

Make sustainable

# IMPACT

with SM AirSeT™

Air innovation and digital technology  
for greater sustainability and efficiency



SeT Series

SM AirSeT, SF<sub>6</sub>-free medium voltage switchgear

[se.com/smairset](https://se.com/smairset)

Life Is On

**Schneider**  
Electric

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# Introducing SM AirSeT

Introducing SM  
AirSeT

Powered by air  
and digital

Connected and flexible  
to meet your needs



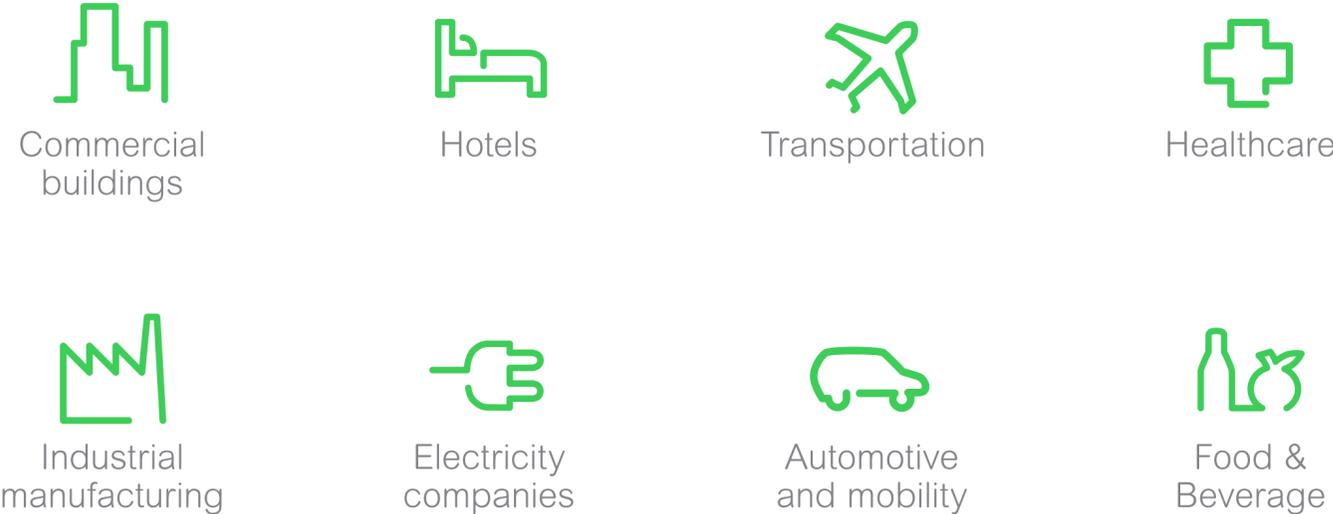
# A breath of fresh air for your network

For decades, SF<sub>6</sub> (sulfur hexafluoride) has been trusted for use in MV switchgear, but it is the strongest greenhouse gas with Global Warming Potential (GWP) of 24,300 compared to CO<sub>2</sub>.

Electrical distribution is [moving away from SF<sub>6</sub>](#) to reduce its carbon equivalent footprint (CO<sub>2</sub>e). Schneider Electric's AirSeT technology offers SF<sub>6</sub>-free transition with the best solution: pure air. It helps improve safety and avoid future regulatory risks as well as recycling treatment and costs.

Introducing SM AirSeT MV switchgear. [Powered by air and digital](#), it uses an innovative combination of air and vacuum technology while keeping all the benefits of its SM6 predecessor. This means no compromise for end users aiming to hit their environmental targets or professionals seeking to offer the latest technology.

SM AirSeT represents a huge step forward for MV distribution, and the planet, combining Schneider's renowned switchgear with more sustainable SF<sub>6</sub>-free technology.



# A step forward for MV distribution

SM AirSeT is a range of SF<sub>6</sub>-free modular air-insulated switchgear for MV secondary distribution and installations in commercial and industrial buildings and electric distribution networks. It is easy to commission and install, with footprint and connection points identical to its predecessor, and familiar operations. SM AirSeT provides users with:

- Increased sustainability
- Higher levels of efficiency
- Enhanced safety



SM AirSeT and SF<sub>6</sub>-free projects have received recognition from experts:



IF Design Award



Industrial Energy Efficiency Award



Top 10 Innovations from ICEF



EnerTIC Award

[Watch SM AirSeT video](#)



# Powered by air and digital



# Innovation for sustainability and circularity

With SM AirSeT, consultant engineers, contractors, and panel builders will be offering customers the latest, innovative green technology. While facility managers and grid operators will achieve new levels of sustainability.

Air has no global warming potential (GWP), no sole-source supply, and is sustainable by nature. Pure air technology is reliable and, free from regulatory considerations.

To enable the change from SF<sub>6</sub>, Schneider Electric has combined air for insulation and vacuum technology for arc interruption. Our innovative arrangement in a Shunt Vacuum Interruption (SVI)<sup>TM</sup> technology is used to break the current, while producing no alternative gases or toxic byproducts.

See how EEC Engie went SF<sub>6</sub>-free

[Learn more](#)

## Zero

recycling or costs required for air at end-of-life



# Redefining safety

Powered by air and digital, the innovative SM AirSeT improves safety on two levels:



## Operational

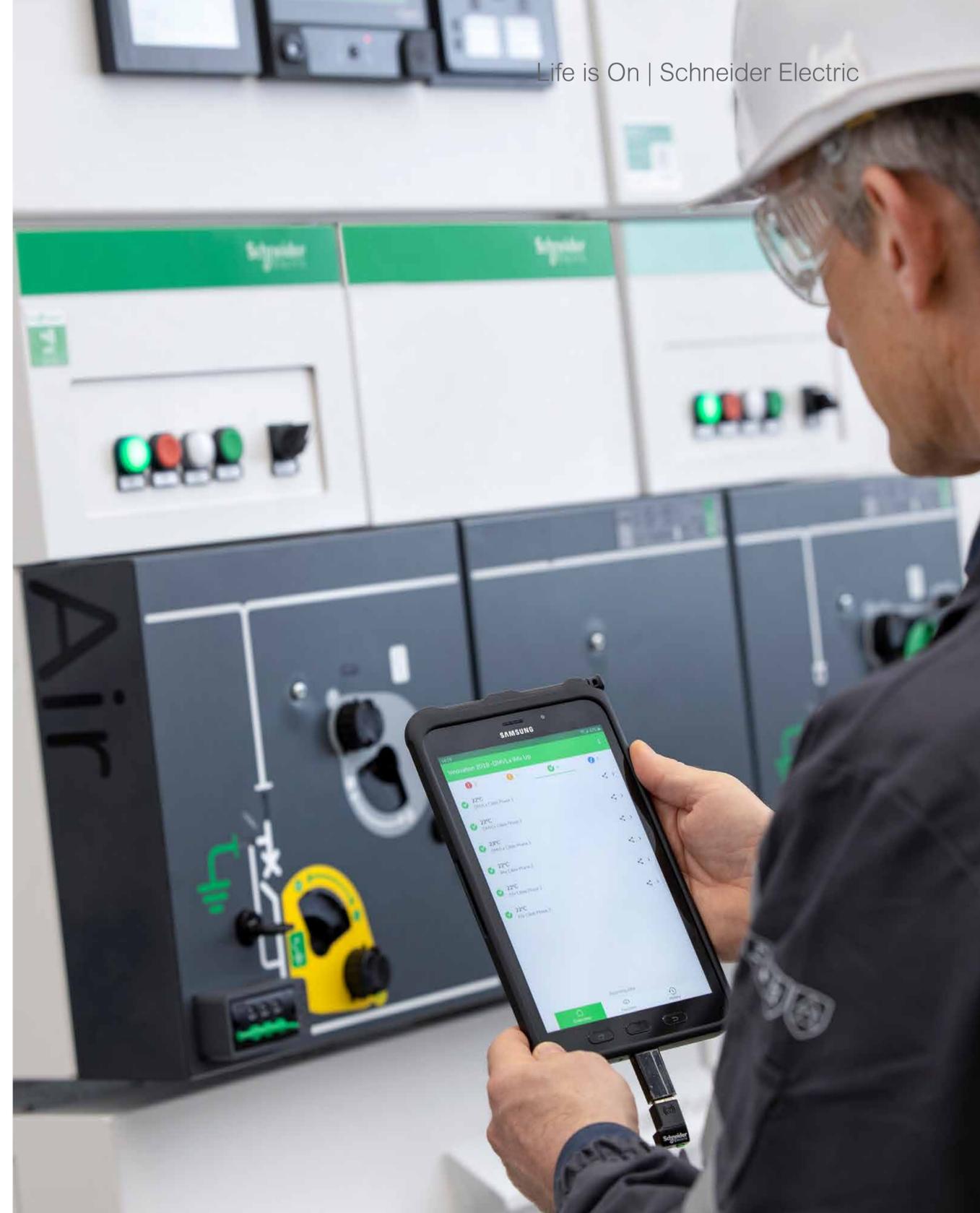
As a digital, connected switchgear, SM AirSeT enables nearby control features. It allows users to operate and monitor the switchgear from a smart device, letting staff do their jobs without physically interacting with the equipment. Built-in arc-flash detection reduces the risk of damage to the device and enhances the safety of on-site personnel.



## Environmental

As an SF<sub>6</sub>-free, air-insulated switchgear, SM AirSeT generates no alternative gases or toxic byproducts from current breaking – which also enhances the safety of environment and users.

[Watch SM AirSeT explained](#)

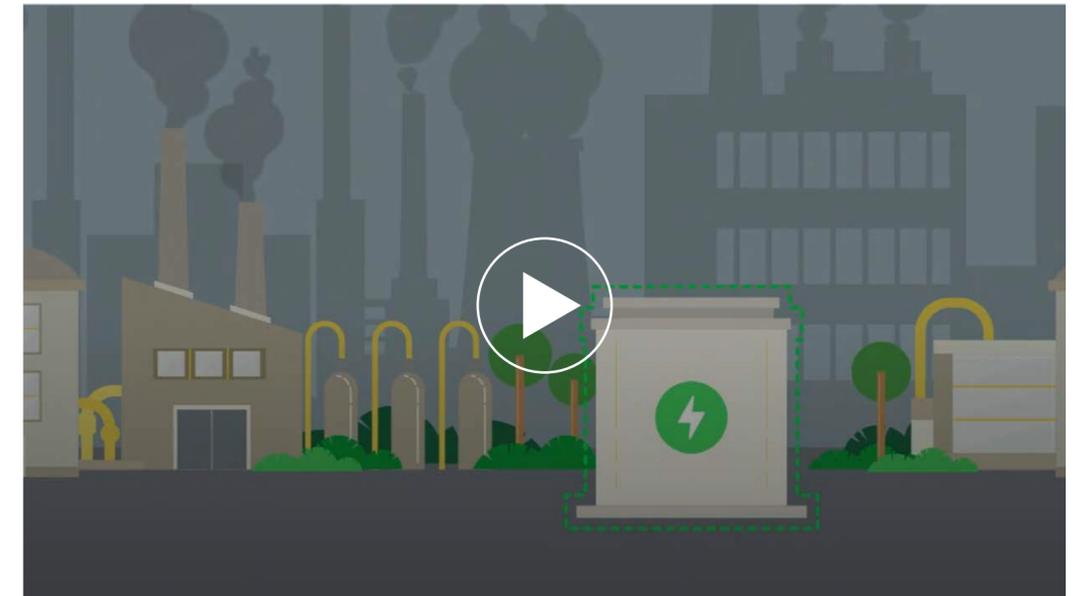


# Move to SM AirSeT with ease

Transitioning to new technology has never been easier.

SM AirSeT's footprint and position of connections are identical to Schneider's popular SM6 switchgear. This familiarity makes the equipment easy to adopt, and provides a simple installation process for extension or new switchgear.

The switchgear retains the familiar three-position switch for closed, opened, and earthed. For the end user this means unchanged operations, which reduces adoption risks and helps improve safety. The use of pure air mitigates regulatory risks and removes gas recycling treatment and costs.



SF<sub>6</sub>-free technology explained

[Watch the video](#)

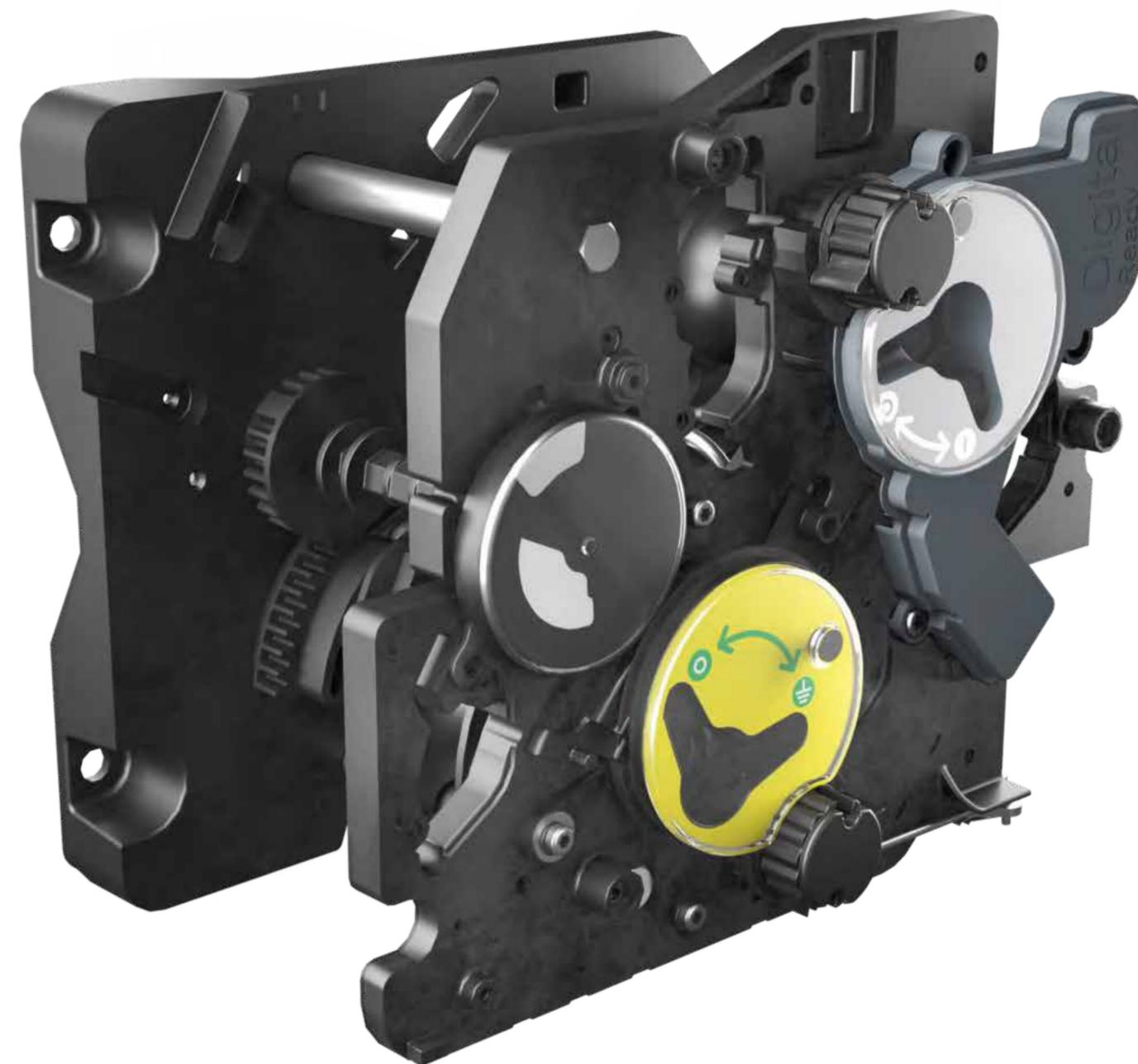


# Delivering high performance and longer life

SM AirSeT features the next-generation CompoDrive switching mechanism. Its optional plug & play motorization makes it easily upgradeable to dramatically reduce implementation time and supply interruptions during installation.

The device increases mechanical and environmental performance, allowing up to 10,000 operations, accommodating more switching linked to intermittent generation from distributed energy resources (DERs).

As well as saving operation and installation time and costs, the mechanism is composed of parts engineered from high-tech composite materials and has an improved resistance to harsh environments. The highly robust design, combined with EcoCare services membership, extends the lifetime of SM AirSeT up to 40 years.



[Watch the CompoDrive video](#)



# A comprehensive, flexible range

The modular SM AirSeT is designed to meet the versatile requirements of different electric distribution networks. The switchgear uniquely provides cost-efficient flexibility with a [choice of functions to fit different needs](#). For example, the switch-fuse is the most cost-efficient method of protecting the transformer. Thanks to the available upgrade options, SM AirSeT can be adapted evolve as user needs change.

Functions include:

- Switch
- Circuit breaker
- MV metering and measurement
- Switch-fuse
- Riser

Explore SM AirSeT in 3D



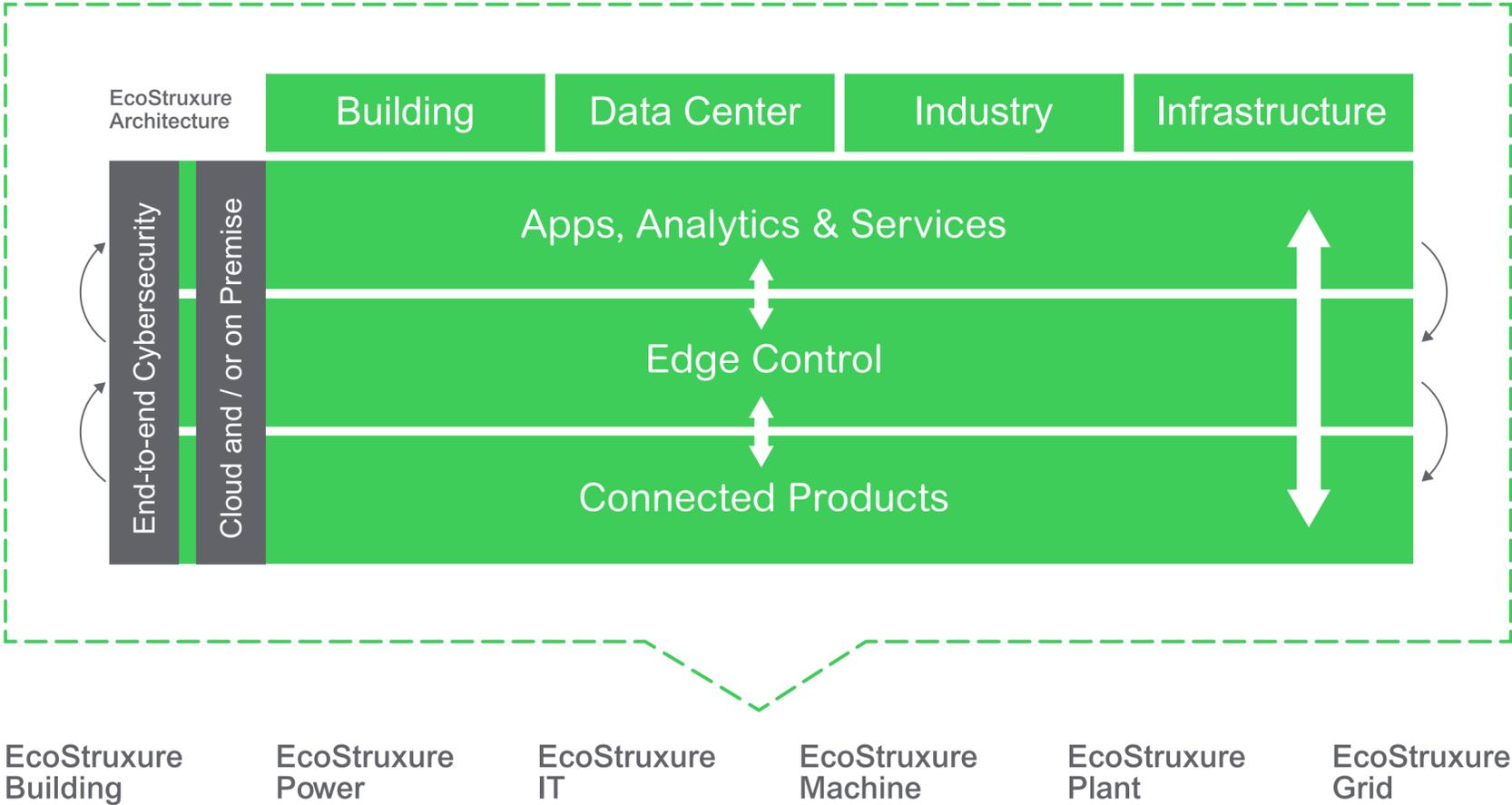
# Connected and flexible for greater efficiency



# Discover the benefits of EcoStruxure

EcoStruxure™ Power is part of Schneider Electric’s open, interoperable IoT-enabled system architecture and platform. It delivers enhanced value around safety, reliability, efficiency, sustainability, and connectivity for our customers. EcoStruxure Power leverages advancements in IoT, mobility, sensing, cloud, analytics, and cybersecurity to deliver innovation at every level. This unified approach provides more value than a traditional network of isolated devices and is covered by end-to-end cybersecurity.

SM AirSeT is located at the connected products level.



# Active connectivity for asset health monitoring

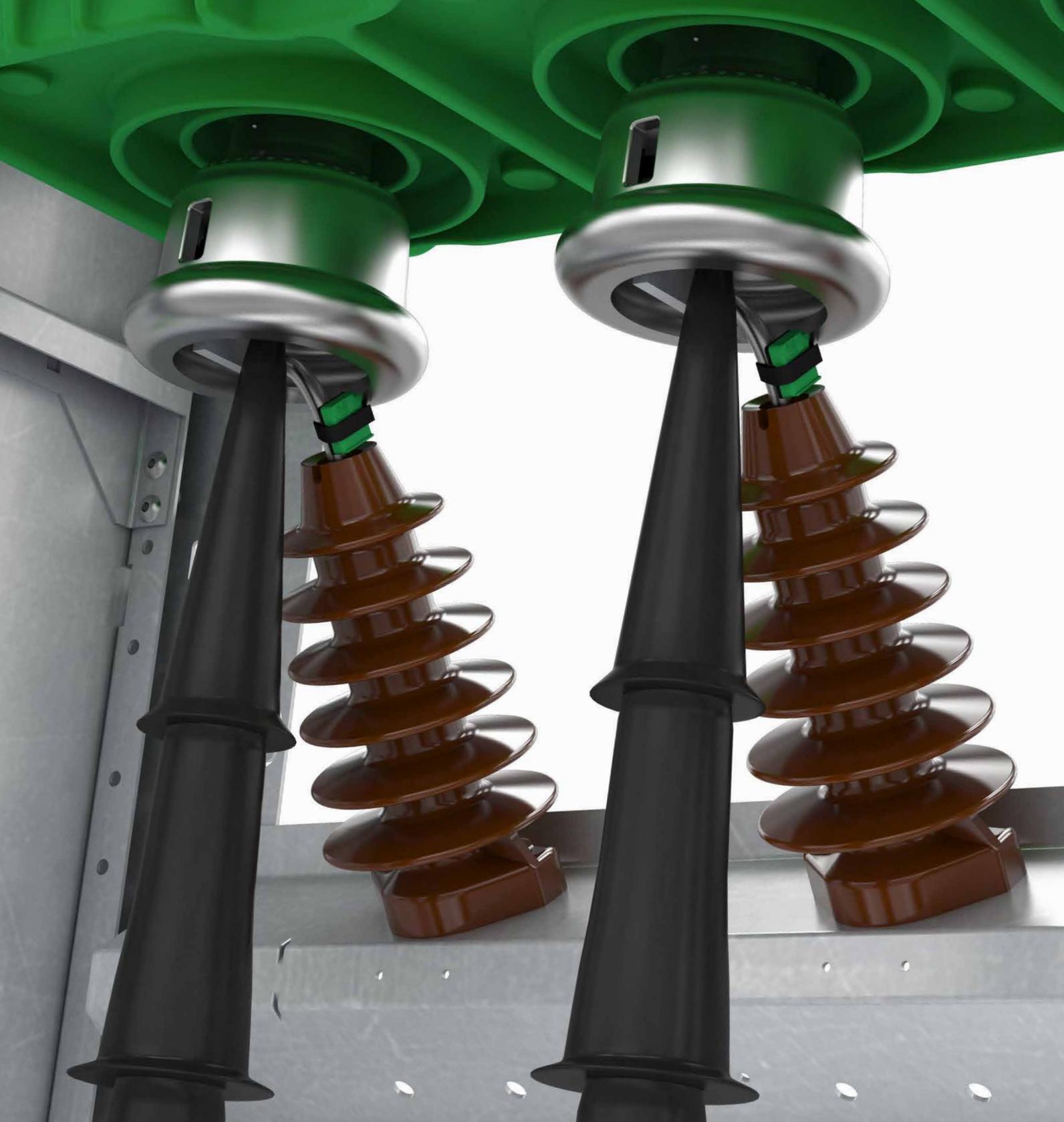
SM AirSeT offers the high efficiency you have come to expect from a Schneider Electric switchgear.

The health status of the device can be monitored via wireless sensor-based technology and digital tools. Thus, condition-based maintenance can take place at the right time, meaning reduced downtime risks and costs.

Condition monitoring tools for asset management include:

- Thermal monitoring
- Environmental monitoring
- Circuit breaker monitoring

A 3D render, not an actual picture



# Discover powerful connectivity



### Substation monitoring device

Substation monitoring communicates with a range of sensors embedded in equipment by default. Operate SM AirSeT easily from your smart device or Local HMI, from a safer\* distance.



### Thermal monitoring

Wireless thermal sensors help detect temperature anomalies, prompting diagnosis of potential faults, reducing downtime and fire risks.



### Environmental monitoring

Wireless humidity sensors monitor environmental impacts, helping detect accelerated aging and optimizing maintenance costs.



### Circuit breaker monitoring

Monitoring of the circuit breaker's health and status enables preventive maintenance.



### Digital logbook

EcoStruxure code provides a quick connection to access its dedicated digital logbook, manuals, support and more; designed to save operational time and effort.



### Internal arc detection

Optical sensors provide fast internal arc clearance, reducing operator and equipment risk, while reducing equipment damage due to internal arcs.



\*Refer to NFPA70E standard



# Scalable to your needs

## SM AirSeT

### Enriched experience

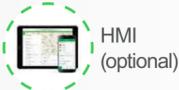
- Thermal monitoring
- Digital Logbook for maintenance



## SM AirSeT Active

### Massive connectivity

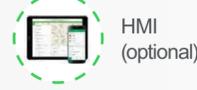
- 24/7 connected condition monitoring of your switchgear with local, remote and cloud based connectivity for advanced services.



## SM AirSeT Active Plus

### Comprehensive monitoring and control

- Decision and control capabilities from Edge layer for all devices.
- Comprehensive condition monitoring solution from local, nearby, or remote.



### Digital tools



### Edge control



EcoStruxure Power SCADA

- Energy supply management software for electro-intensive sites.

### Services



EcoCare Services Membership

- Next-generation service plan which helps reduce significantly downtime and help improve efficiency, safety and costs.
- EcoCare combines priority access to services support, 24/7 remote monitoring and AI-powered condition-based maintenance.



# The extended benefits of going digital

## Software apps and Service

<p>Local monitoring</p>		<p>EcoStruxure Power Device EcoStruxure Facility Expert</p>	<p>Access thermal monitoring and control your operations from the palm of your hand. Make operations simpler, effective and convenient, benefiting from our new digital logbook features.</p>
<p>Edge control</p>		<p>EcoStruxure Power Monitoring Expert EcoStruxure Power SCADA</p>	<p>Designed for power-critical and energy-intensive facilities to maximize uptime and operational efficiency. Energy supply management software for electro-intensive sites.</p>
<p>Service</p>		<p><a href="#">EcoCare Services Membership<sup>1</sup></a> </p>	<p>Proactive asset performance management with AI-powered condition-based maintenance, 24/7 remote monitoring, and expert support.</p>

<sup>1</sup> If EcoCare is not available in your region, leverage [EcoStruxure Service Plan](#)



# Combine SM AirSeT with EcoCare services membership

Even the most reliable switchgear can face unforeseen failures in the early years of operation. The performance and uptime of your assets can be optimized with the right service plan, enabled by native digital connectivity.

With **EcoCare membership<sup>1</sup>**, a next-gen service plan, you gain exclusive support for your equipment from day 1 and throughout its entire lifecycle. For a minimal investment compared with your overall CapEx, you'll enjoy **AI-powered condition-based maintenance and 24/7 remote monitoring**, and get exclusive and faster access to technical expertise, on-site and remotely.

[Find out more](#)

<sup>1</sup> If EcoCare is not available in your region, leverage [EcoStruxure Service Plan](#).

<sup>2</sup> This percentage is non-contractual and is based on the time between two manufacturer maintenance activities for low and medium voltage equipment which can be extended by up to 2 years compared to a traditional calendar-based maintenance contract, from 3 to 5 years.

<sup>3</sup> This percentage is non-contractual and is based on Schneider Electric experience and expertise with respect to the main root cause of downtime observed and for which Schneider Electric has developed solutions.

		EcoCare Essential	EcoCare Advanced	EcoCare Advanced+
Support to operations	<ul style="list-style-type: none"> <li>mySchneider portal</li> <li>Emergency support</li> <li>Customer Success Management</li> </ul>	●	●	●
Workforce empowerment	<ul style="list-style-type: none"> <li>Access to online training courses</li> </ul>	●	●	●
Exclusive benefits	<ul style="list-style-type: none"> <li>Member rates on other services: On-site interventions, advanced trainings, spare parts, and more</li> </ul>	●	●	●
Monitor and optimize	<ul style="list-style-type: none"> <li>24/7 monitoring and alarming</li> </ul>	●	●	●
	<ul style="list-style-type: none"> <li>Consultancy by our experts and quarterly reports</li> </ul>	-	●	●
	<ul style="list-style-type: none"> <li>Condition-based maintenance</li> </ul>	-	-	●
	<ul style="list-style-type: none"> <li>Partial discharge monitoring for Medium Voltage Switchgear</li> </ul>	-	Option	Option
	<ul style="list-style-type: none"> <li>Advanced Transformer oil monitoring</li> </ul>	-	Option	Option
Extended warranty		●	●	●
On-site maintenance	<ul style="list-style-type: none"> <li>Manufacturer calendar-based maintenance visits with asset diagnostic</li> </ul>	Option	Option	-



Reduce electrical failure risk and unplanned downtime **by up to 75%<sup>2</sup>** by combining environmental and thermal monitoring



Reduce on-site maintenance activities and planned downtime **by up to 40%<sup>3</sup>** through condition-based maintenance



# Technical specifications

Frequency	50/60 Hz
Rated current (A)	630 A (1,250 A coming soon, contact us for more information)
Rated voltage (kV)	up to 24 kV
Rated power frequency 1 min withstand voltage (phase-phase/Earth)	up to 50 kV
Impulse withstand voltage (peak)	up to 125 kV
Partition class	PI
Loss of service continuity class	LSC2A (LSC1 for metering and riser functions)
Installation	Indoor
Protection index	Enclosure: IP3X/between compartments: IP2X
Short-time withstand current	Up to 25 kA 1s
Internal arc classification	Basic A-FL: 12.5 kA 1s Advanced A-FL(R): 12.5 kA 1s, 16 kA 1s, 20 kA 1s
Arc quenching technology	Vacuum
Ambient air temperature range	-25°C to +40°C
Mechanical endurance	Circuit breaker: 10,000 operations (M2)/Switch: up to 10,000 operations (M2)
Gas exhaust direction	Basic: Rear-bottom Advanced: Bottom or top
<b>Overall dimensions per unit type</b>	
Width (mm)	Switch & switch-fuse: 375/500 Circuit breaker: 750 Metering: 375/750 Risers: 375/500
Depth (mm)	Basic: 940/1020 Advance: 1030/1230
Height (mm)	From 1600 up to 2050

[Access SM AirSeT catalog](#)

Introducing SM  
AirSeT

Powered by air  
and digital

Connected and flexible  
to meet your needs



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To find out more about the SF<sub>6</sub>-free  
**SM AirSeT MV** switchgear, visit:

[se.com/smairset](https://se.com/smairset)



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