



Power Plant Electrical Technologies (Pty) Ltd



GEN-FLEX LOW VOLTAGE

Compact Low Voltage Gen-Flex Panel

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INTRODUCTION

The Gen-Flex is a stand-alone, non-modular solution, to generator systems between the alternator and step-up transformer, ATS panel or synchronisation panel.

We have developed a technically competent low voltage switchgear solution specifically intended for power generation through generators, which enable us to compete in the South African and African markets as well as internationally.

The Gen-Flex LV panel can be supplied as a barebones panel with only a moorised air circuit breaker, or the client can specify to include items, such as current transformers, voltage transformers, metering equipment, indication lights, protection relays or generator controllers. In the end, the solution will match the client's requirements.

Whether your choice will be for ready-to-buy, easy configuration and design, with short delivery time, or whether you need a tailored-made solution to suit your specific requirements, Power Plant Electrical Technologies has the solution. Power Plant Electrical Technologies range offers a large choice of functions to meet any kind. of application: switches, circuit breakers, metering equipment.

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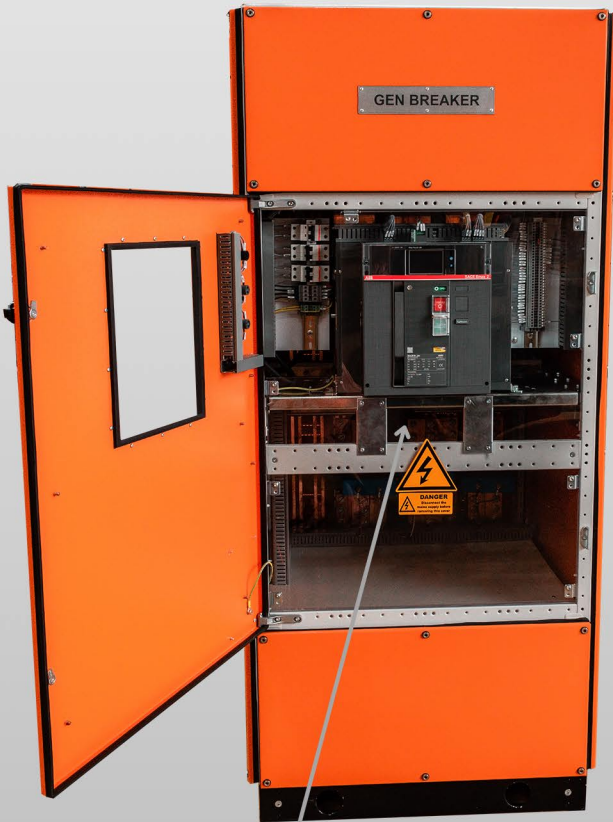


TECHNICAL DATA SHEET

The Power Plant Electrical Technologies Flexrange aims to provide solutions that are robust, reliable, sustainable and efficient.

The design and engineering philosophy used in our manufacturing approach speak to solutions that provide the best results for your company, your process, and your profits.

The LV switchgear is suitably rated and manufactured in compliance with SANS 1973-1/IEC 60439-1 or IEC 61439 standards and is manufactured under an ISO 9001-2015 standard of quality.



General specification for Compact GenFlex Panel

| | |
|------------------------------------------------|-------------------------|
| GenFlex type | Single Busbar |
| Delivery version | Complete panel |
| Standard | IEC 62271 |
| Packing | RSA – Bubble Wrapping |
| FAT | Nelspruit RSA |
| Altitude of installation | Less than 1000 m |
| Rated voltage | 12 kV |
| Service voltage | 12 kV |
| Rated frequency | 50 Hz |
| BIL (1.2/50 micro-sec. wave) | 95 kV peak |
| Short time withstand current | 50kA - 120kA rms - 15 s |
| Peak withstand current | 50kA - 150kA peak |
| Busbar rated current | 6300 A |
| Insulated busbars | No |
| Main circuit Cu bars coating | No |
| Protection degree outer cover (IEC 60529) | IP4X |
| Protection degree inner partitions (IEC 60529) | IP20 |
| Ambient temperature (IEC 60694) | -5 to +40 °C |
| Painting colour | B26 Orange |
| Painting treatment | Standard |
| Feeder and apparatus doors closing version | Square Key |
| LV compartment closing doors version | Square Key |
| Floor fixing | Anti-vibration mounts |
| Anticondensation heater | On request |
| Panel control | On request |
| Panel Protection | On request |
| Panel Metering | On request |
| Panel Indication Lights | On request |
| LV compartment internal lighting | On request |
| Apparatus spring loading voltage | On request |
| Control auxiliary voltage | On request |
| Signalling auxiliary voltage | On request |
| Lighting & heating voltage | On request |
| Control circuits wires section | 1.5 mm ² |
| Voltage circuits wires section | 2.5 mm ² |
| Current circuits wires section | 2.5 mm ² |
| Earthing circuits wires section | 2.5 mm ² |
| Wiring cables type | Standard |
| Wiring cables rated voltage | 0.6/1 kV |
| Wiring cables colour | Customized |
| Colour of Auxiliary AC | BLK |
| Colour of Auxiliary DC | GRY |
| Colour of CT circuits | RW-B |
| Colour of VT circuits | RW-B |
| Colour of Earthing circuits | Y-G |
| Panel control | ABB IEDs |




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