INDUSTRIAL SA

NOVA BAYS

The **NOVA-BAYS** equipment is intended for on-line monitoring, measurement, processing, storage and remote transmission of data representing values of electrical and physical parameters, in stationary or dynamic mode, for primary switching and measurement equipment that make up an electrical cell specific to high-voltage electrical stations in electricity transmission and distribution systems.

The **NOVA-BAYS** equipment is designed to monitor and perform on-line diagnosis of the following possible primary electrical equipment in a high-voltage electrical cell, namely:

- circuit breaker (3 single-phase assemblies, each with its own single-phase actuator);
- busbar disconnectors (2 x 3 single-phase assemblies, each with a single-phase/three-phase actuator);
- circuit breaker disconnectors (3 single-phase assemblies, each with a single-phase/three-phase actuator);
- earthing knife (9 quick earthing knife assemblies with their own actuator);
- current transformers (3 single-phase);
- voltage transformers (3 single-phase);
- surge arresters (3 single-phase).

The **NOVA-BAYS** equipment allows direct measurement in static and dynamic mode of the following electrical and state parameters:

- three-phase line current and three-phase phase voltage transiting the cell under monitoring. In stationary mode the values are RMS values, in dynamic mode (during a normal switching or triggered by an event) they are graphical recordings of the waveforms;
- the supply voltage of the circuit breaker operating coils, static mode;
- the current through the operating coils (closing and tripping) of the three phases of the circuit breaker, dynamic mode graphical recordings of the waveforms;
- the SF6 pressure, when there are transducers, in stationary mode;
- the current and voltage supply to the motor of the actuator for the main circuit (CP) and for the earthing circuits (CLP), in dynamic mode, for the disconnectors;
- the leakage currents through the protective arresters, both for the fundamental component (50Hz) and the third harmonic (150Hz);
- the signalization of the occurrence of an overvoltage with arrester actuation, on one or more phases;
- the minimum/maximum level of the insulating fluid at the circuit breaker and the measuring transformer;
- the closed/open position of the circuit breaker;
- the closed/open position for all circuits of the disconnector (CP, CLP1, CLP2);
- the dynamic recordings include both electrical parameters (current, voltage) and state parameters (closed/open mode, operating commands) so that a visualization of an event (equipment closing/opening) allows a comparison of the development of the event parameters over time, both in amplitude and in positioning reported to the start time of the event;
- the recording period of an event is 3 seconds for the circuit breaker and 10 seconds for the disconnector.

The origin of time is given by the receipt of an operating command.

There are a number of other parameters, which are calculated or evaluated depending on the directly measured parameters, which use different specific software protocols, within the specific software application.





100% created & made in ROMANIA

Over 25 years of experience

ISO 9001, ISO 14001, ISO 45001

QUALITAS — CERTIFICAT SMC NR. QC/1105 SR EN ISO 9001 : 2015

QUALITAS — CERTIFICAT SMM NR. QM/1034 SR EN ISO 14001 : 2015

QUALITAS — CERTIFICAT SMSSM NR. QSM 38 SR EN ISO 45001 : 2023

www.novaindustrialsa.ro