ABB MOTION SERVICES

ABB Ability™ Digital Powertrain

What’s new? PT15

See topics

Enhancements for rotating equipments

- Visualization of FFT vibration data
- Sign-in steps to Powertrain portal is enhanced
- Logged out error message handling is enhanced
- Zoom level in charts enhanced
- Translation improvements

Enhancements for drives

- Medium voltage converters support
- Display gateway properties
- Enhanced support for ACH580 and ACQ580 drives
Note: In this document, ABB Ability™ Digital Powertrain portal or mobile app will be referred as “Powertrain portal” or “Powertrain mobile app”.

**Enhancements for rotating equipments**

**Visualization of FFT vibration data**

The Powertrain portal displays the FFT vibration analysis data in graphical format.

In portal, go to **Powertrain & asset details → Detailed information → Assets → Operational parameters → Vibration FFT**.

- The chart shows the Velocity Vs Frequency data [1] on the X- and Y-axis.
- The FFT chart is generated based on the last raw data measurement received from the sensor. You can see the timestamp of last raw data measurement on the chart [2].
- You can select and view the chart in below modes [3]:
  - Full spectrum (max. frequency of 12 kHz, i.e., full length of spectrum)
  - Default spectrum (max. frequency of 1000 Hz)
  - 10x Spectrum (max. frequency is 10 times the nameplate speed of motor)
  - 100x Spectrum (max. frequency is 100 times the nameplate speed of motor).
- Below the chart, a legend with different series [4] appears. You can enable or disable the series to view on the chart.
- You can download the raw data [5] as .csv format.
- You can select a portion of the signal and drag it to zoom. To view the actual graph, click the **Reset zoom** [6] button.

![Chart of FFT vibration data](image)

**Sign-in steps to Powertrain portal is enhanced**

The sign-in steps to the Powertrain portal are enhanced by integrating with Customer Identity Access Management (CIAM). With this system a new user can join an existing organization or create a new one to manage the associated assets. The user is then redirected to the Powertrain portal where the new or existing organization can be viewed.
Logged out error message handling is enhanced

The error messages due to unexpected logout from the Powertrain portal are handled better. For example, HTTP error messages are aggregated into a single message and displayed as “You have been logged out (inactivity or invalid token detected)” in a Blue notification banner (see in below sample screen).

Zoom level in charts enhanced

In Powertrain portal, when adding or removing a signal (KPI) in the Trend charts, the existing zoom level will remain intact.
Translation improvements
The Powertrain portal provides full translation support for all trend signals in all platform contexts, including the ones that were previously missing. The numeric prefixes for additional signals are available for all items including the translated ones.
Enhancements for drives

Medium voltage converters support
The Powertrain condition monitoring supports the below medium voltage converter:

- PCS6000 MV wind turbine converter

Display gateway properties
In Powertrain portal, the gateway admin page shows the Edge Industrial Gateway (EGW) device properties such as the existing NETA-21 remote monitoring tool information and the Connectivity panel information.

Enhanced support for ACH580 and ACQ580 drives
The Powertrain portal has enhanced the templates for ACH580 and ACQ580 drives with two additional parameters:

- 80.01 Actual Flow m³/h
- 80.02 Actual Flow percentage.

The new parameters can be visualized in the trend chart.