

8VM3 Blue GIS™

Coming soon to our Blue portfolio:
Compact gas-insulated switchgear up to 72.5 kV
Clean air switchgear with Zero CO₂e emissions

[siemens-energy.com/blue-products](https://www.siemens-energy.com/blue-products)

SIEMENS
energy

Vacuum technology



+

Clean air



Blue



Higher voltages with Zero GWP

Renewable energy sources are key to the decarbonization of the energy sector – and as the demand for power increases, a new generation of wind power plants is needed to handle the higher voltage created. At the same time as increasing capacity, it's essential that we achieve Zero Global Warming Potential (GWP) in the transmission of power as well as in its generation.

Most high-voltage electrical switchgear still uses SF₆ gas for insulation – but this is 24,300 times more climate-hostile than CO₂ and stays in the atmosphere for up to 1,000 years. Recognizing the harmfulness of SF₆ and other F-gases, the EU has legislated to restrict their use and allows only GWP < 1 solutions if available.

The good news is that there is a sustainable, viable, future-ready alternative. Our innovative Blue switchgear portfolio, including the compact 8VM3 Blue GIS™, uses Zero fluorinated gases of any kind and has Zero harmful impact on the environment.

Zero SF₆ – just clean air

Clean air insulation is the future of switchgear in wind farms and indeed the wider grid and is the only way to achieve Zero GWP and Zero toxicity.

The 8VM3 Blue GIS™ combines proven vacuum switching technology with clean air insulation. It operates with Zero harmful greenhouse gases of any kind, with Zero toxic decomposition products and Zero safety requirements during handling and maintenance.

The clean air used – consisting of 80% nitrogen and 20% oxygen, cleaned and free of humidity – can be released into the atmosphere with Zero harmful effects to people or the environment.

At the same time, the 8VM3 maintains the highest standards of technical performance and reliability, together with low lifecycle costs.



Zero environmental impact

- Zero SF₆ and other F-gases
- Zero greenhouse gas emissions
- Zero GWP



Zero impact on health & safety

- Zero toxic insulation gases
- Zero toxic decomposition products
- Zero special safety measures needed during maintenance
- Zero disposal of gases required at end of life



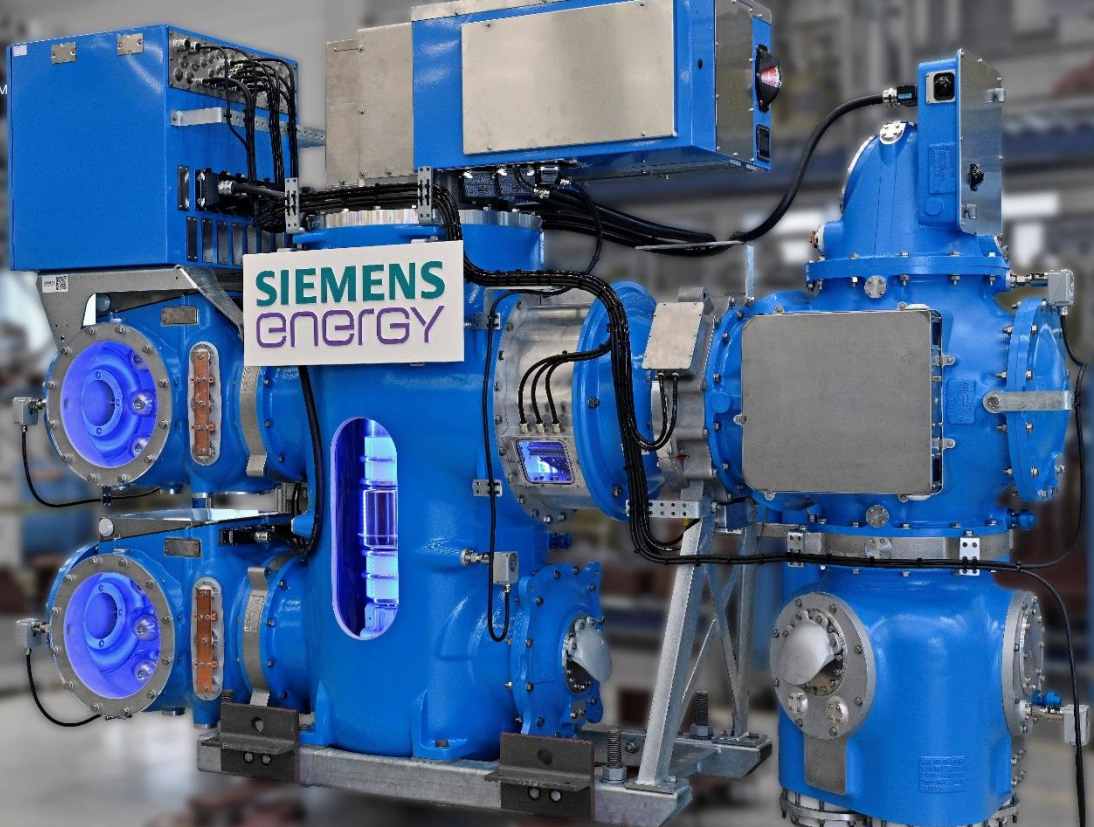
Zero regulation

- Zero regulations on gas handling or density checks
- Zero reporting and accounting of gases required
- Zero F-gas training needed
- Zero issues with current and potential legislation against F-gases



Zero compromise on performance and reliability

- Specifically designed for wind turbine conditions
- Compact, modular design makes multiple configurations possible
- Maintenance-free vacuum interrupter
- Factory-assembled, fully-tested
- High operational and switching performance
- 10+ years of experience in HV vacuum switching up to 145 kV
- Low operational costs throughout the entire lifecycle



Perfect size and required performance for versatile applications and switchgear arrangements the 8VM3 Blue GIS™ design is based on our long-time proven 8DN8 GIS design – but with higher performance at same footprint!

With its enhanced module kit 8VM3 Blue GIS™ provides dedicated solutions where space is limited, and compactness is required - like in renewables applications.

- 1 Onshore grid and industry
- 2 Onshore renewables – wind and solar
- 3 Offshore substation
- 4 Offshore wind

Global Warming Potential (GWP)

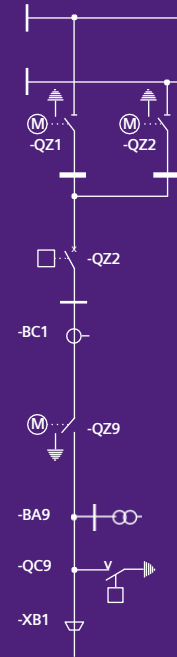
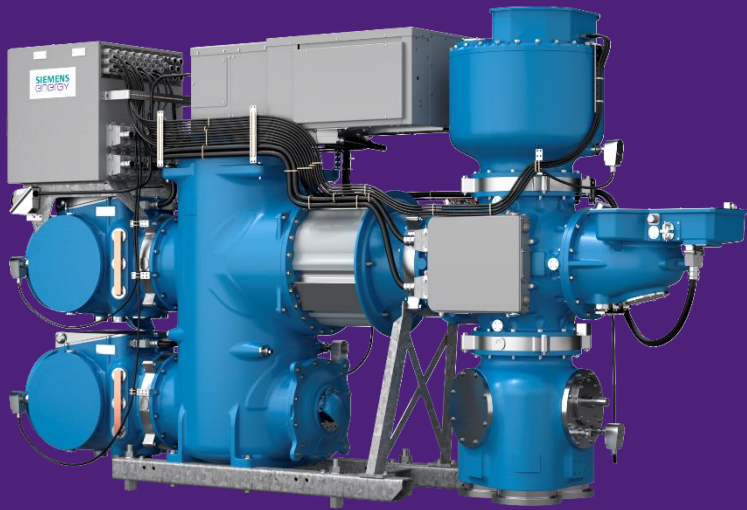
Global warming is the rising of the global temperature due to emissions of greenhouse gases. The 8VM3 reduces the GWP significantly by substituting SF₆.

SF₆

- High environmental impact
- Costs for special maintenance and gas density checks
- Costs for special trainings
- Costs for reporting and taxes
- Costs for gas recycling

Clean air

- + No environmental impact
- + Non-toxic, non-hazardous
- + No density checks
- + Training-free
- + Reporting-free
- + Gas recycling-free



8VM3 Blue GIS
1,555 t CO₂e saved*

Technical details 8VM3 Blue GIS™

Maximum system voltage	up to 72.5 kV
Rated frequency	50 / 60 Hz
Rated continuous current	up to 3,000 A
Rated short-time withstand current	50 kA, 3 s
Drive mechanism of circuit breaker	stored-energy spring
Interrupter technology	vacuum
Insulation medium	clean air
Rated filling pressure	0.66 MPa abs
Bay width common pole drive	800 mm
Bay height / depth (depending on bay arrangement)	2,600 / 4,440 mm
Ambient temperature range	-50 °C up to +55 °C
Installation	indoor / outdoor
First major inspection	> 25 years
Expected lifetime	> 50 years
Standards	IEC / IEEE

*by not using SF₆ for insulation



Switchgear with up to three bays pre-assembled in the factory



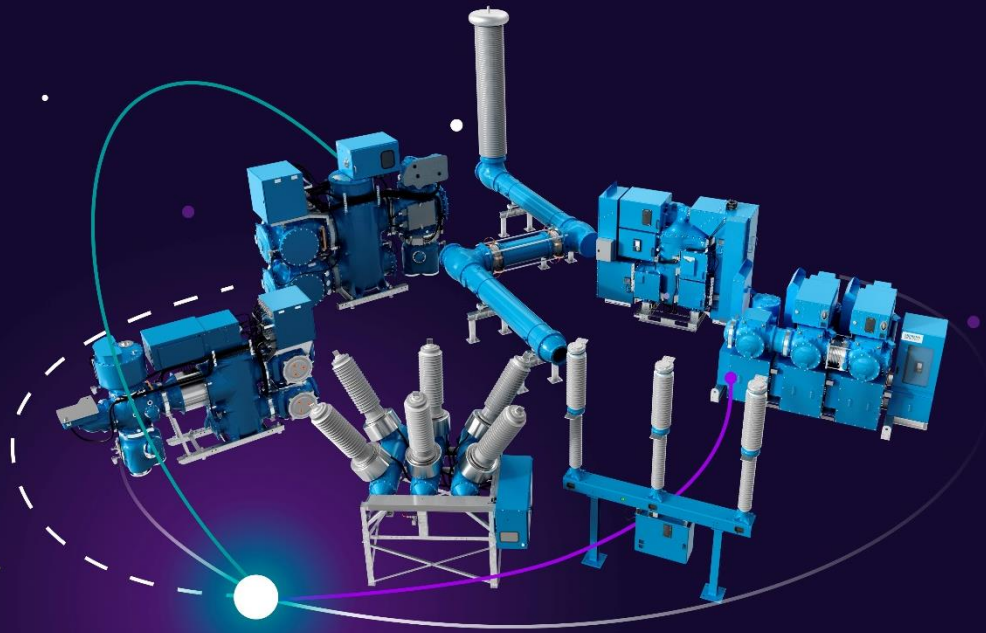
8VM3 Blue GIS

2,673 t CO₂e saved*

Technical details 8VM3 Blue GIS™

Maximum system voltage	up to 72.5 kV
Rated frequency	50 / 60 Hz
Rated continuous current	up to 1,250 A
Rated short-time withstand current	31.5 kA, 3 s
Drive mechanism of circuit breaker	stored-energy spring
Interrupter technology	vacuum
Insulation medium	clean air
Rated filling pressure	0.60 MPa abs
Bay width common pole drive	1,050 mm
Bay height / depth (depending on bay arrangement)	2,400 / 2,200 mm
Ambient temperature range	-30 °C up to +40 °C
Installation	indoor
First major inspection	> 25 years
Expected lifetime	> 50 years
Standards	IEC / IEEE

*by not using SF₆ for insulation



Siemens Energy Blue portfolio covers many more F-gas free product lines and ratings.
Learn more at [siemens-energy.com/blue-products](https://www.siemens-energy.com/blue-products)

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