



Reduced Power Test (RPT) for MV drives

A comprehensive test sequence helps to ensure the operating condition before starting

Comprehensive test sequence

It is important to make sure the preliminary conditions and flawlessness of your drive system for proper operation before starting. GE Power Conversion recommends a detailed testing sequence known as **Reduced Power Test (RPT)** to check the condition of the drive components such as IGBTs, voltage & current measurement sensors, DC link capacitors and chopper.

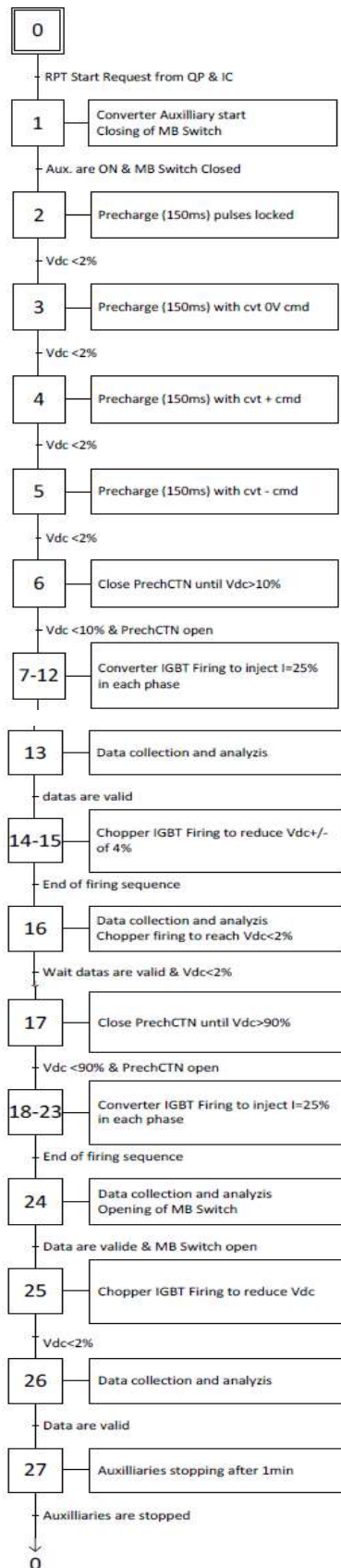
This test is used with pre-charge power supply instead of regular high voltage power supply. It is completely automated and could be performed on-site by customer via operator interface. In case of any interruption, the data collected needs to be sent to GE desk for further analysis as it requires high level of competence to be interpreted.

Benefits

- Prior to closing the high voltage system, power components will be checked for proper operation.
- Measurement chains will be checked for expected outputs and deviations will be detected.
- With advanced troubleshooting, converter function will be restored in a short period of time.

How do we do? Here's an overview!

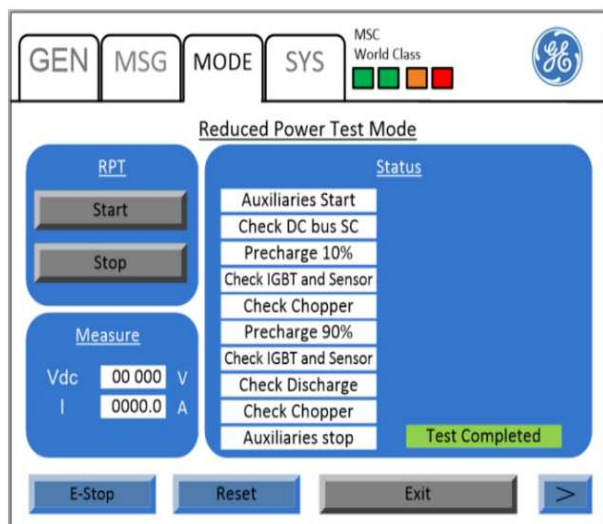
The RPT have two different level of validation. Both will operate in parallel as the sequences are interdependent. The first level mainly check the connection issues and healthy status of the main components. The second level makes a detailed record/analyze of the system response.





Reduced Power Test (RPT) for MV drives

A comprehensive test sequence helps to ensure the operating condition before starting



Successful completion of RPT

- Verifying DC bus voltage with various precharge sequence
- checking each components commands, on/off time and current feedbacks
- Checking each component at high DC voltage
- Checking all main signals and feedbacks to operator

Salient points

- It is applicable to MV7K drives with recent PIBe automation (RXi controller).
- Field Service Engineer (FSE) implementation time on site will be 2 FSE days/converter.
- GE recommends to implement this RPT function in the next maintenance/dry dock.

GE's services for a lifetime

GE offers bespoke service support in the form of spares and replacement parts, onsite and remote technical support, maintenance services, upgrades, customized trainings and service agreements aimed at supporting customers based on their unique needs.

CONTACT US: services.powerconversion@ge.com