

ABB adds new digital options to integrate and control electrical systems for mining customers

ABB Ability™ System 800xA Power Control Library expands integration options with larger range of intelligent electronic devices for digital power control

ABB recently expanded its ABB Ability™ System 800xA Power Control Library (formerly MIDAS Library) software to include more options to communicate with and control electrical devices throughout the power infrastructure for mining and mineral processing operations. The digital solution now supports the PLC (Programmable Logical Controller) Connect functionality to extend power automation beyond IEC 61850 devices and infrastructure.

“This product update is a great example of how ABB is helping our customers harness the true potential of digital to improve their system and equipment performance and electrical reliability, as well as increase the safety of their personnel,” said Martin Knabenhans, head of product management for ABB’s Process Industries business unit. “With the addition of PLC Connect support, this Power Control release also enables digitalization for substations that were built without 61850; making it possible to digitalize existing brownfield sites. “

The Power Control Library is part of the innovative ABB Ability™ MineOptimize digital portfolio. It works within ABB Ability™ System 800xA, which is a platform for monitoring and controlling a wide range of automated industrial processes. The library is based on the International Electrotechnical Commission’s (IEC) 61850 standard, which creates a common language for automated substations and power distribution systems so that technologically advanced mines around the world are able to take advantage of its capabilities.

The updated version supports non-IEC 61850 substations through the PLC Connect functionality of System 800xA, to communicate with and control a broader range of intelligent electronic devices (IEDs).

The Power Control Library provides engineers that operate automated mines with the ability to rapidly troubleshoot electrical system issues through an enhanced substation control and monitoring environment in one control room. It allows a broader range of electrical and substation equipment to be monitored and managed remotely, so that potential issues can be resolved quickly and safely. This remote monitoring allows the plant team to solve problems safely, away from the electrical substation, thus reducing the time for electrical fault diagnosis and problem solving.

Since its introduction in 2014, the Power Control Library has been implemented in more than 20 projects worldwide and has integrated more than 4,000 IEDs.