

Preventive Maintenance Service Agreement

Optimize the Performance of Medium Voltage Drives

Lost productivity caused by poor performance or unplanned failure of your medium voltage drives can significantly reduce your revenue and profitability. In today's competitive environment, you need to keep these assets running at peak efficiency to reach your production and business goals. But not all companies have the resources to develop and sustain a preventive maintenance program that will optimize their operating environment.

A Rockwell Automation Preventive Maintenance Service Agreement allows you to leverage our global network of technical resources to help you design and implement the most efficient preventive maintenance program for optimizing the performance of your medium voltage drives to ensure greater productivity and quality.

In addition to providing regularly scheduled preventive maintenance service visits, your Rockwell Automation Preventive Maintenance Service Agreement includes a full-service warranty for every piece of equipment covered by your agreement.



What makes our Preventive Maintenance Service Agreement different?

Total protection and peace of mind with the full support of Rockwell Automation to stand behind your preventive maintenance program:

- Full-service warranty that ensures we'll repair or replace the parts in the unlikely event of a failure
- Rockwell Automation fully-warranted remanufactured replacement parts which ensures compatibility
- Documentation of all activities performed during scheduled visits
- Remediation of equipment problems

LISTEN.
THINK.
SOLVE.™

Medium voltage drives require special knowledge to keep them in prime operating condition. Your Rockwell Automation factory-trained Field Service Engineer is armed with the test instrumentation, special tools, performance data and experience needed for optimum support of your equipment.

Typical Preventive Maintenance Services

Physical Checks

- Record/Validate Drive, Motor and Feedback Device Nameplate Information
- Examine environment in which drive is installed.
- Inspect input/output/bypass contactor sections
- Inspect all associated drive components for loose power cable connections and ground cable connections
- Torque any loose cables to the required torque specifications
- Inspect the bus bars and check for any signs of overheating/discoloration and tighten the bus connections to the required torque specifications
- Clean all cables and bus bars
- Use torque sealer on all connections
- Carry out the integrity checks on the signal ground and safety grounds
- Check for any visual/physical evidence of damage and/or degradation of components in the low voltage compartments
- Clean all contaminated components
- Check for any visual/physical evidence of damage and/or degradation of components in the medium voltage compartments
- Inspect and verify proper operation of the contactor/isolator interlocks, key interlocks and door interlocks
- Verify the additional cooling fans mounted in the AC Line Reactor cabinet; check the Harmonic Filter cabinet for mounting and connections.
- Clean the fans and ensure that the ventilation passages are not blocked and the impellers are freely rotating without any obstruction.
- Megger the drive, motor, isolation transformer/line reactor, and the associated cabling
- Check clamp head indicator washers for proper clamp pressure, and adjust as necessary
- Check resistors and capacitors for all snubber resistors, sharing resistors and snubber capacitors

Control Power Checks

- Apply 3 Phase Control power to the PF7000 drive, and test power to all of the vacuum contactors in the system, verifying all contactors can close and seal
- Verify all single-phase cooling fans for operation
- Verify the proper voltage levels at the CPT (if installed), AC/DC Power Supplies, DC/DC converter, isolated gate power supply boards
- Verify the proper gate pulse patterns using Gate Test Operating Mode
- If there have been any changes to the system during the outage, verify all functional changes

Final Power Checks before Restarting

- Put all equipment in the normal operating mode, and apply medium voltage
- If there were any changes to the motor, input transformer, or associated cabling, retune the drive to the new configuration using auto tuning
- Save all parameter changes (if any) to NVRAM
- Run the application up to full speed/full load
- Capture the drive variables while running, in the highest access level if possible
- Back-up Software to CD & Document Revision Levels of All Firmware

Consultation and Remediation

- Review maintenance and operator logs
- Informal Instruct on drive operation and maintenance
- Review installed equipment revisions and compare against any known PSAs
- Make recommendations on needed critical spares stocking
- Perform maintenance & record

For more information about Rockwell Automation Preventive Maintenance Services, contact your local Rockwell Automation sales office or go to: www.rockwellautomation.com/services/onsite

www.rockwellautomation.com

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