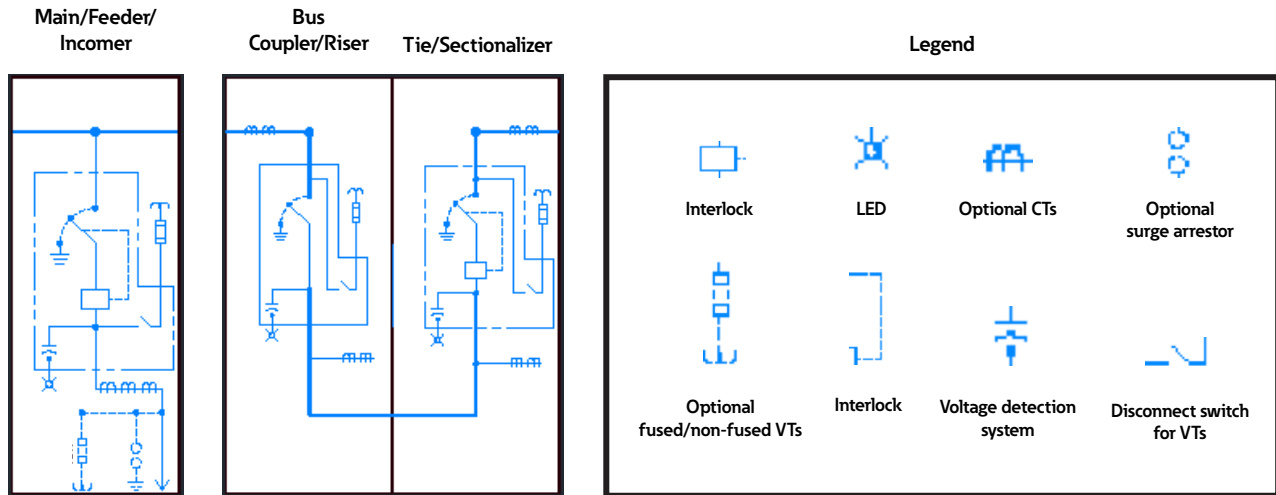
³ An arc-resistant metal clad AIS would add approximately 750 mm or 30 inches to the height



Small but accessible

Breaker and three position disconnect switch operations are performed from the front of the switchgear with a user-friendly interface, making it intuitive for personnel to operate.

Configurations and Electrical data



Also available with sectionalizer/tie on left

System		Value
Rated voltage	kV	36/38
Lightning impulse withstand voltage	kV	170
Power frequency withstand voltage	kV	80
Rated frequency	Hz	50/60
Internal arc class		AFLR
Loss of service continuity category		LSC2B
Earthing circuit	kA - 3 s	31.5
Accessibility of compartments		
Circuit breaker compartment		Interlock-controlled
Busbar compartment		Tool-based/non-accessible
Cable compartment		Tool-based or interlock-controlled
External degree of protection		Available with IP4X
Primary live parts (tank) degree of protection		IP65
Installation		Indoor
Busbar system		
Rated normal current	A	1250, 2000*
Rated short-time withstand current	kA - 3 s	31.5
Rated peak withstand current	kA	82
Circuit breaker ratings		
Rated normal current	A	1250, 2000
Rated short-circuit breaking current	kA	31.5
Rated short-circuit making current	kA	82
Rated short-time withstand current	kA - 3 s	31.5
Breaking number of short-circuit current		30
Mechanism		
Rated operating sequence	A	0 - 0.3s - CO - 15s - CO

*Consult Eaton representative for higher ratings

Operating conditions

Normal operating conditions, according to IEC 62271-1 for indoor switchgear.

Ambient air temperature and humidity

Less than or equal to 40°C (104°F)
 Less than or equal to 35°C (95°F) on average over 24 hours
 Greater than or equal to -5°C (23°F)
 Relative humidity (for a period over 24 hours) < 95%

Altitude

Less than or equal to 1000 m**

Storage Conditions

In order to retain all of the functional units qualities when stored for prolonged periods, we recommend that the equipment is stored in its original packaging, in dry conditions sheltered from the sun and rain at a temperature of between -25°C and +55°C

**Consult Eaton representative for applications higher than 1000 m

Exceptional service, globally networked

Eaton's network serves the world, bringing you global expertise and local support. Our global footprint provides the breadth of solutions customers need for most applications. We offer a global network of installation and support from responsive, local professionals. Our regional application, engineering and manufacturing teams can offer custom solutions to fit your specific needs. Whether it be for turnkey design, start up and commissioning or field service, Eaton will be there to support you every step of the way.

Learn more at Eaton.com/XGIS

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Printed in USA
Publication No. BR022010EN / NFM
September 2018

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