OnSite ProDiag MV Relay
Diagnostic of medium voltage protection relays condition and configuration settings

**OnSite ProDiag MV Relay objective**
Accurate tripping time operation in accordance with medium voltage relay protection function settings defined for an electrical installation has always been mandatory for evaluating its protection performance, along with the circuit breaker trip chain operation (wiring, coil, circuit breaker opening).

The aim of *OnSite ProDiag MV Relay* diagnostic service is to mitigate the risk of medium voltage protection relay electronics problems. It identifies the symptoms of an undetected degradation of the equipment (tripping time drifts, wrong configuration settings) before the fault happen with unwanted effects like:
- unexpected blackouts
- downstream industrial equipment inefficiencies
- potential breakdowns (reactive maintenance)
- longer short circuits
- circuit breaker, switchgear or electrical room complete destruction.

Regular diagnostics of medium voltage protection relays, as part of *OnSite Condition Maintenance Essential*, brings several benefits:
- alert at its early stages of above described phenomena not detected during the regular preventive maintenance.
- improve the protection of downstream electrical distribution equipment, goods and people operating them as its main mission:
  - isolation of network segments where fault is detected,
  - maintain high energy availability, avoiding a total outage,
- help to enhance reliability, mitigating unexpected shutdown risks and operating costs.
- help to extend medium voltage protection relay lifespan optimizing its total cost of ownership.

**Benefits**
- Improve protection of people and goods
- Mitigate shutdown costs
- Optimize total cost of device ownership
OnSite ProDiag MV Relay

Additional information

Potential causes of electronics weak performance in medium voltage protection relays are:

• severe environmental conditions: humidity, strong temperature variations (condensations), bad ventilation, saline ambient, etc.
• harsh exploitations conditions:
  • electrical stress (overvoltage)
  • mechanical stress (vibrations)
  • chemical stress (corrosive ambient, dust, pollution)
• uneven, weak or simply no maintenance.

Schneider Electric Field Services recommends OnSite ProDiag MV Relay at least every 4 years under favourable operating conditions, or less if operates under severe operating conditions (for more details go to our White Paper “Strategies for Maintaining Electrical Distribution equipment”).

OnSite ProDiag MV Relay diagnostic assesses the electronics condition. It confirms if the equipment performs or not according to technical specification. Designed by Schneider Electric, OnSite ProDiag MV Relay diagnostic service is conducted on de-energized equipment. It delivers valuable and customised assessment of:

• protection function ANSI 32P, 37, 46, 49, 50/51, 50/51N, 51LR, 59, 59N, 67, 67N, 81H, 81L
• configurations settings.

Data is recorded and organized in OnSite ProDiag MV Relay software and these results can be:

• within the acceptable range, so operating chain is in good condition
• at the limit, or not compliant, recommending curative actions.

Summarized in an exhaustive report with asset characteristics, measured data and analytics with our expert insights, OnSite ProDiag MV Relay recommends (only if needed) to repair and regain the original equipment conditions improving its protection, reliability and service life.

Schneider Electric, as original equipment manufacturer, we use a proprietary software and diagnostic methodology for collecting data to deliver a world class medium voltage protection relay diagnostic.

Schneider Electric Field Services proposes to order OnSite ProDiag MV Relay diagnostic with next commercial references:

FSMDIAMVRELAY0. OnSite ProDiag MV Relay up to 2 protection functions
FSMDIAMVRELAY1. OnSite ProDiag MV Relay up to 10 protection functions
FSMDIAMVRELAY2. OnSite ProDiag MV Relay all protection functions.

Please, consult with your local Schneider Electric Field Services Sales Representative or reseller for details (Statement of work) and on equipment serviceability.