



More than

1 000 000

SM6 units sold worldwide

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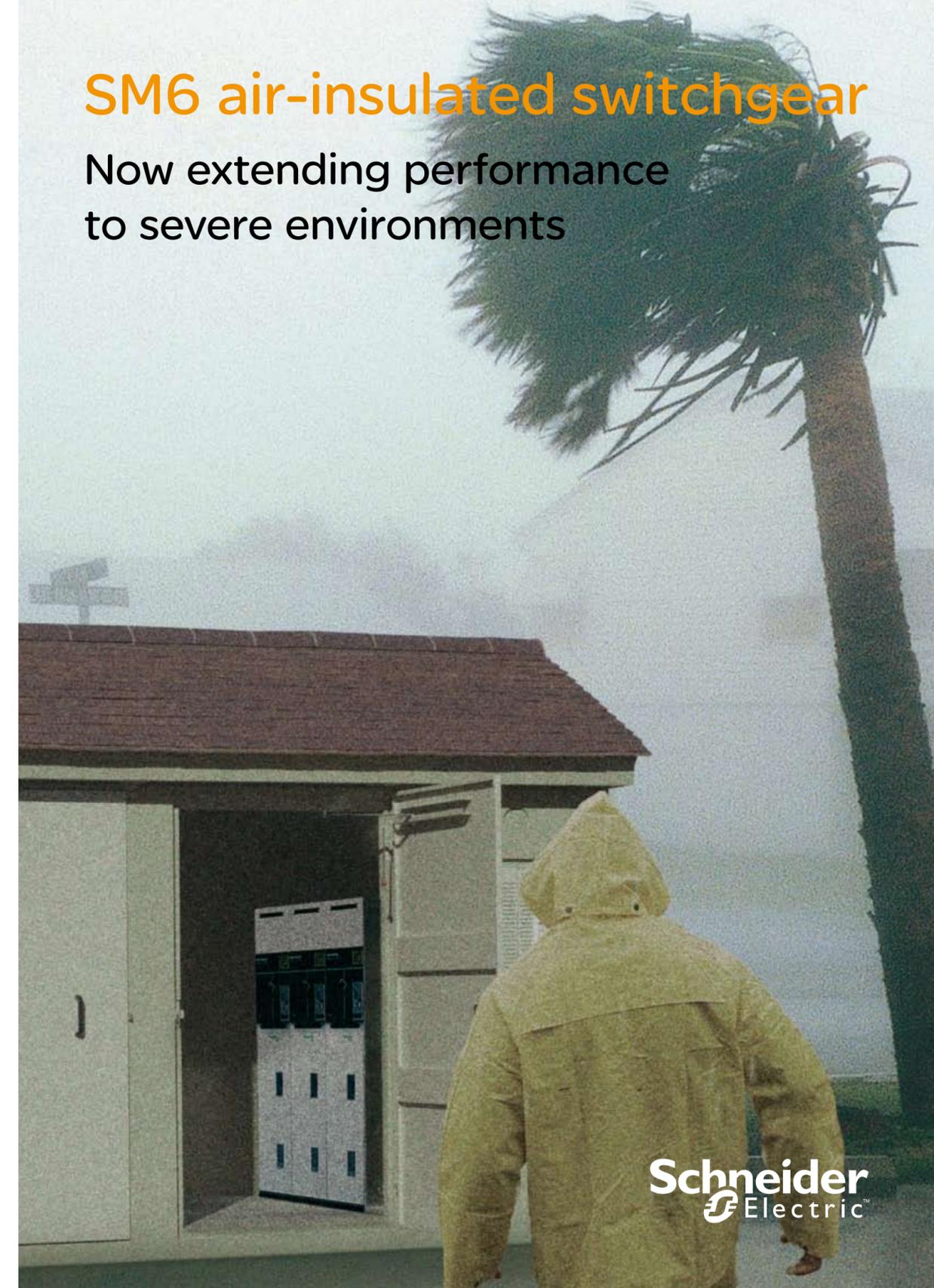
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SM6 air-insulated switchgear

Now extending performance
to severe environments



Answers to the severe environment question



A two-step approach to protecting your switchgear



A severe environment is any location with heightened levels of condensation, dust or pollution. It's these types of conditions that, over time, cause switchgears to deteriorate prematurely.

Of course, there's often no choice but to operate MV switchgears and substations in these types of environments. But the operator then pays a steep price in the form of shorter installation lifetime, due to superficial degradation of the insulating parts.



Improving the installation, safeguarding your switchgear

The first step in these situations should always be to improve the installation, with an aim to better protect the switchgear from the degrading environment. This can be achieved with such improvements as:

- > **Installing an air-conditioning system,** and eliminating sources of humidity such as plant growth around the substation.
- > **Equipping substation ventilation openings** with chevron-type baffles to reduce entry of dust and pollution.
- > **Avoiding temperature variations** by improving the thermal insulation of the substation.



Improving the product, protecting the triple point

And yet, the most significant improvement you can make is to improve the product itself — the switchgear — and protect the triple point against corrosion or degradation.

Schneider Electric's new severe environment option for the SM6 MV switchgear does precisely this, insulating your switchgear and defending it from harsh conditions in order to improve your equipment lifetime.

The ideal modular equipment for severe environments worldwide

Schneider Electric is your proven, trusted partner for MV solutions

With more than 1 000 000 units sold, the SM6 air-insulated switchgear is a global leader, with a global supply chain to support selling in more than 40 countries. This ensures that Schneider Electric is right next door to our customers to meet their needs, wherever they happen to be.

Providing additional severe condition protection

And, through our severe conditions option, the SM6 range gains enhanced durability to withstand severe environments, providing the end user with:

- > **A better equipment lifespan**
- > **Reinforced structure at triple points**
- > **Improved dielectric performance**
- > **Improved service continuity**

The severe conditions option gives the SM6 range additional protection which both reduces maintenance and increases the safety of the equipment. Reduced risk of internal arcing, easy upgradeability — all this adds up to **increased peace of mind for the end user.**

Peace of mind throughout the equipment life cycle

But even without the severe conditions options, we take your needs into concern. That's why we provide a high degree of protection at three compartments, helping to enhance the safety of personnel.

It's also why SM6-24 has been designed to be environmentally friendly; at the end of its life, **SM6-24 is recycled** and its materials recovered in compliance with European regulations.

And, this process runs without any gas being released into the atmosphere or any polluting fluids being discharged.

3,890 years
The mean operating time to failure (MTTF) for SM6-24 MV switchgear based on an internal study completed in 2011.



Severe environment product evolution:



Innovation at the busbar



It's a simple solution, but the isolated busbar is an important innovation — and since the triple point is the root cause of degradation on most MV switchgears, protecting this area is critical.

This optional isolated busbar solution provides full coverage of the triple point at connection, with no change on the busbar itself (if there is no LBS). Here, new field distributors are used both between cubicles and on extremities.



Replacing aluminum with silicon



By replacing the field distributor's traditional aluminum composition with one made of silicon, we provide the triple point — the air, copper and epoxy connection point — with extra protection from a variety of severe conditions.

Why silicon?

Besides providing good overall withstand to harsh environments, silicon has also been proven to be:

- > Resistant to ozone gas, providing additional durability
- > A hydrophobic material, reducing degradation from water
- > A provider of enhanced triple point protection.



Reduced maintenance



Increased safety



Environment friendly

