

Equipment for Service and Maintenance of SF₆ -Switchgear and Circuit -Breaker

Certified acc. EC 305/2008

SF₆ - Gasopur-210



SF₆—Gas Analyser

Applications

The Gasopur-210 Pump Back unit is a fully-automatic gas analyser, designed for controlling and monitoring the quality of SF₆ in medium and high voltage gas insulated electrical equipment.

Special features

- Bespoke sensor combination
- 7 inch full-colour touch screen
- Lithium battery provides 8 hours of operation
- Heavy duty IP66 case
- Continuous data logging download via USB
- Can be charged by AC adaptor, convenient and quick on worldwide mains voltage
- Integrated thermal printer
- Multi-language
- Total weight 21kg
- Long service life of sensor
- Easy to use
- Fast response time
- Calibration in the factory using certified test gases

Description

Exceptional accuracy and stability are provided when measuring the purity of SF₆ gas, through specially selected sensors. The modular configuration allows for up to eight compatible gases to be analysed, simultaneously, with one analyser.

Once connected, the Gasopur-210 SF₆ Pump Back samples gas from the electrical equipment automatically or manually, with an inlet auto gas pressure sensing function. A vacuum purge cycle and internal gas storage system ensures that no air can contaminate the gas sample and that no SF₆ gas is able to escape during the testing period.

SF₆ gas pressure in the internal sample compartment is recorded and logged by the analyser. All measured gases are analysed, and data logged simultaneously with only a few minutes required to achieve a stable reading. A powerful 10 bar compressor, with a separate lithium battery power supply, then returns the gas to the electrical equipment at high pressure.

The analyser is pre-programmed with all current IEC and CIGRE test configurations, with the ability to create customised test parameters. Modular design allows for bespoke sensor combinations upon request.

Though highly configurable to suit individual customer requirements, the Gasopur-210 SF₆ Pump Back possesses several standard features to enhance functionality.

Working principal

SF₆ is an extremely stable, non-flammable and highly electronegative gas with excellent dielectric properties. It is commonly used in medium and high-voltage electrical equipment as an electrical insulator, arc-quenching and cooling medium.

However, SF₆ is classified as a greenhouse gas and must be kept within a closed circuit to avoid any deliberate release into the atmosphere. The international Kyoto agreement protocol has mandated reductions to harmful emissions amongst its member states.

For the power transmission and distribution network, SF₆ technology remains essential. To protect personnel, equipment and the environment regular SF₆ analysis should be adopted within the maintenance schedule. The early identification of any decomposition products and moisture within the SF₆ gas will help avoid unnecessary shutdowns, outages and failures, in addition to reducing maintenance expenditures.

Accessories



- 1) Calibration and Service Kit
- 2) Gas Recovery Bag
- 3) DN8 & DN20 Fittings and Braided Hoses

Specifications

Operating Temperature :	-20°C to 55°C
Warm-up time:	3-4 minutes at 20°C
Voltage (Charging)	90-260VAC, 50/60Hz
Battery Life:	in excess of 8 hours , 4-6 hour charge
Sample Connections	Rectus style fittings
Data Output:	Excel compatible data via USB memory stick
Data Storage:	4GB internal data storage (allowing for approximately 1 year of continuous monitoring)
Gas Flow:	100-1000ml per minutes
Max Inlet Pressure:	10bar
Optional Pump:	0-litres per minutes
Display:	7 inches (180mm) full-colour LCD touch screen interface
Printer:	Integrated thermal printer allows output of results on demand
Anyser Dimensions:	180mm (H) x 480mm (W) x 360mm (D)
Weight:	8.5kg (Total instrument and case)