Medium voltage switchgear With fixed pattern circuit breaker

GenieEvo

Simple and highly reliable switchgear for primary and secondary distribution







GenieEvo is an indoor switchgear assembly circuit breaker that provides maximum user safety.

It is intended to meet all electrical distribution needs from 3.3kV to 13.8kV and incorporates a set of innovative solutions using proven techniques

- > Hi-performance vacuum breaking device
- > Digital protection and control system
- > A range of cubicles designed and tested for internal arc resistance
- > Proven insulation systems for all environments

GenieEvo is the result of extensive experience: proven to deliver high levels of reliability and safety.

It is particularly suitable for network operators, infrastructure, banking, data centres and large commercial sites, for the distribution of medium voltage.

GenieEvo: outstanding references

With it strong reputation, GenieEvo has become the switchgear trusted by those who supply the critical installations and need to ensure uninterrupted service:



Network operators

EDF Energy Scottish Power



Transport

Tyne Crossing
Heathrow airport
Birmingham New street station
Paddington Central station



Water treatment

UU Water Yorkshire Water Severn Trent Water



Banking and finance

Canary Wharf New York Stock Exchange Morgan Stanley Deutsch Bank



Telecommunications

& data centres

Equinix Data BBC Media Infinity data centre



Industry

Aston Martin
Bells Whiskey
British Gypsum
John Smiths brewery



Hospitals

Hammersmith hospital Princess Diana hospital

A high level of reliability and performance



GenieEvo: high-level protection for users

GenieEvo is designed to protect users through its resistance to faults due to internal arcing.

Offering piece of mind for end users:

- > Internal arc to IEC 62271-200
- > Front protection
- > Optional four sided protection
- > Assessed to ENATS 41-36 specification
- > Safety systems that prevent unauthorised operations



GenieEvo: high reliability in all environments

GenieEvo is has been proven to be reliable no matter what the substation environment.

GenieEvo design has features design features for enhanced reliability:

- > Insulated connections and earth screened disconnector
- > Earth screened busbar option for a fully earth screened switchboard
- > Evolis breaker proven technology
- > Solid insulated busbar and primary connections



GenieEvo: simplicity in design and operation

GenieEvo has been designed for all involved in the selection, installation, commissioning and end user.

With unique features for all those involved in the supply chain to the end user:

- > Pre-engineered catalogue solutions or engineered to individual requirements
- > Attractive lead times
- > Simple to use
- > Virtually maintenance free fit and forget



GenieEvo: compact in design

GenieEvo compact design allows designers to keep substation civil costs down with features to assist consultants, architects and contractors:.

- > Compact footprint and lower than standard door height
- > Easy to install and commission
- > Minimal working space required when installed
- > Switchboards can have additional panels added at a later date

GenieEvo:			
Main characteristics			
Rated system voltage		13.8kV	
Rated frequency		50/60Hz	
Rated insulation level			
Impulse voltage withstand (1.2/50µs)		95kV peak	
Power frequency voltage withstand (1 min)		38kV	
Busbar ratings		630A/1250A/2500A	
Internal arc rating		Up to 25kA AF or AFLR for 1 second	
Rated short time current		25kA rms	
Rated short time duration		3 seconds	
Circuit breaker characteristics			
Technology		Vacuum	
Rated breaking current (symm)		25kA	
Rated peak making current		67.5kA	
Rated nominal current		200A/630A/1250A/2000A/2500A	
Rated cable charging breaking current		25A	
Rated operating sequence		0-0.3s-CO-15s-CO	
Mechanical charging time		< 5 seconds	
Dimensions			
Туре	Width	Depth	Height
Incomer/feeder			
Up to 1250A	500mm	1200mm	1900mm
2000A/2500A	750mm	1200mm	1900mm
Bus-section			
Up to 1250A	1000mm	1200mm	1900mm
2000A/2500A	1250mm	1200mm	1900mm

GenieEvo: thorough, systematic testing

During manufacture, each cubicle undergoes systematic routine testing aimed to check quality and conformity:

- > Testing of circuit breaker and disconnector
- > Measurement of closing and opening speeds
- > Dielectric testing
- > Testing of safety systems and interlocks
- > Testing of digital protection and control systems
- > Testing of low voltage components
- > Conformity of drawings and diagrams

GenieEvo: ISO 9001 certified quality

Each Schneider Electric manufacturing site complies with meticulous quality department procedures to maintain constant high quality and ensure compliance to standards.

Schneider Electric gives you the guarantee of consistent quality, wherever the manufacturing site, anywhere in the world and is recognised by a large number of customers and officially recognised organisations.

The strict, measured implementation of the quality system has been acknowledged by independent organisations: UKAS (UK Accreditation Service) and AFAQ (French Quality Assurance Association).

GenieEvo's quality system for design and manufacturing is certified according to the requirements of ISO 9001: 200 quality assurance standards.



GenieEvo: high reliability and simplicity in design

Low voltage cabinet

This cabinet includes:

- > Sepam relay
- > Low voltage components
- > Electrical controls for the switchboard
- > Voltage presence indicator

Busbar compartment

This compartment connects other cubicles in the switchboard via busbars.

Switchgear compartment

This compartment contains:

- > Vacuum circuit breaker
- > Encapsulated air disconnector and earthing switch
- > Protection and metering CT's
- > Voltage transformers

Cable box

The cable box can accommodate up to 4 x 6302mm cables per phase





For further information on our range of products please contact:

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Schneider Electric, the global specialist in energy management, offers integrated solutions making energy safer, more reliable, efficient and productive in the energy and infrastructure, industry, data centres and networks, buildings and residential markets.

With sales of €18.3 billion in 2008, the company's 114,000 employees in 102 countries 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, Mita, Sarel, Himel, Thorsman, Tower and TAC.

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

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As standards, specifications and designs change from time to time, please ask for confirmation of the information given in this publication



