NOVA INDUSTRIAL SA

Switchgear apparatus prophylaxis

NOVA INDUSTRIAL S.A. experts evaluate the technical state echnical state of the switchgear apparatus in service based on the analyze of the history data (concerning construction, factory tests, tests for putting into service or for preventive maintenance, incidents in operation, etc.), in addition to tests and measurements specific to each type of switchgear.

Tests and measurements specific to **SWITCHES / DISCONNECTORS**:

- measurement of the insulation resistance of the low voltage secondary and/or auxiliary circuits from the operating mechanism;
- measurement of the insulation resistance of the pieces made of organic or composite insulating materials;
- insulation test made at the power frequency voltage of the primary current path, with the switch closed, respectively opened;
- verification of the contact resistance of the main knifes and respectively of the earthing knife, in static and dynamic conditions;
- verification of the electromagnetic interlocks of the assembly made by the operating mechanism and the switch (verification of the interlocks between the main knifes and the earthing knife);
- functional verifications at repeated closings / openings;
- measurement of the load torque at the switch action;
- verification of the tightness, of the connector operation at the pressure decrease and of the dew point (for the SF6 gas insulated switch / disconnectors);
- verification of the motion characteristics (reaction times, non-simultaneities at the cycles opening and closing, speed, acceleration, total course);
- measurement of the vibration during the switches operation;
- verification of the seismic behavior of the switches.

Tests and measurements specific to **CONTACTORS**:

- measurement of the contact touching non-simultaneity for each faze;
- measurement of the voltage drop on the contacts;
- measurement of the ohmic resistance of the current path;
- measurement of the insulation resistance of the current path;
- measurement of the insulation resistance of the auxiliary circuits (control and signalization);
- insulation test made at the power frequency voltage of the primary current path, with the main contacts closed, respectively opened.

Specialized engineering services for switches and contactors in operation



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

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