



MCEGold 3.1.2 Highlights

(Release date: 03/29/19)

Features Summary

Version 3.1.2 implements a basic version of Variable Frequency Drive (VFD) and DC motor templates which allow for easier and more efficient testing of motors running on drives. Drive templates include test capabilities for testing both Line Side and Load Side of the drive for AC Induction Motors, Synchronous Motors, and DC motors. The new templates offer the ability to enter Drive related information such as the manufacturer, type of drive, serial number, V/F mode of operation, etc. Additionally, DC motor templates now include two new test sections for Series and Interpoles. To support these changes, test location diagrams have been thoroughly revamped with a cleaner look and on chart selection of test location. Drive Input Power Analysis has been simplified by revamping the Results page to show only pertinent information. Historical data will be moved forward and compatible with the new version and existing location data will be mapped into the new test locations. Lastly, Fault Zone Analysis and Report capability for the input and output sections of the drive and Series/Interpoles sections of DC machines have been added.

Main Features

- Fully Renovated Test Location Graphics and Selection capabilities.
- Added VFD test templates for AC Induction Motors and Synchronous Motors.
- Modified DC Motor test templates.
- Added remote software update capability for PdMA Cloud services.

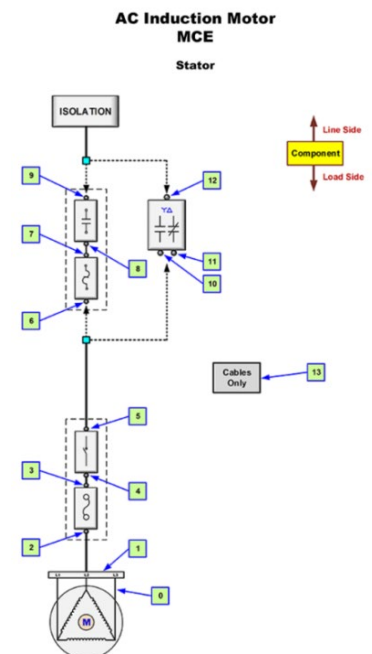
New Features Details

Drives

- Added ability to test both Line Side and Load Side of a drive using Drive Input and Drive Input In-Rush/Start-Up test selections.
- Added Drive Manufacturer, Model, Serial, Asset Identification, and Voltage to the Nameplate information.
- Added revamped Results pages for Drive Input Power Analysis.
- Added a Drive Icon column in Site Navigator to indicate when an asset has a drive.
- Added and Improved FZA and Ocular for the new VFD and DC Motor test templates.

Test Location Graphics

- Users can now select the test location directly from the test location graph.
- To better represent real-world testing, we now provide separate graphics for EMAX and MCE test locations.
- Added many new test locations and system components such as reactors, filters, and isolation transformers to select from.
- Line and Load Side of system components are now distinguished.
- Added a Cables only location for testing cables that have been isolated for test purposes.



Nameplate Modifications

AC Motors

- Added Drive Information entry fields to the Nameplate.
- V/F Mode – users can now enter the type of torque control of the drive. Available selections are Constant Torque, Variable Torque, and Constant Horsepower.
- Max Speed – users can now enter the maximum allowable speed of the motor when it is running from a drive.
- Max Frequency – users can now enter the maximum allowable frequency of the drive when a motor is running from a drive.

DC Motors

- Revised tab names to Armature and Field to make it easier to enter information.
- Changed Min/Base Speed to Base Speed
- Added Max Speed.
- Removed Operating Speed input and forwarded information to Base Speed.
- Field Current renamed to “Base Field Current”
- Added “Min Field Current”.
- Added “Field Regulator” with selections of Full Wave, Half Wave, and PWM.
- Moved Number of Poles, Commutator Segments, and Armature Type to the Armature tab to make it easier to enter information.

Synchronous Motors/Generators

- Revised tab names to Stator and Field to make it easier to enter information.
- Added a selection for the type of field excitation – Self-Excited (default) or Externally Excited.
- Added “Field Regulator” with selections of Full Wave, Half Wave, and PWM.
- V/F Mode – users can now enter the type of torque control of the drive with selections of Constant Torque, Variable Torque, and Constant Horsepower.
- Max Frequency – users can now enter the maximum allowable frequency of the drive when a motor is running from a drive.

Test Setup Modifications

AC Motors

- Added ability to ability to test both Line Side and Load Side of a drive using Drive Input and Drive Input In-Rush/Start-Up test selections.

DC Motors

- Added Series and Interpoles Tabs to Test Setup for MCE tests.
- Revised DC voltage testing so that the voltage across leads A1-A2 is being measured.
- Added ability to test both Line Side and Load Side of a drive using Drive Input and Drive Input In-Rush/Start-Up test selections for both the Armature and Field sections.
- Changed field default temperature to 25°C.

Other Features

- Added remote software update capability for PdMA Cloud users. PdMA Cloud users can now update MCEGold without the hassles of extensive downloads, uninstall/re-install, database backups, etc.
- Added warranty licensing capabilities.
- Renamed Condition Code to Asset Health Level.

