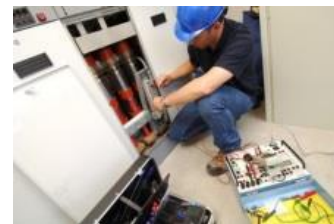


XIRIA MV Switchgear and Ring Main Units

Dakalo Dama
Business Development
AMEU

Power Distribution Division

Provides safe, reliable and innovative LV & MV power distribution solutions to residential, commercial, industrial and utility customers



**Medium Voltage
Primary Switchgear**

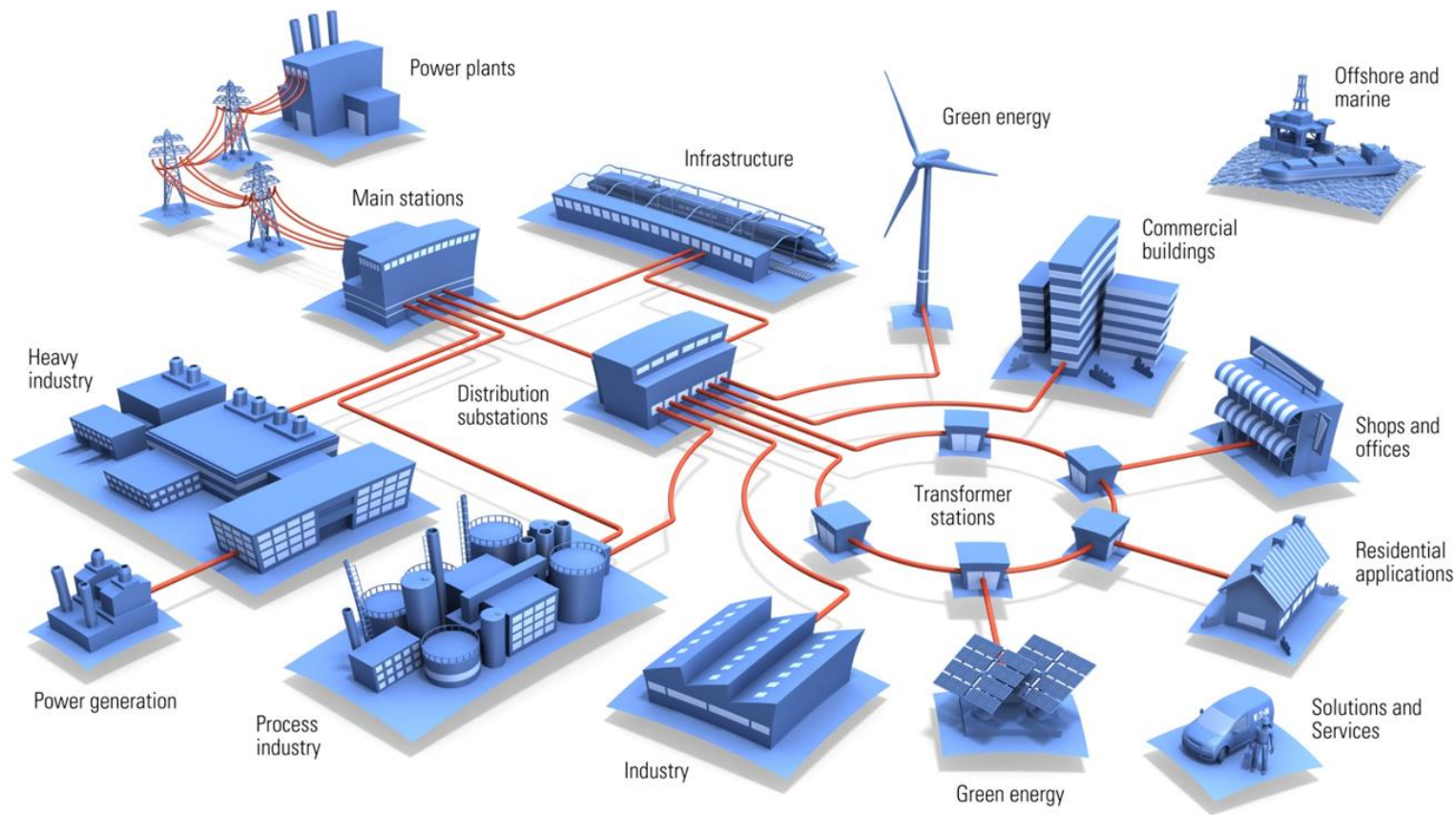
**Medium Voltage
Secondary Switchgear**

**Medium Voltage
Ring Main Units**

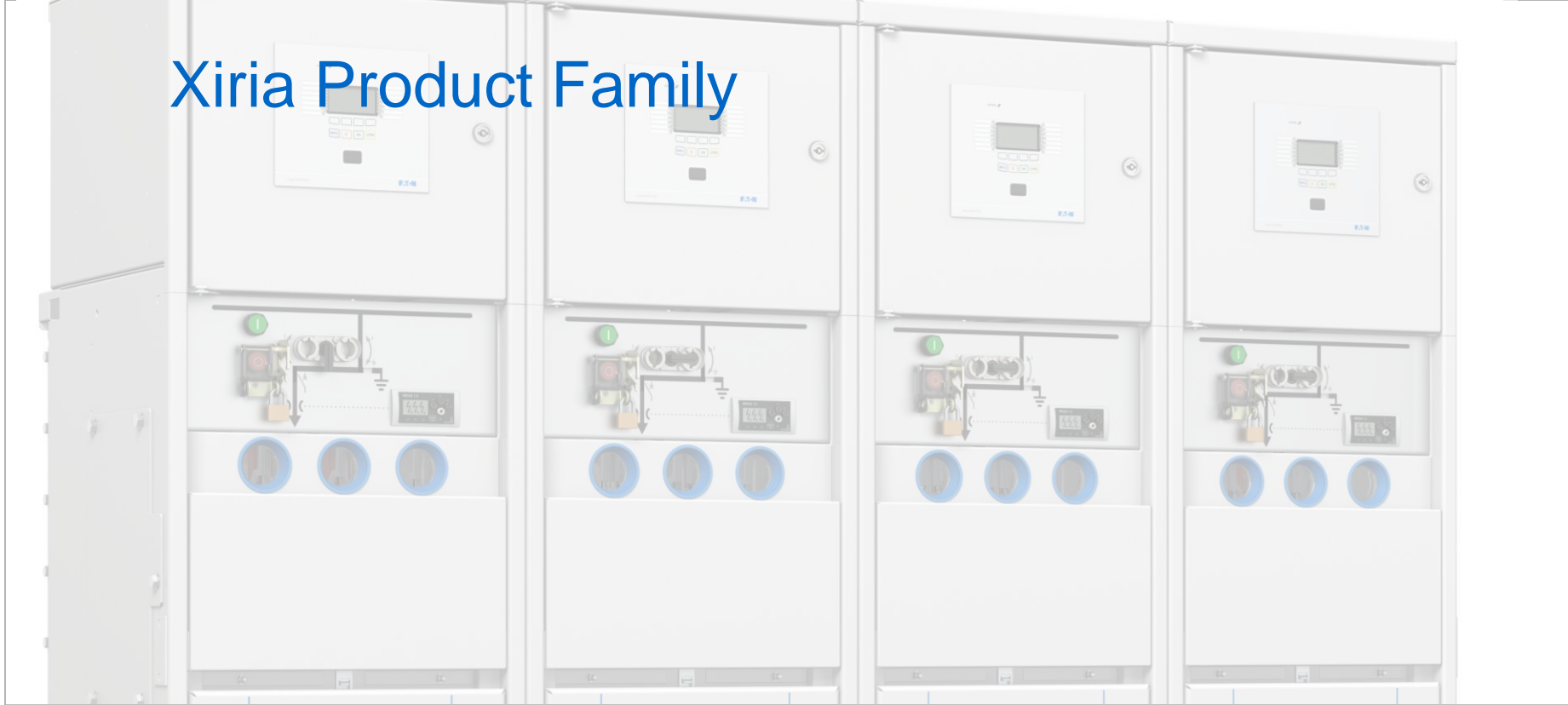
**Services &
Aftermarket**



Powering Business Worldwide



Xiria Product Family

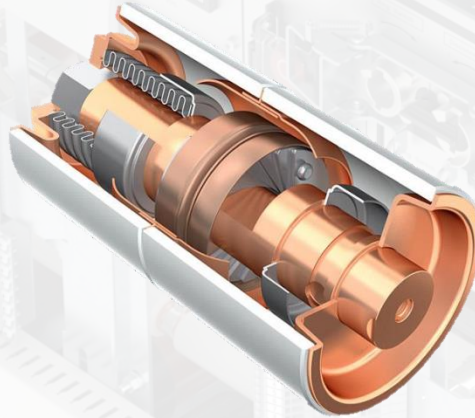


Core competences

Safety, Sustainability and Availability

- Arc free design
- Arc proof design
- SF6 free

Vacuum Interrupters



Solid Insulation



Success of Xiria

- Xiria was introduced under the HOLEC brand in 2002
- Satisfied customers in more than 30 countries
- Segments: Utilities, Commercial buildings, Infrastructure, Light industrial, Tunnels, and Green energy





Block type



Metering panel



Extendable type



Powering Business Worldwide

Xiria

Rated Voltage: 24kV

Rated normal Current: 630A

Loss of service continuity: LSC2B

Partition class: PM

Internal Arc Classification (IAC): AFLR 20kA – 1s

Xiria complies with the following international standards

IEC 62271-1

IEC 62271-100

IEC 62271-102

IEC 62271-103

IEC 62271-200

IEC 62271-304

IEC 61869-1

IEC 61869-2

IEC 61869-3

IEC 60529

EN 50181

ISO 9001-2015

ISO 14001



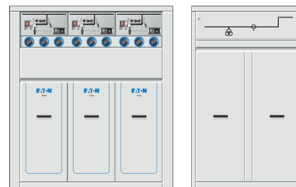
Xiria range



Xiria block type offers high operational safety and availability in an environmental friendly and compact design. With no use of greenhouse SF6 gas and an extensive range of options and panel types make *Xiria block type* the best choice for Ring Main Unit applications up to 24kV.




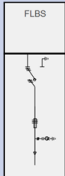



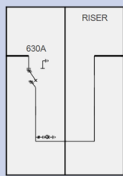

Xiria metering solutions offers flexibility. The open metering panel integrates flawlessly with *Xiria block* and *Xiria extendable type* panels while the integrated solution integrates all measurement transformers in the cable compartment of a regular panel. This benefits a highly compact metering solution.



Xiria Extendable type adds (future-) extendability to *Xiria's* Product Family. Together with the extensive list of options and panel types *Xiria Extendable type* is positioned front row for secondary switchgear applications up to 24kV.



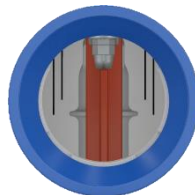
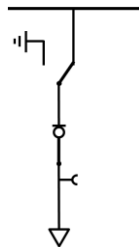
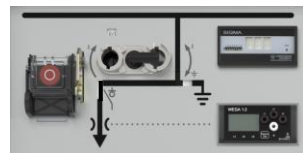
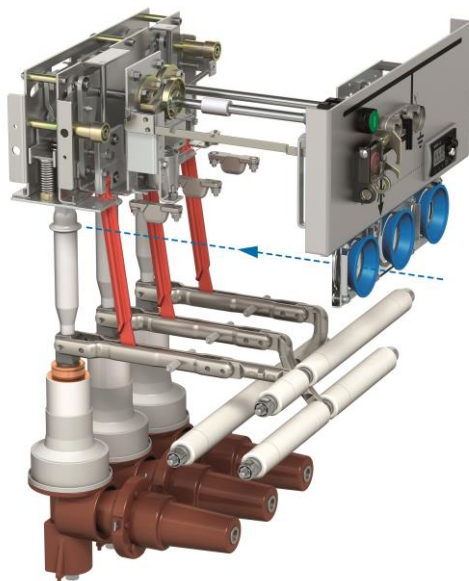
Xiria range: Panel types and Options

	Load-break Switch	Fused Load-break Switch	Circuit Breaker	Direct Busbar	Busbar side VT's	Sectionalizer / Rizer		Metering
Voltage Detection System	Default	Default	Default	Default	-	Default	-	-
Motor Operation	●	●	●	-	-	●	-	-
Fast-In	●	●	●	-	-	●	-	-
10,000 operations	●	●	●	-	-	●	-	-
Short Circuit Indication	●	●	●	-	-	●	-	-
2 nd Tripping Coil	●	●	●	-	-	●	-	-
Under Voltage Release	●	●	●	-	-	●	-	-
Auxiliary Contacts	●	●	●	● (*)	● (*)	●	● (*)	-
VT's (Cable side)	●	-	●	●	●	●	-	●
CT's (Metering)	●	-	●	●	-	●	-	●
Change Over Switch	Default	Default	Default	●	●	Default	●	-
Top Unit (400mm)	●	●	●	●	●	●	●	●
								

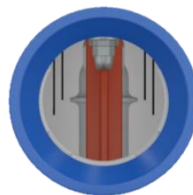
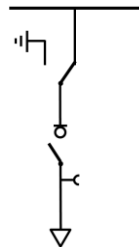
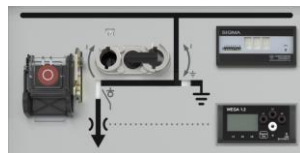
(*) Only in combination with Change over switch

Xiria and safety

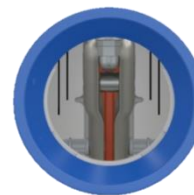
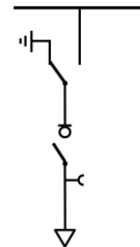
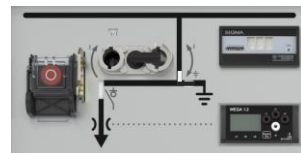
Xiria panels feature unique viewing windows for inspecting position of vacuum interrupter and change-over switch.



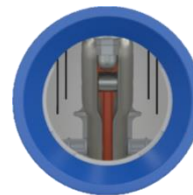
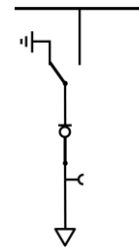
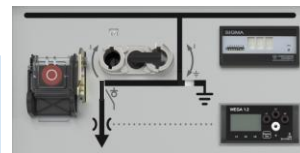
Service Position



Open Position



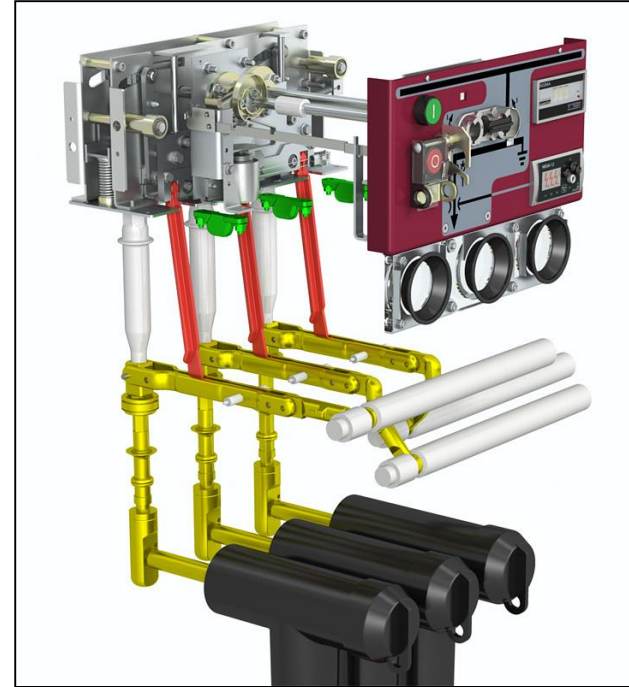
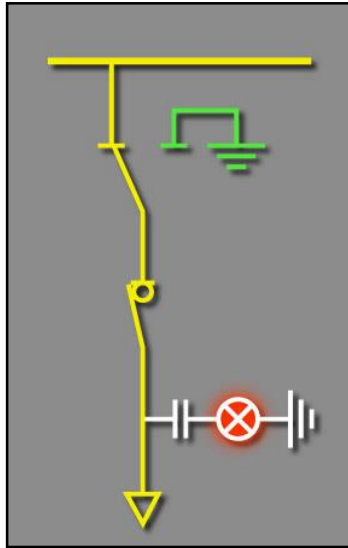
Neutral Position



Earthed Position

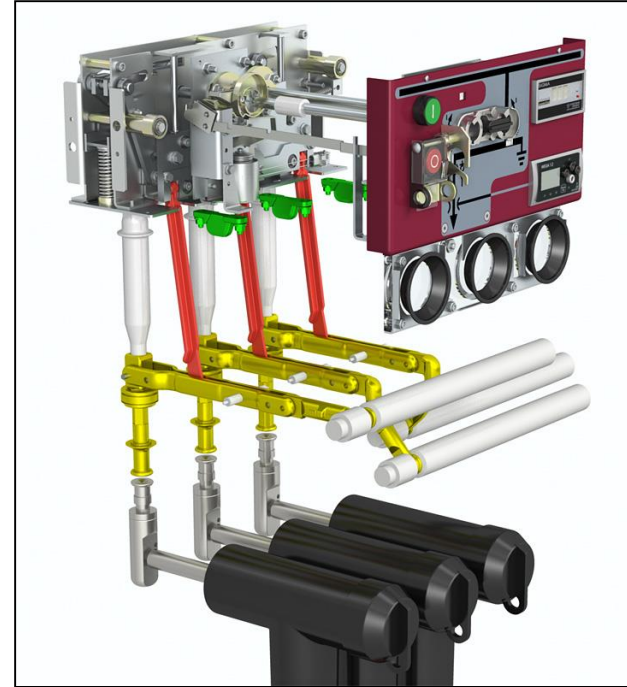
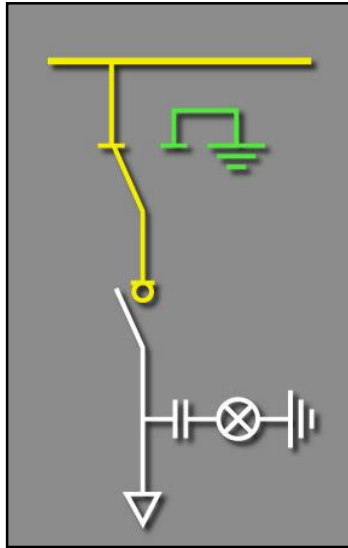
Xiria – Switching sequence

Service position



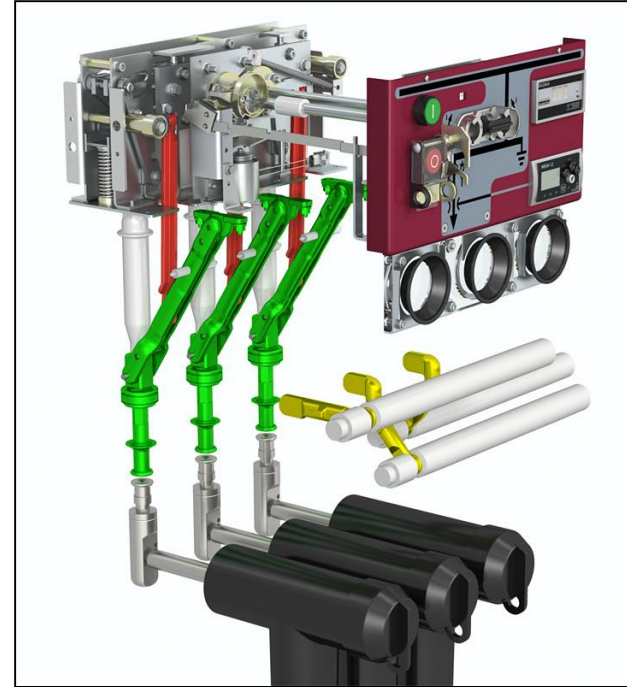
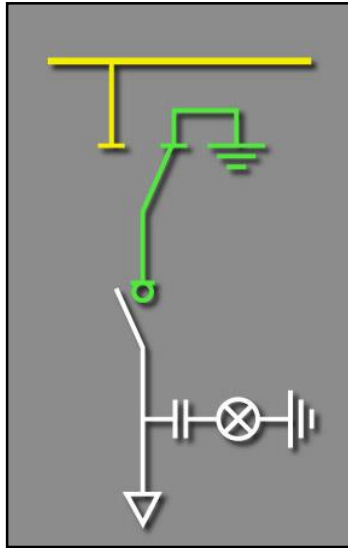
Xiria – Switching sequence

Open position



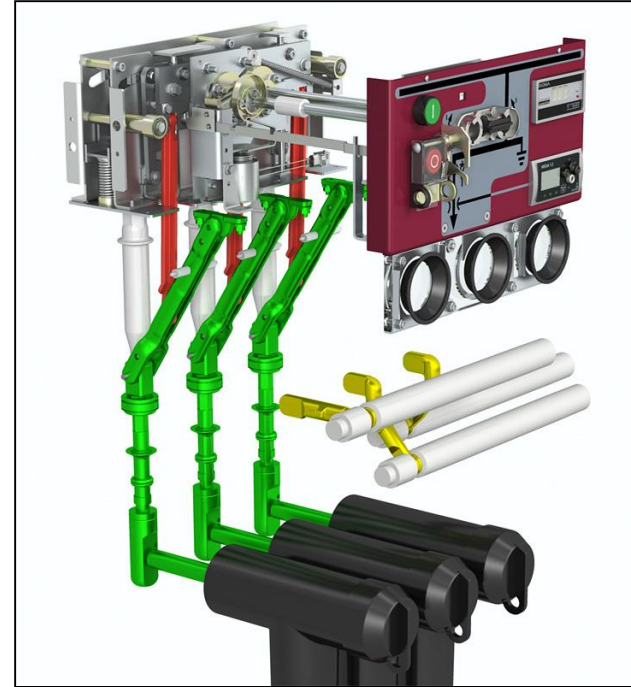
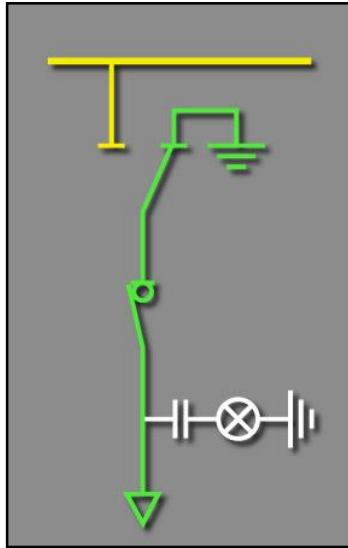
Xiria – Switching sequence

Isolated position



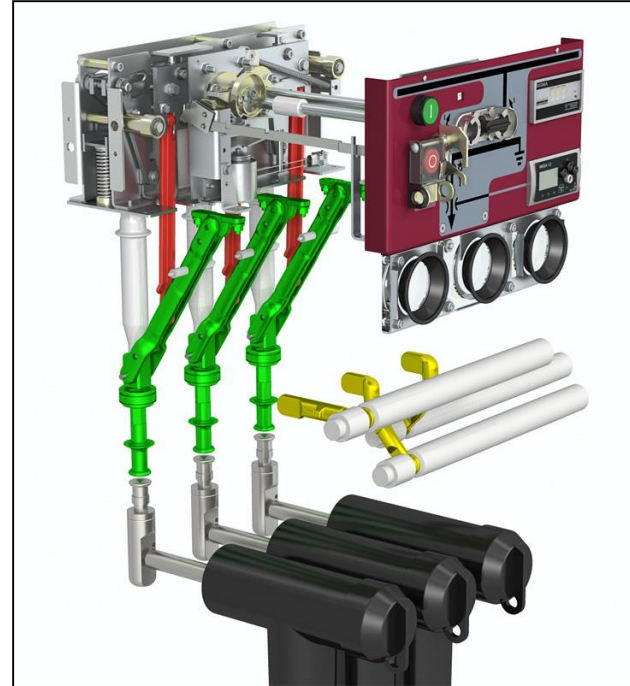
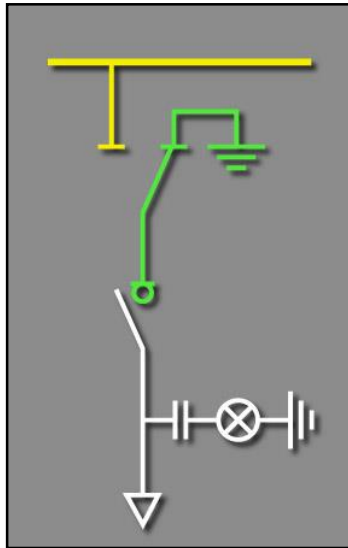
Xiria – Switching sequence

Earthed position



Xiria – Switching sequence

Test position



Xiria and safety

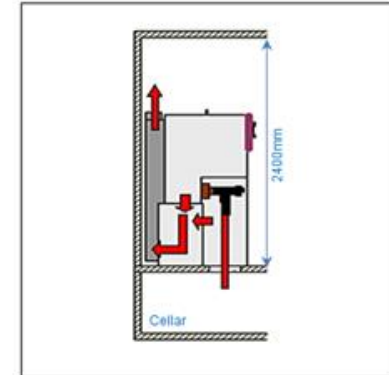
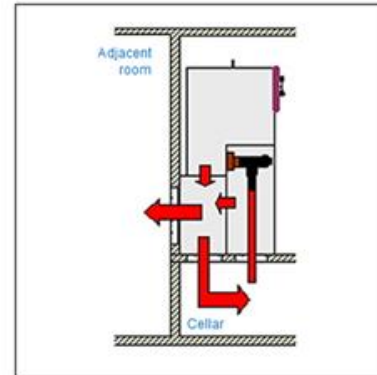
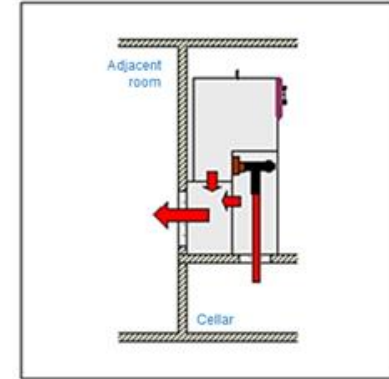
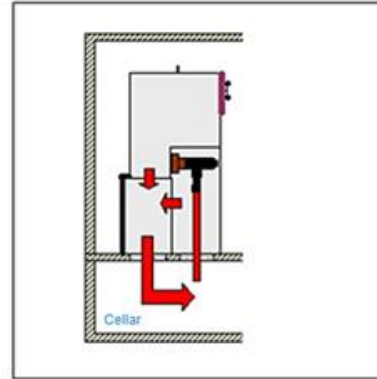
Venting

Xiria is designed for multiple venting methods including venting in the switch room. By means of pressure reliefs Xiria features designated channels to vent the pressure in case of an internal arc.

With the pressure relief in the bottom allows for venting into the cable cellar while the pressure relief in the rear of Xiria allows for venting to the adjacent room (transformer room).

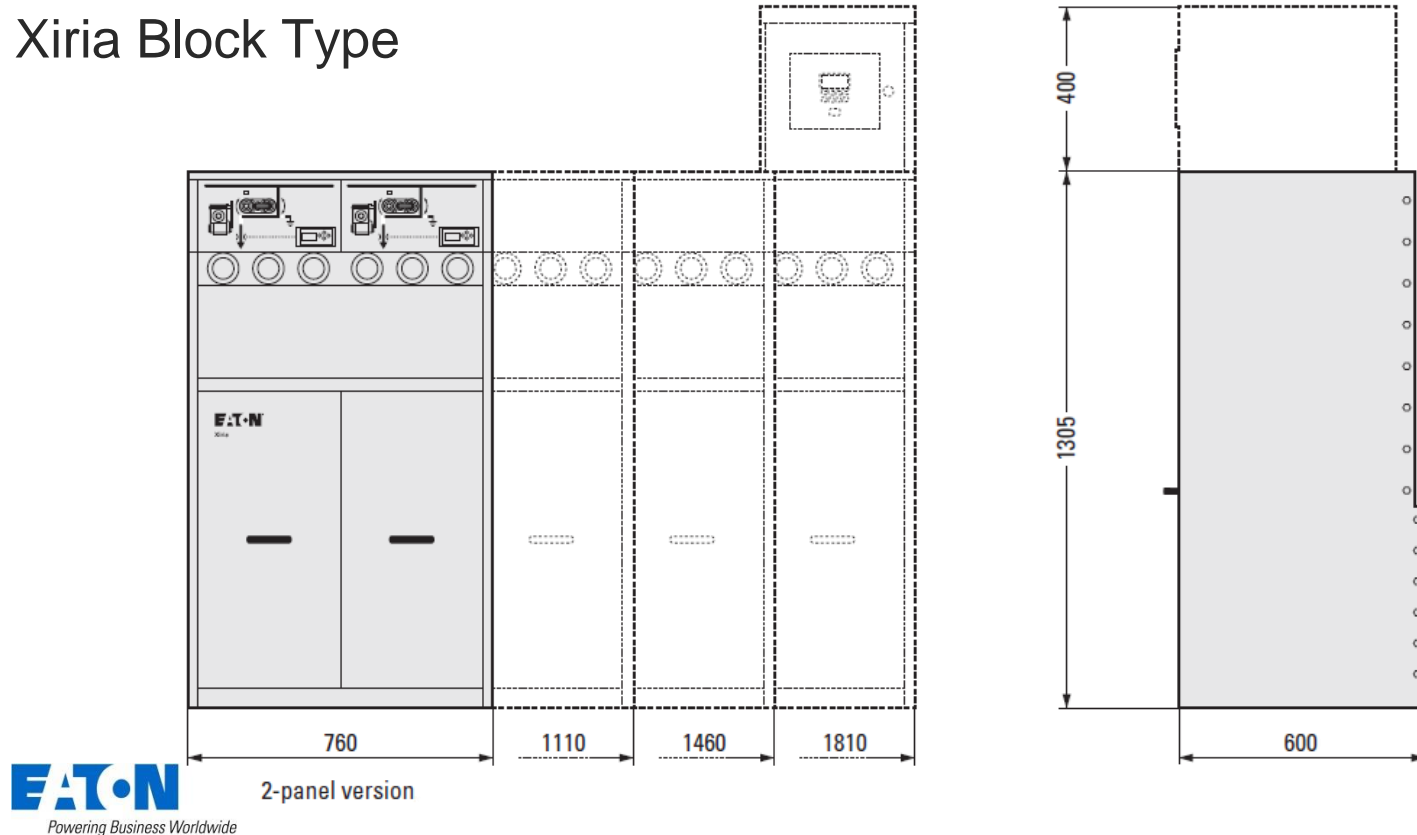
An optional chimney reduces the pressure before venting into the switch room.

All venting methods are compliant with IEC 62271-200

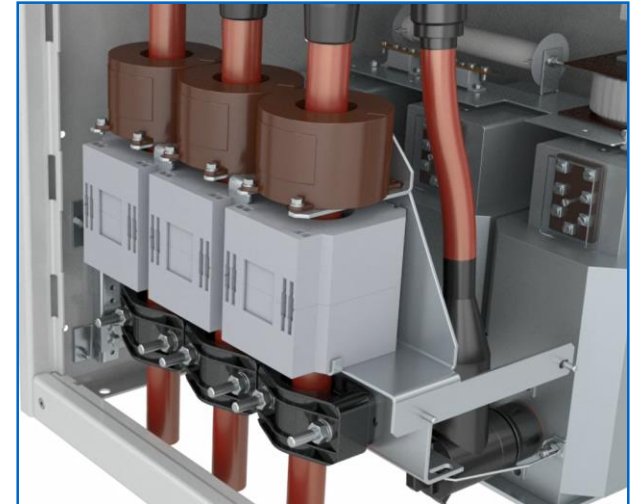
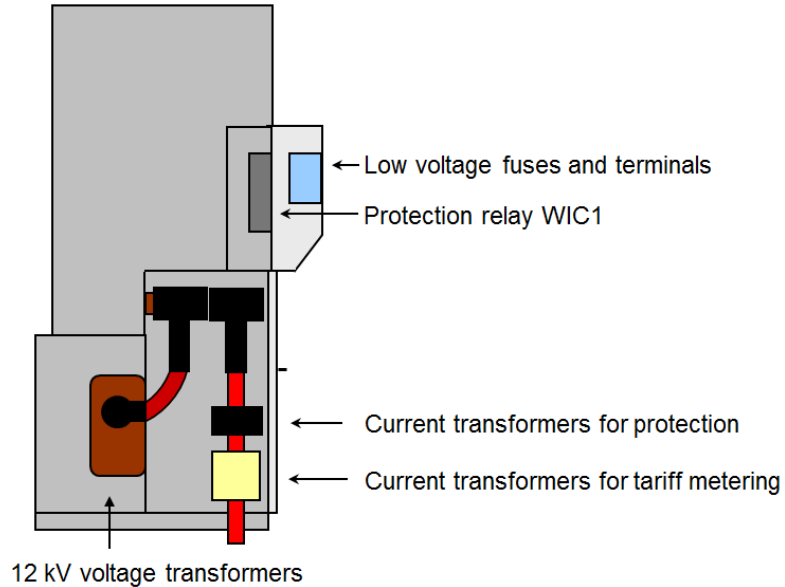


Xiria and compactness

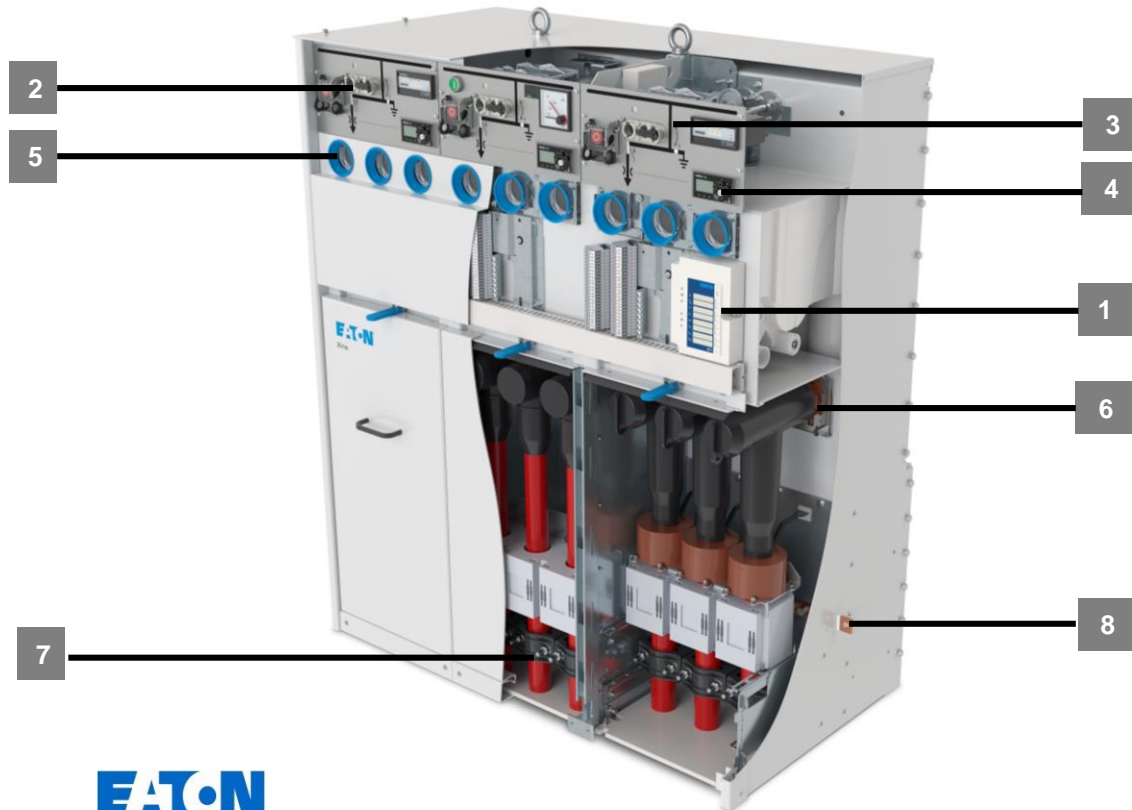
Xiria Block Type



Xiria-MA (max. 12 kV tariff metering)

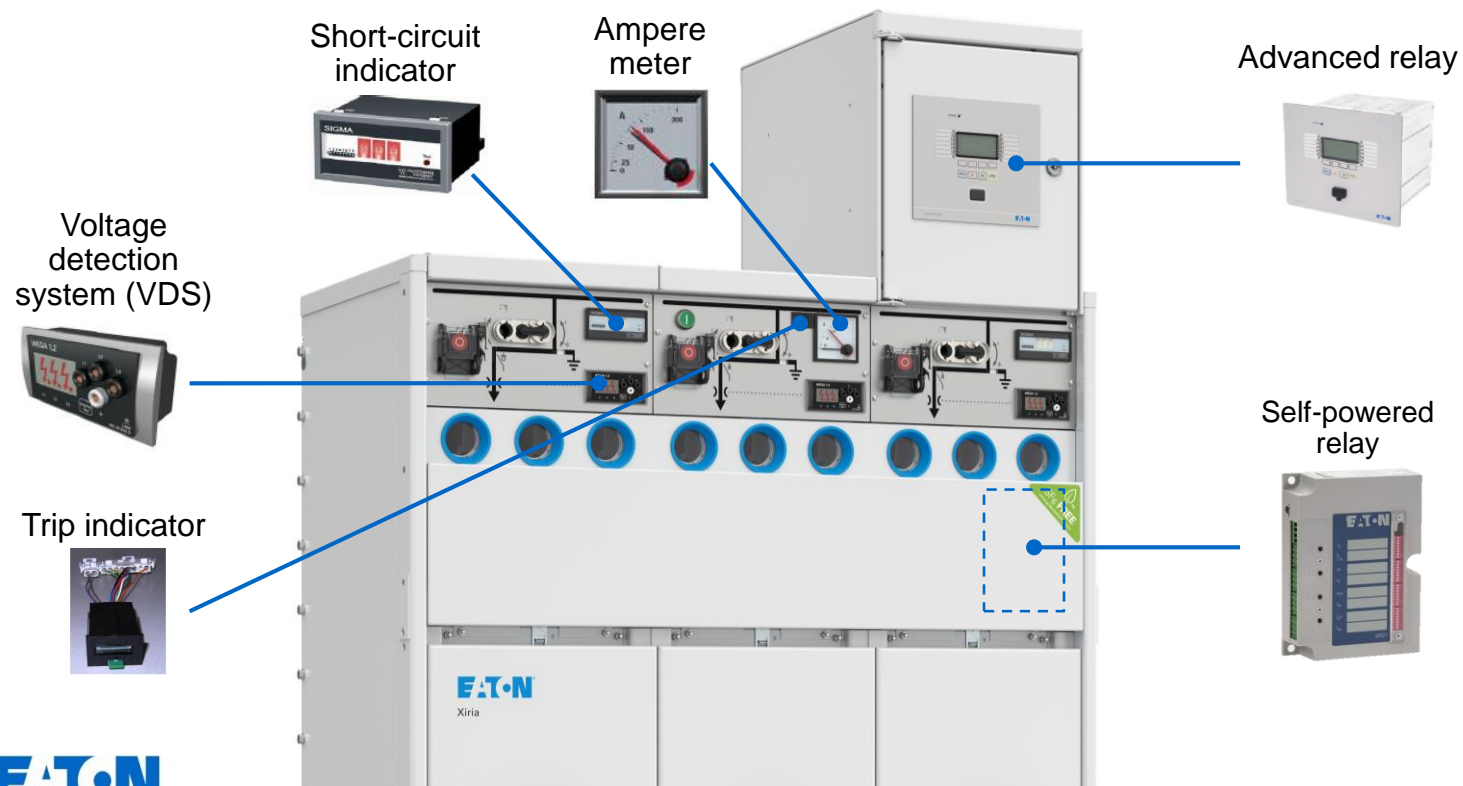


Xiria block version – Basic Design



1. Protection relay
2. Control panel
3. Mimic diagram
4. Voltage detection system
5. Inspection window
6. Cable cones
7. Cable clamps
8. Earth bar

Intelligent devices embedded

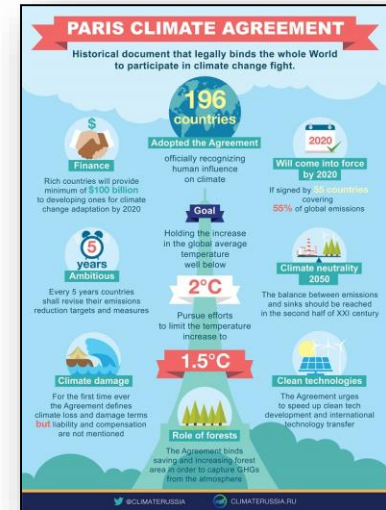


Xiria and sustainability

Environmental Friendly

- Minimized number of components
- Environmental friendly materials used
- No use of greenhouse SF₆ gas
- Energy efficient production
- Minimal number of transition points
- Re-use or recyclable materials

SF₆ FREE







Powering Business Worldwide

According to the United Nations' Intergovernmental Panel on Climate Change, **sulfur hexafluoride (SF₆)** tops the list of the most harmful Greenhouse Gases (GHG) as it is 23,500 times more potent than CO₂ and stays in the atmosphere for 3,200 years.

SF₆ has been banned for most applications in Europe, but in recent years, there has been an increasing trend in the use of SF₆ gas in switchgear, a trend that is likely to accelerate due to the progressive introduction of a decentralized electricity grid in Europe – unless something is done by regulators.

Sulfur hexafluoride (SF₆) is an inorganic, colorless, odorless, non-flammable, non-toxic but extremely potent greenhouse gas, and an excellent electrical insulator.^[7] SF₆ has an octahedral geometry, consisting of six fluorine atoms attached to a central sulfur atom. It is a hypervalent molecule. Typical for a nonpolar gas, it is poorly soluble in water but quite soluble in nonpolar organic solvents. It is generally transported as a liquefied compressed gas. It has a density of 6.12 g/L at sea level conditions, considerably higher than the density of air (1.225 g/L). From Wikipedia,