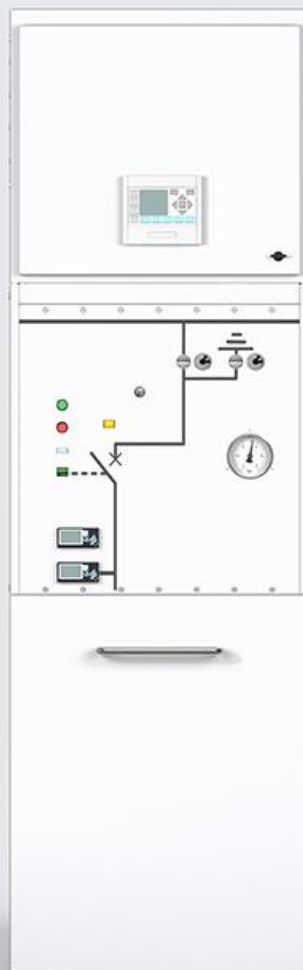


nuventura

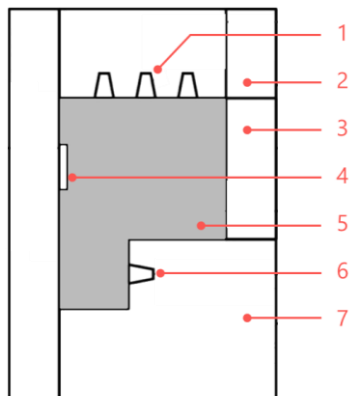
next-generation GIS



Nuventura's nu1 gas-insulated switchgear uses climate-friendly **dry air** insulation, maintains all the benefits of F-gas based GIS and provides **additional safety** and **asset health** features unmatched by the competition. The single busbar GIS covers the medium voltage primary distribution range **up to 36 kV**.

We license our technology to switchgear manufacturers to allow them to extend their product portfolio fast and efficiently. With our focus on R&D and product development, based on input from DSOs and the industry, we function as an R&D center and enable access to this new generation of switchgear to all switchgear manufacturers. The technology is suitable for the typical production capabilities of AIS and GIS manufacturers alike.

Plug & play: nuventura's flexible design for MV primary distribution



1. Busbar bushing
2. Low-voltage compartment
3. Drive compartment
4. Pressure relief
5. Gas-insulated tank
6. Cable bushing
7. Cable compartment

Technical data

IEC 62271-200 Data

Rated voltage	kV	36
Testing voltage (PF/Impulse)	kV	70/170
Rated frequency	Hz	50/60
Rated busbar current	A	1250/2000
Rated feeder current	A	1250
Rated peak withstand current	kA	78.8
Rated short time current (3s)	kA	31.5
Internal arc protection AFLR (1s)	kA	31.5

Dry air insulation medium

Filling pressure (relative)	bar	1.8 at 20 °C
Min. operating pressure (relative)	bar	1.6 at 20 °C
Operating temperature	°C	-5 ... +40

Dimensions

Width	mm	650
Height	mm	2300
Depth	mm	1500

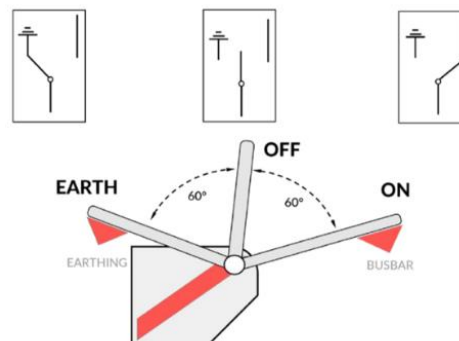
Switching devices

Circuit breaker

Class	Standard
M2	IEC 62271-100
E2	IEC 62271-100
C2	IEC 62271-100

Three-position disconnectors

Class	Function	Standard
M0	Disconnecting Ready to earth	IEC 62271-102
E2	Earthing over CB	IEC 62271-102



Dry technical air insulation allows for new advantages

Dry technical air insulation:

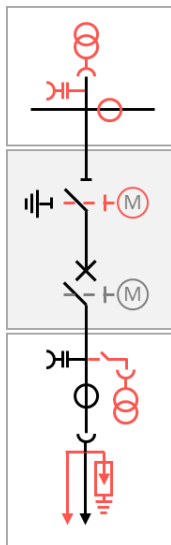
- Climate-friendly natural gases (80% nitrogen, 20% oxygen)
- Widely available as standard technical gas
- No F-gas equipment and certification
- Increased personnel safety

Accessibly sealed system requires no maintenance but allows for access to all components if necessary:

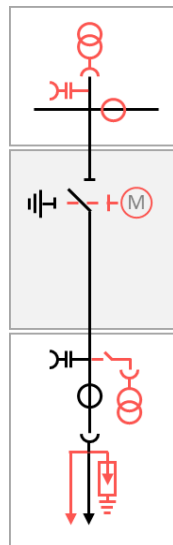
- Switching devices in gas tank
- Cable compartment
- Busbars
- Low voltage compartment

Panel variants

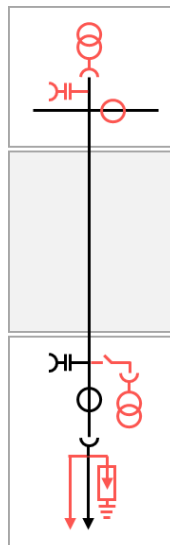
Circuit-breaker panel



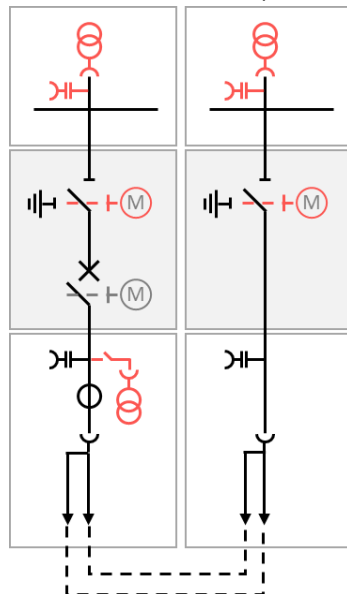
Disconnecter panel



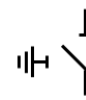
Direct connection panel



Busbar sectionalizer panel



Index



3-position
disconnecter/
earthing switch
(3PS)



Circuit-breaker
(CB)



Voltage Transformer
(VT), plug-in and
with disconnecter



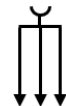
Current Transformer
(CT)



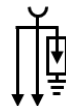
Voltage Presence
Indication (VPIS)



Motor-operation



Outer-cone cable
connection: For up to
3 cables/phase, or ..



Outer-cone cable
connection: Up to 2
cables + surge
arrester



Marked orange: optional items

Nuventura GIS enables smart sensor integration to measures what matters

Nuventura sensors can be used to prevent functional breakdown and extend the lifetime of the switchgear. The sensor integration enables:

- Online monitoring of temperature and partial discharge via a single platform
- Passive measurement methods used to ensure long lifetime of sensors
- Simple GUI for local measurement display and configuration
- Connectivity to private SCADA networks or public networks via Modbus-RTU or Modbus TCP communication protocols.
- Additionally, long term local data storage on USB or micro-SD card if required

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