DigiCYC™
AMI Digital CycloConverter

DigiCYC™

DigiCYC™ (CycloConverter) is a microprocessor-based control and firing circuit replacement for existent cycloconverters, based on a high-performance digital controller and FPGA technology, with extended communications, diagnostic and monitoring capabilities.
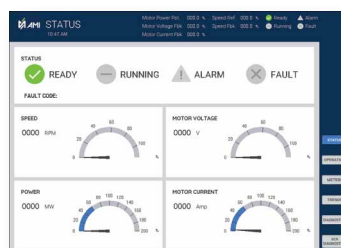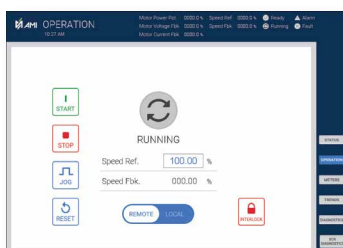
The DigiCYC™ is an affordable with optimal cost/benefit ratio solution for outdated and obsolete cycloconverter drives, allowing the reutilization of the power components while providing the latest state-of-the-art control and firing technology, enhanced graphic interface and the latest hardware and software specifically designed for this application.

Applications:

The cycloconverter is an AC-AC high power converter based on rectifier topology, which uses thyristors as commutating devices, and is intended to be used in frequency conversion application and synchronous or induction motor control. The main supply is the input frequency, typically 50 or 60 Hz, and the output frequency could be varied with thyristor gate control. The cycloconverter is preferred in large capacity and slow frequency applications, like:
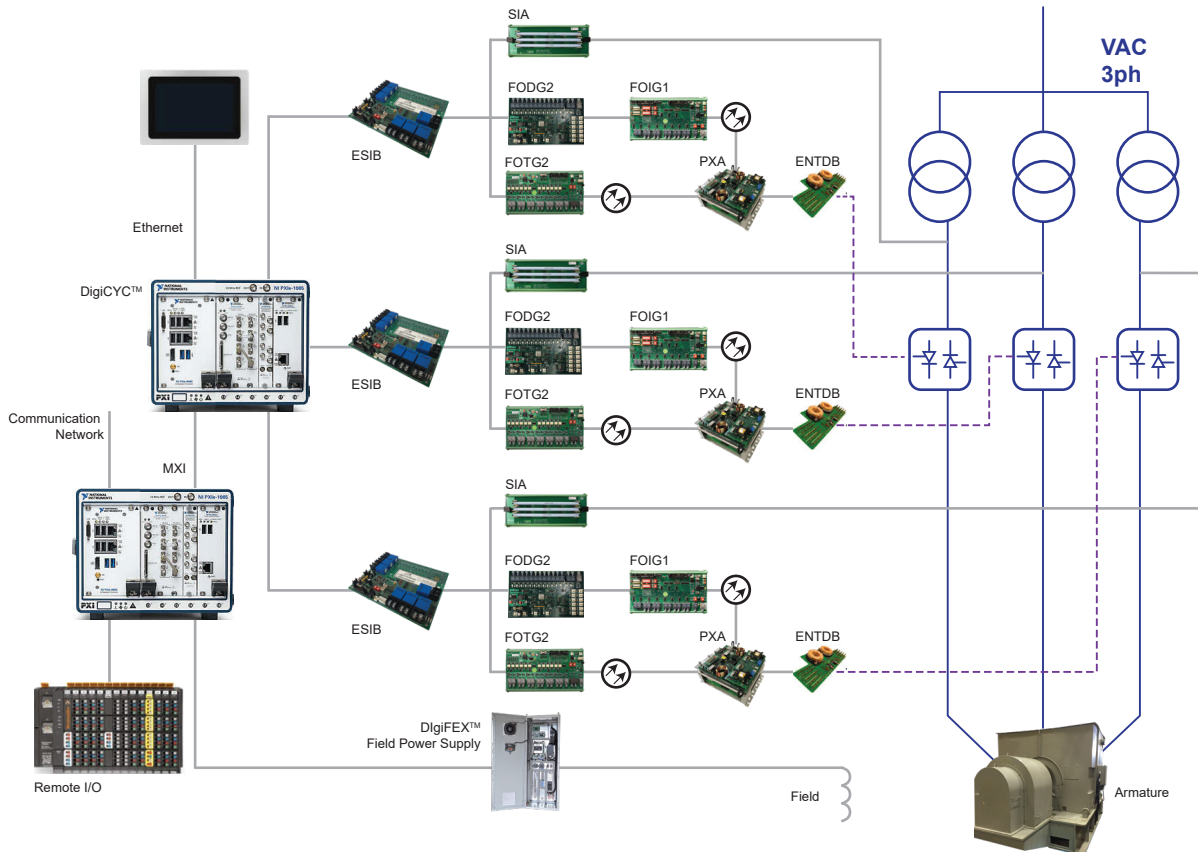
- ▶ Power transmission
- ▶ Steel and Rolling Mills
- ▶ Marine Drive
- ▶ Cement kiln and mill drives
- ▶ Ship propulsion drivers
- ▶ Bar Mills for ore processing
- ▶ Washing machines
- ▶ Mine winders
- ▶ Water pumps

Friendly HMI Interfase

Typical 3-phase Block Diagram

Benefits:

▶ Standard hardware with all other AMI products.

▶ AMI DigiFEX™ field exciter when used with Synchronous Motors.

▶ Wide range of configurations:
  - Single-phase (1PH) / Three-phase (3PH)
  - Non-Circulating Current (NCC) / Circulating Current (CC)
  - 6-pulses (6P) / 12-pulses (12P)
  - Low Voltage (LV) / Medium Voltage (MV)
  - Power Transmission / Synchronous Motor with Field Control / Induction motor

▶ Friendly HMI interfase

▶ Communication capabilities (Ethernet IP®, Modbus TCP®, ProfiNET®, Profibus®, and many other protocols)

▶ Seamless PLC integration with a variety of brands, using communication or I/O

▶ Firing control retrofit for existing installations.

▶ CSA certification

▶ ISO-9001-2015 manufacturing

Mining   Oil & Gas   Pulp & Paper   Steel   Cement