Innovative technologies for greater sustainability and efficiency

SeT Series

SM Air**SeT**™ medium voltage switchgear range

se.com/smairset

Life Is On Schneider Electric

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Introducing SM Air**SeT**

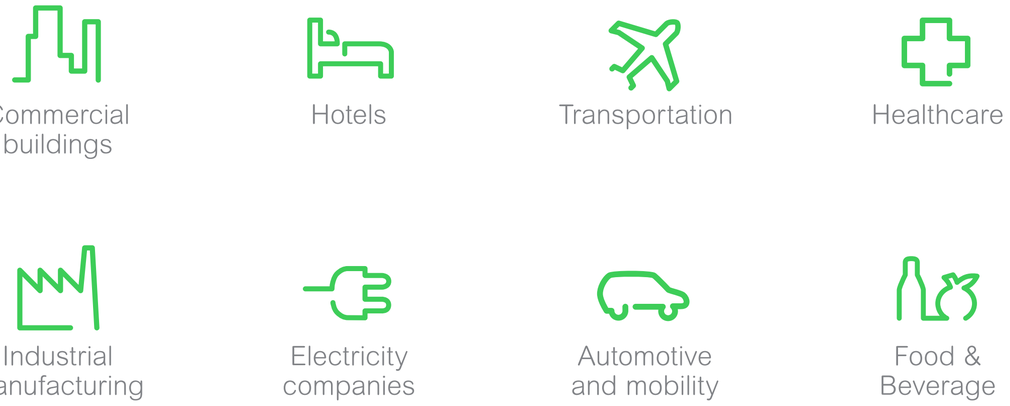
A breath of fresh air for your network

For decades, SF_6 (sulfur hexafluoride) has been trusted for use in MV switchgear, but it is the most potent greenhouse gas.

The time has come to move away from SF and switch to the best sustainable gas: pure air. It helps improve safety and avoid future regulatory risks as well as recycling treatment and costs.

Introducing the new SM AirSeT MV switchgear. Powered by air and digital, it uses established air and vacuum technology and keeps its original functionalities and connectivity. This means no compromise for professionals seeking to offer the latest technology, or end users aiming to hit their environmental targets.

SM AirSeT represents a huge step forward for MV distribution, and the planet, combining Schneider's renowned switchgear with innovative green SF_6-free technology.



A step forward for MV distribution

SM AirSeT is a range of SF_6-free modular air-insulated switchgear for MV secondary distribution and installations for the commercial and industrial buildings sector and utilities. It is easy to commission and install, with familiar footprint, connections, and operations and provides users with:

- Increased sustainability
- Higher levels of efficiency
- Enhanced safety

Watch SM AirSeT video

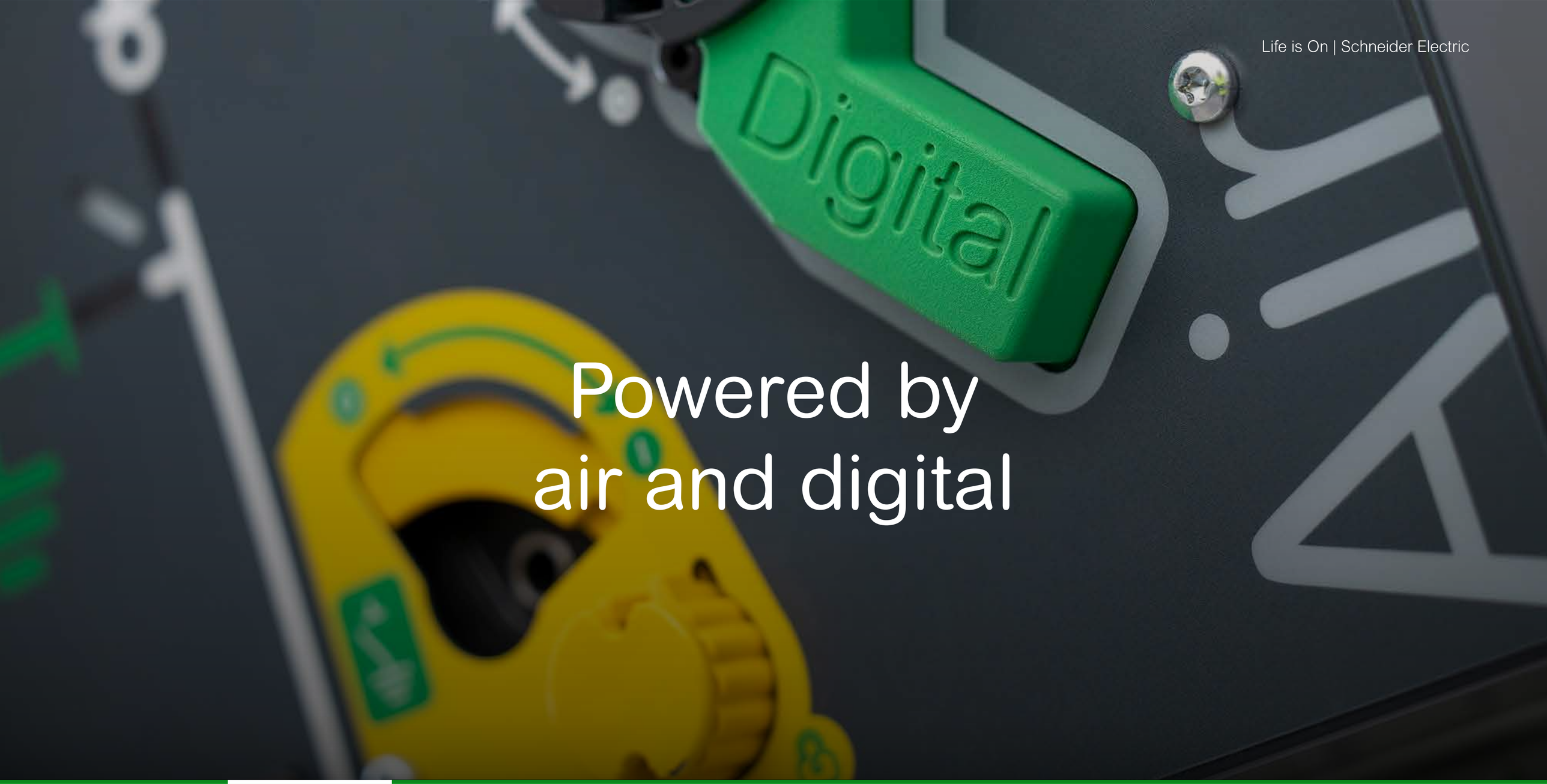
SM AirSeT and SF_6-free projects have received recognition from experts:

IF Design Award

Industrial Energy Efficiency Award

Top 10 Innovations from ICEF

EnerTiC Award



Powered by air and digital

Dramatically increased operational sustainability

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 future-ready, free from regulatory considerations.

To enable the change from SF_6, Schneider Electric has combined air for insulation and vacuum technology for arc interruption. Our innovative arrangement in a Shunt Vacuum Interruption (SVI)™ technology is used to break the current, while producing no alternative gases or toxic byproducts.

See how EEC Engie went SF_6-free
Learn more

Zero

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

Increased operator safety

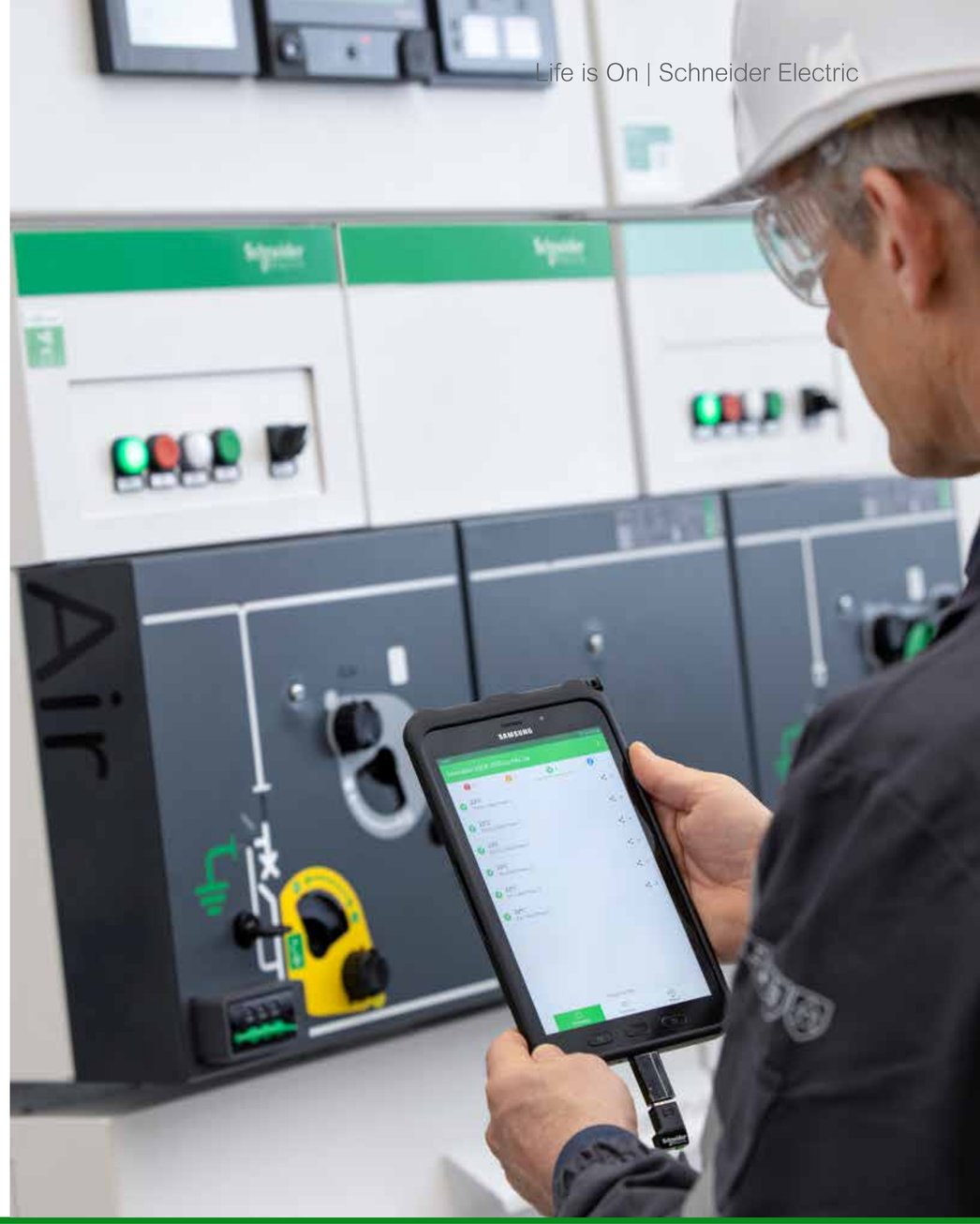
Powered by air and digital, the new SM AirSeT improves safety on two levels:

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_6-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.



Move to SM Air**SeT** with ease

Making the transition to a new MV switchgear has never been so easy.

SM AirSeT's footprint and position of connections are identical to Schneider's popular . This familiarity makes the equipment easy to recommend, 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 operation, which reduces adoption risks and it helps improve safety and avoid future regulatory risks as well as recycling treatment and costs.

Green SF_6-free MV switchgear technology explained

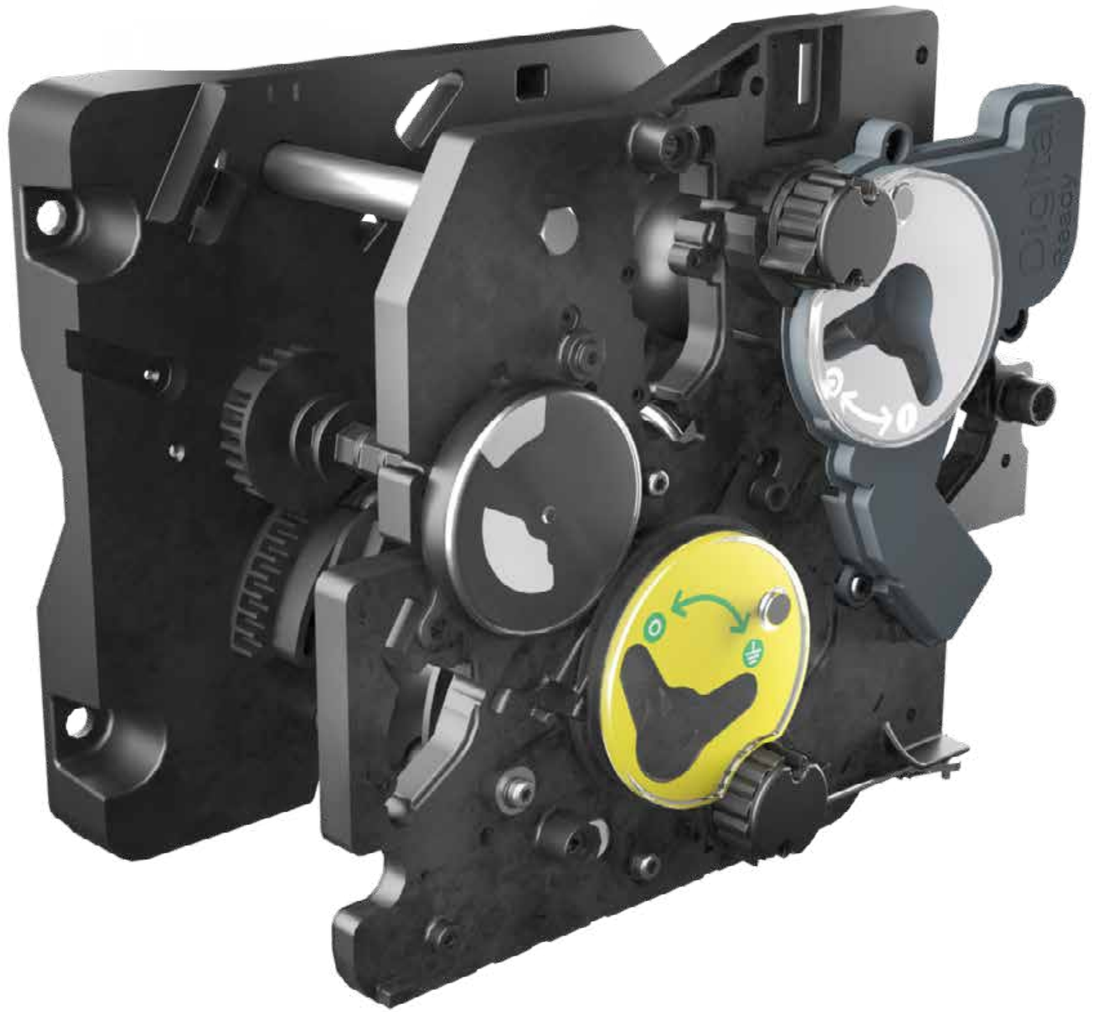
Watch the video

Made of efficient components

Each SM AirSeT features the next-generation CompoDrive 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. Highly robust design extends the lifetime of SM AirSeT to 40 years.



A comprehensive, flexible range

The modular SM AirSeT is designed to meet the most popular requirements of each distribution network. 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. Plus, users get the peace of mind that SM AirSeT is adaptable enough to evolve with their needs.

Functions include:

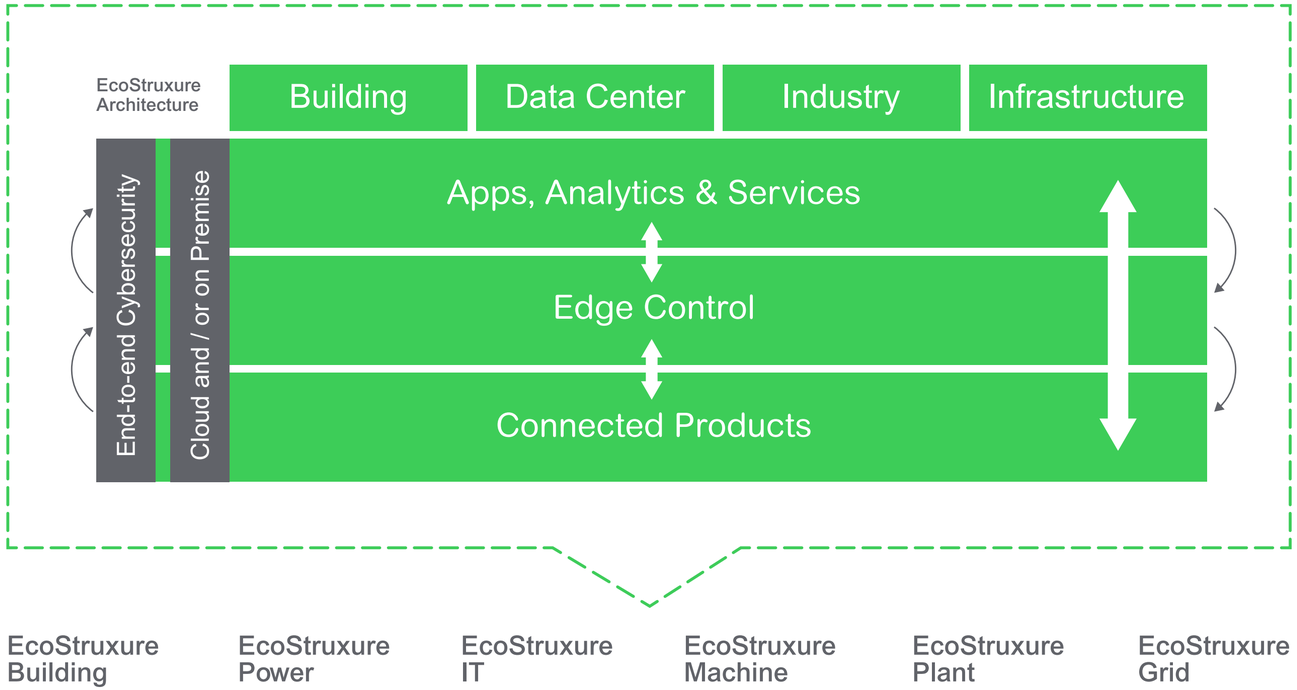
- Switch
- Switch-fuse
- Circuit breaker
- Riser
- MV metering and measurement

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.



Greater efficiency with asset health monitoring

SM AirSeT features 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. Because of this, condition-based maintenance can take place at the right time, meaning fewer 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

SM AirSeT also boasts other powerful digital capabilities extending beyond local visibility and maintenance.

Discover EcoStruxure connected solutions
Watch the video

Nearby control
Operate SM AirSeT with a single tap from a smart device, allowing operators to keep a safe distance. Including NFC Tag for Thermal Connect app download and on-site thermography.

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

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

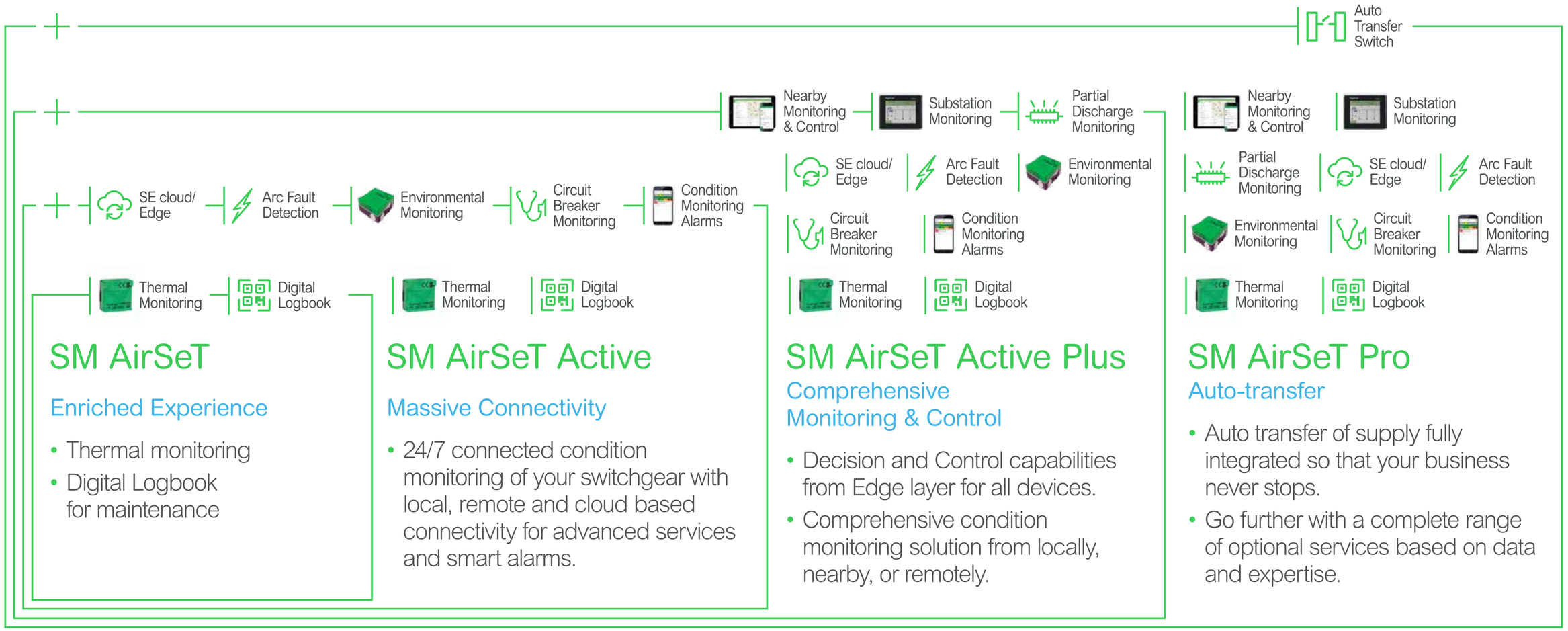
Circuit breaker monitoring
Monitoring of the circuit breaker's wear and tear for preventive maintenance.

QR codes
Quickly connect to SM AirSeT and get access to the digital logbook, manuals, and support saving operational time and effort.

Internal arc detection
Optical sensors allowing the relay to provide fast internal arc clearance decreasing operator and equipment risk, while reducing equipment damage in case of internal arcs.

LPVT
Allows standardizing and simplifying of the measurement and protection applications.

Scalable to your needs



The extended benefits of going digital

Software Apps & Service

Local monitoring	EcoStruxure Power Device	Access thermal monitoring and control your operations from the palm of your hand.
	EcoStruxure Facility Expert	Make operations simpler, more effective and more convenient, including our new digital logbook features.
Edge control	EcoStruxure Power Monitoring Expert	Designed for power-critical and energy-intensive facilities to maximize uptime and operational efficiency.
	EcoStruxure Power SCADA	Energy supply management software for electro-intensive sites.
Service	EcoStruxure Asset Advisor	Reduce downtime by monitoring and optimizing your critical connected products.
	EcoStruxure Service Plan	A set of tailored service contracts that combine the power of our EcoStruxure platform with dynamic maintenance.

Technical specifications

Frequency	50/60 Hz
Rated current (A)	630A/1,250 A
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	-25ºC to +40ºC
Mechanical endurance	Circuit breaker: 10,000 operations (M2)/Switch: 10,000 operations (M2)
Gas exhaust direction	Basic: Rear-bottom Advanced: Bottom or top
Overall dimensions per unit type	
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

Coming in 2022: 1250A/ IAC AFLR 16kA/20kA, consult us for availability

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To find out more about the SF_6-free
SM AirSeT MV switchgear, visit:

se.com/smairset

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