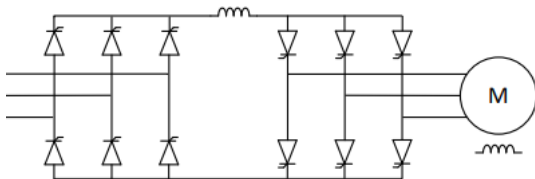




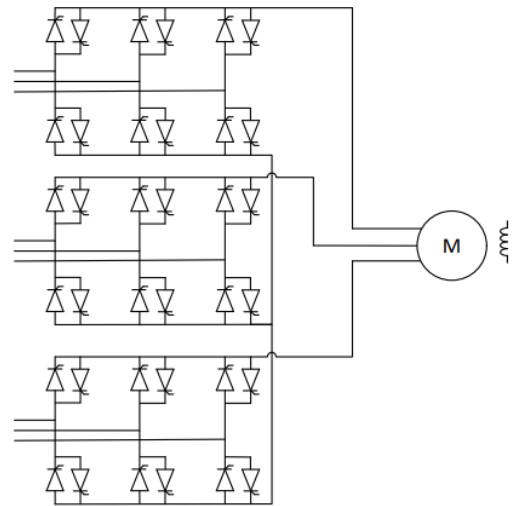
SCR TECHNOLOGY MODERNIZATION

Load Commutated Inverter (LCI) & Cycloconverter (CCV) control and power upgrade strategies

Thyristors are known for their high reliability, easy maintenance, high voltage/current capability, rugged design, ability to control direct current loads, and more. Thyristor-based drives are used in various applications such as gas turbines, fans, grinding mills, cement mills, rolling mills, ship propulsion, pumps, mining, frequency conversion (SFC), and more. LCI's and CCV's utilize thyristors to control loads.



Typical architecture of LCI



Typical architecture of CCV

UPGRADE CONSIDERATIONS

Service – Modern controllers provides a chance to broaden product familiarity for end-users and service provider personnel

Maintenance – Modern controllers with digital options enable integrated condition-based monitoring

Spare parts – Upgrades help to mitigate the unavailability of spare parts and downtime risk

Modernization features from GE Vernova's Power Conversion business

Power Conversion focuses on the modernization of vintage controllers, power stacks, I/O, and HMI for all legacy brands.

- Industrial PC based control architecture has improved reliability, reduced parts count, simplified power interfaces, improved diagnostics and digital options.
- Enhanced flexibility with multiple communication protocols.

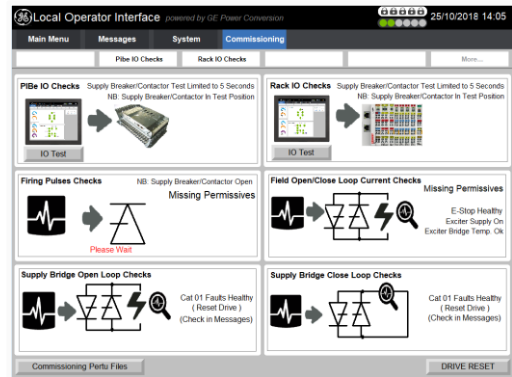
<https://www.gepowerconversion.com>



SCR TECHNOLOGY MODERNIZATION

Load Commutated Inverter (LCI) & Cycloconverter (CCV) control and power upgrade strategies

- Optional 15" touch screen HMI displays process status, diagnostics, converter status, faults & alarms, metering, with enhanced commissioning and test capabilities.
- Power bridge fiber optic firing option enhance noise immunity.
- Power stack inspection for corrosion mitigation in water cooled drives, thyristor grouping validation, obsolescence mitigation, component compatibility, general stack condition review and refurbishment program if necessary.



Commissioning Screen



Power stack inspection / refurb

Lifetime services from GE Vernova's Power Conversion business

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 the unique needs of industry.

Salient Points

Applicable to legacy LCI & cycloconverter technology drives and generally to any thyristor-based technology.

Considering microprocessor lifecycles, GE recommends controls refreshment every 10 – 20 years or end of life obsolescence or if reduced MTBF is noted.

Field Service Engineer (FSE) completion time on site will be 3 to 7 days for LCI & 7 to 10 days for CCV. May vary by site or application (can be reduced to suit outage needs)

Contact us for more information

services.powerconversion@ge.com