Services

ECOFIT™ – Switchgear retrofit and upgrade solutions
Enhance the performance of your equipment with minimal interruption to your business
ECOFIT™
The ultimate service concept

It can be time-consuming and expensive to replace obsolescent switchgear, so a more effective solution may be to simply upgrade the circuit breaker.

ECOFIT is Schneider Electric’s solution to switchgear retrofit and upgrade, with limited busbar shutdowns and no civil work modifications. ECOFIT has already been adopted by more than 1,000 companies around the world that want to be completely confident that their system is efficient, safe and is utilising up-to-date technology.

Through its acquisition of AREVA Distribution, Schneider Electric has widened its portfolio of ECOFIT offers. We can now provide more than 150 solutions for medium and low voltage switchgear. We can replace Schneider Electric switchgear and its legacy brands, (including Merlin Gerin, Yorkshire Switchgear, Alstom, GEC, AEG, Sprecher or Concordia), and our ECOFIT also extends to non-Schneider Electric equipment.

More than 1,000 companies worldwide have already adopted ECOFIT.
ECOFIT, means ‘ecological and economical’

It is Schneider Electric’s solution to reduce maintenance and replace old technology with the latest innovations. With ECOFIT we can replace your circuit breaker, protection relays or provide an extension panel to your existing installation, all with minimal down time.

What are the benefits?

- Significantly prolongs the effective lifetime of your switchgear
- Enhanced availability and operational reliability by reducing the risk of failure
- The outage required to complete a retrofit is much shorter in duration than that required to replace a switchboard
- It’s not necessary to remove the old switchboard – particularly key when access may mean this is difficult to achieve
- Maintains compliance with evolving industry standards and legislation
- Phased modernisation of your installation increases budgetary and operational flexibility
- Ensures the ongoing safety of your personnel and surrounding equipment by utilising the latest technology
Schneider Electric has developed a range of ECOFIT solutions to suit your needs.

Take a look at the next few pages to see what we can do for you...

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Medium voltage switchgear solutions

Schneider Electric has designed several retrofit solutions to extend the operational life of its medium voltage range of withdrawable switchgear.

YSF6 Retrofit

Introducing a ‘roll-out’ ‘roll-in’ retrofit offer, the YSF6 retrofit replaces the SF6 Circuit Breaker with our latest Evolis vacuum circuit breaker, in a new moving portion.

The Evolis circuit breaker is at the heart of the YSF6 retrofit and has been developed using our vast experience in medium voltage switchgear. It has been designed with environmental care in mind and has been awarded the ISO 14001 standard certification. It also conforms to our ISO 9001 quality assurance standards – therefore offering a high quality product that is already well established and used in several product ranges worldwide.

VMX medium voltage retrofit and extension

Originally manufactured under the legacy brand names of GEC, GEC Alsthom and Alstom, VMX is an 11kV withdrawable vacuum circuit breaker.

Schneider Electric can provide VMX units as both an extension to existing VMX switchboards and as a retrofit and extension solution for legacy BVP oil circuit breakers.

We can also provide workshop refurbishment, on-site maintenance and a full range of spare parts for the VMX products.
Features and Benefits

- Modular engineered ‘roll-out’ ‘roll-in’ unit
- Fully engineered type tested solutions
- We offer installation and commissioning upon request
- Optional protection upgrade to replace the existing electromechanical and older type solid state protection relays, with technologically advanced integrated microprocessor-based Sepam and MICOM digital relays.
- The performance, accuracy and longevity of your system can be significantly improved
- Optional remote control is useful for system automation or for situations where no access is allowed to an MV switchroom when breakers are switched
- Take advantage of the latest technology through increased functionality incorporated in today’s circuit breakers, such as metering and communication for use in energy efficiency initiatives
HWX medium voltage extension panels

HWX – an 11kV withdrawable vacuum circuit breaker.*

Extension cubicles and trucks are still manufactured for the HWX range, together with workshop refurbishment and a full range of spare parts.

HMX 36 and MX 36 medium voltage extension panels

HMX 36 and MX 36 – withdrawable vacuum circuit breakers.*

Extension cubicles and trucks are still manufactured for the HMX range, together with workshop refurbishment, on-site maintenance and a full range of spare parts.

Medium voltage switchgear summary

<table>
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<tr>
<th>Range</th>
<th>YSF6</th>
<th>VMX</th>
<th>HWX</th>
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Through its in-house design capabilities, Schneider Electric can offer ECOFIT solutions for other manufacturers medium voltage switchgear (by consultation via an engineered solution).

ECOFIT solutions are available for over 150 types of MV switchgear.

*Originally manufactured under the legacy brand names of GEC, GEC Alsthom and Alstom

*With HMX36 via an adaptor
Motor Starter Solutions

HMC 1072 / 1172 vacuum motor starters

HMC 1072 / 1172 – 3.3kV and 6.6kV withdrawable vacuum motor starters.*

Schneider Electric can provide HMC 1172 units as extension cubicles to existing switchboards. We can also provide workshop refurbishment, on-site maintenance and a full range of spare parts is available for the HMC range.

HMC 400 / 410 vacuum motor starters

HMC 400 / 410 – 3.3kV and 6.6kV withdrawable vacuum motor starters.*

Schneider Electric can provide HMC 400 / 410 units as a complete starter chassis. We can also undertake workshop refurbishment, including vacuum contactors and control scheme utilising the Gemstart controller unit.

*Originally manufactured under the legacy brand names of GEC, GEC Alsthom and Alstom
Low voltage switchgear solutions

Upgrade and extend the life of your power distribution devices, without the disruption of removing and replacing your entire switchboard and disturbing existing cabling.

Engineered to fit
The LV Air Circuit Breaker (ACB) retrofit has been designed and engineered to fit into an existing switchgear compartment, with minimal modification to upgrade your LV system and switchboards.

Why replace your switchgear?
When it becomes:
> unserviceable
> no longer commercially available
> impossible to obtain spare parts
> expensive to maintain
> no longer suitable for the application

A service to suit you
Dependent on the device to be retrofitted, Schneider Electric can offer several solutions:

LV Plug and play
> Quickest retrofit option available
> The original chassis is maintained and fitted with an NW circuit breaker
> Covering Masterpact M and Compact C product ranges
> Can also be used with Klockner Moeller IZM and Holec circuit breakers

LV Masterkit
> The kit for the entire device is pre-fabricated enabling simple installation on site
> Covering previous generations of Merlin Gerin and Klockner Moeller devices

LV Engineered solutions
> Custom-made engineered solutions
> Using either pre-engineered components, on-site fabrication or a combination of both

As a type-tested solution, the Ecofit offer ensures the continued functionality of existing installations and the integrity of existing panels.
Upgrade and extend the life of your power distribution devices.
Get more from the experts

We can also retrofit circuit breakers from other manufacturers. These include:

- All Merlin Gerin devices, Masterpact, DA, Selpact, Compact
- Ottermill
- Ellison
- Terasaki
- ABB/SACE
- Mitsubishi
- Siemens
- AEG
- Vickers
- GEC

(Other manufacturers by consultation via an engineered solution)
Low voltage motor control centre solutions

Schneider Electric’s range of 415V Motor Control Centres* can be supplied as extension cubicles and starter chassis’ for the Mainline, Trimline and Galaxis ranges.

We can also undertake workshop refurbishment and on-site maintenance on these ranges, together with availability of a full range of spare parts.

*Originally manufactured under the legacy brand names of GEC, GEC Alsthom and Alstom.
Protection upgrades

Improve the performance of your system with the latest technology in micro-processor based integrated relays.

Why protection upgrade?

By replacing solid state and older type electromechanical protection relays with technologically advanced multi-function microprocessor-based digital relays, the performance, accuracy and longevity of your system can be significantly improved.

With a number of different protection functions Schneider Electric’s range of relays can provide a range of options to include metering; communication; event capture; monitoring and control. Units are self-diagnostic to provide enhanced reliability. It is normally possible to use the existing current and potential transformers and auxiliary relays for the new digital relay inputs. Schneider Electric’s application based approach makes it easy to select the appropriate relay for your needs.

What are the benefits?

Accuracy

➢ System protection at the current level reduces unnecessary outages and minimises stresses to equipment.
➢ Increased accuracy of measurement assists in cost allocation and understanding power demand requirements.
➢ High reliability from advanced self supervision systems.

Flexibility

➢ The integrated functions of the relay allow for communications and control of the equipment either as a stand-alone unit or as part of networked systems.
➢ All components in the protection chain are referenced and interface rapidly.
➢ No constraints for integration in cubicles due to the compact size of the base unit.

Ease of use

➢ Settings and adjustments are entered via the device’s keypad and visually displayed.

Reduced costs

➢ The amalgamation of functions into one self-diagnosing meter reduces expenditure and saves on space.
Associated services

The Schneider Electric Services and Projects team can provide a comprehensive range of associated services to complement our retrofit services, these include:

> ‘Prevent’ – Electrical distribution support contracts
> Workshop maintenance and repair services
> Installation audits and network studies

History – legacy brands

Schneider Electric can offer ECOFIT solutions for many products which were previously manufactured under the legacy brands associated with the organisations history.
As a global specialist in energy management with operations in more than 100 countries, Schneider Electric offers integrated solutions across multiple market segments, including leadership positions in energy and infrastructure, industrial processes, building automation, and data centres/networks, as well as a broad presence in residential applications.

Focused on making energy safe, reliable, and efficient, the company’s 110,000 plus employees achieved sales of 19.6 billion euros in 2010, through an active commitment to help individuals and organisations “Make the most of their energy.”

We are changing our brand names and becoming one Schneider Electric. You’ll get the same great quality products, but from one name you can remember and trust. This provides you and your customers with the reassurance associated with Schneider Electric.

Some of our market leading brands have already become Schneider Electric including Merlin Gerin, Telemecanique, Square D, GET, Mita, Sarel, Himel, Thorsman, Tower and TAC.

Working as one Schneider Electric makes it clearer that our ranges are highly compatible for integrated solutions.