



MV3000 3.6MW CONVERTER COOLING UPGRADE KIT

Improve drive availability by retrofitting with latest cooling fan protection

Technological innovation and improvements are an integral part of Power Conversion (PC), a GE Vernova's business. New product features are being developed based on customer experience to improve products performance, availability and reliability. You can rely upon PC to bring improved features through our upgrade programs.

POWER CUBICLE COOLING FAN PROTECTION

The 3.6MW generator converter is fitted with a fan panel assembly to provide essential forced cooling for the power devices in the power cubicle. These assemblies comprise of a row of three fans operating together to maintain a cooling airflow while the drive is in operation.

Loss of fan air flow will allow temperatures to increase and eventually the turbine can shut down and result in a costly unplanned stoppage and emergency maintenance interventions at the turbine.

UPGRADE KIT ACCESSORIES AND INSTALLATION

The upgrade kit includes the necessary protection MCB's, auxiliary contact blocks, cable assemblies and full work instructions for installation by a trained service engineer. The work instructions give a step-by-step procedure for installation, testing , inspection and finally returning the converter back into operation.

The cooling fan protection upgrade requires very less Installation time as well as no special tool requirements. However, all safety aspects for the electrical work in the power cubicle must be adhered to, including safety LOTO procedures, isolation procedures, checks for the absence of voltage outlined in the work instructions.

BENEFITS OF CONVERT OR COOLING UPGRADE KIT

Power Conversion offers cooling upgrade kit which can greatly reduce the risk of unplanned stoppage enabling the following benefits:

- Activated warning – Sent to the converter controller highlighting a fan has failed and has shut down.
- Fan isolation – In the event of single fan failure the failed fan is isolated, the remaining fans will keep running.
- Warning alarm – Alarm trigger by the cooling upgrade kit which can be seen in leading Wind Farm operating upgrade kit and Scada System.
- Helps turbine to keep running – Reduces unplanned downtime due to single fan failures.
- Perform planned Maintenance – Cooling upgrade kit feature helps to replace the failed fan during scheduled maintenance. The replacement can be planned at a convenient time by the wind farm operator.



Cooling Kit MCB's installed and wired ready for test

CONTACT US

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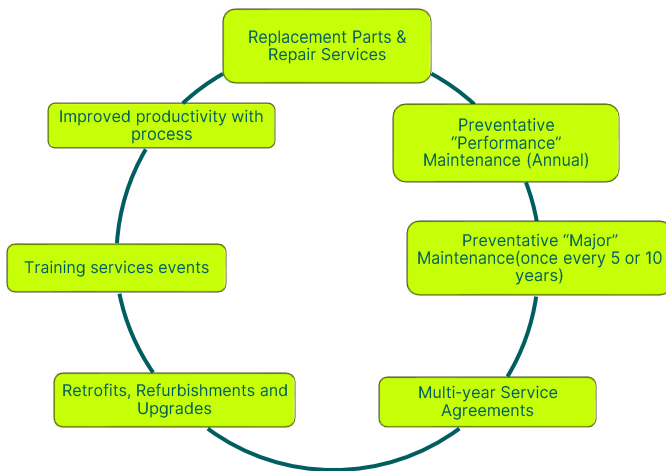


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POWER CONVERSION SERVICES

Power Conversion offer a comprehensive range of services including:



FIELD SERVICES ENGINEERING

All upgrade and maintenance site work is performed by Power Conversion certified field service engineers. As part of their normal service work the engineers will:



Perform and record work according to a prescribed schedule followed by testing to ensure normal drive operation



Identify any safety critical issues – safety critical problems will be brought to the customers’ attention immediately and a resolution proposed. Power Conversion will provide prioritised despatch of parts needed to resolve such issue and if necessary the Field Service Engineer will remain on site or return to site to supervise the solution.



Identify operational critical issues – reduction in performance or critical items affecting reliability will be brought to the customers’ attention and recorded in a report.



Audit and record the customers spares for the drive



Provide a list of critical spares the customer should consider holding



Suggest details of obsolete parts that the customer may wish to plan to replace.



Propose upgrade packages appropriate to the customers equipment and circumstances

For more information of our service: Spare parts & Repairs, please refer to [this document](#).