



MV3000 3.6MW Converter Cooling Upgrade Kit

Improve drive availability by retrofitting with latest cooling fan protection

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.

Due to loss of fan air flow temperatures could increase and eventually the turbine may possibly shut down and result in a costly unplanned stoppage and maintenance interventions at the turbine.

Benefits of converter cooling upgrade kit

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

Fan isolation – In the event of single fan failure, the failed fan is isolated and the remaining fans will continue running.

Activated warning – Sent to the converter controller highlighting a fan has failed and has shut down.

Warning alarm – Alarm trigger by the cooling upgrade kit which can be seen in all the leading wind farm operating Scada System.

Helps turbine to keep running – Reduces unplanned downtime due to single fan failures.

Perform planned Maintenance – Cooling upgrade kit 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

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 GE 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 minimum installation time as well as no special tool requirements. However, all electrical work in the power cubicle must be adhered to, safety LOTO procedures, isolation procedures, checks for the absence of voltage outlined in the work instructions.

Field service support

All Drive upgrade and maintenance site work performed by GE engineers. Engineer will perform and record performance of the drive according to a prescribed schedule followed by testing & recommend upgrades for the drive operation.

Contact us: services.powerconversion@ge.com