New ABB data recorder puts your process at your fingertips

New touchscreen paperless recorder brings host of additional features and functions for added power in data recording

Hanover, April 7, 2014 – Finding ABB’s new RVG200 paperless data recorder incorporates a number of advanced features giving operators slick, easy and secure access to process data. A key feature is the RVG200’s use of touchscreen technology. By using the device’s intuitive icon-based menus or ‘swiping’ through the screens, operators can rapidly find the data they need. This data can be viewed in a variety of formats, including individual or grouped data in chart, bar graph or digital indicator displays.

Up to 24 universal analog inputs enable direct connection of mA, mV, TC, RTD, voltage and digital signals. Coupled with a 125 ms sample rate and 500 V galvanic channel to channel isolation, these inputs deliver reliable, highly accurate data from connected process instruments. The high specification of the process inputs ensure they are AMS2750E compliant, making the RVG200 suitable for temperature recording in aerospace and automotive heat treatment processes. Another new feature is the inclusion of front and rear USB ports. Users can connect a variety of peripheral devices, such as a USB memory drive, enabling archived process data to be transferred from the RVG200 to ABB’s DataManager Pro software for analysis.

For batch applications, attaching a USB barcode scanner provides a quick way of adding information including batch numbers to batch records and eliminates the risk of typographical errors that can occur during manual entry. Integrating the RVG200 into a plant network is made straightforward by the inclusion of a 100Mbit Ethernet connection, giving remote operators access to a range of features and functions. The RVG200’s integrated webserver enables remote access from a PC, tablet or smartphone, providing a true anytime, anyplace overview of both the current status of the RVG200 and the process it is monitoring.

Keeping up to date with the latest process alarms or critical process events is made possible by email notifications which can be automatically sent to an operator’s PC or smartphone. Alternatively, the RVG200 can be configured to routinely email summary reports of process conditions.

Real-time process data can be communicated to and from the RVG200 using MODBUS over Ethernet or RS485, providing an excellent way to integrate the RVG200 in to a control or PLC system so that it can perform secure data recording and visualization duties. Capable of acting in master (client) mode, the RVG200 can be used to collect data from other devices, which can be displayed on screen and archived alongside process signals directly connected to the RVG200.

As with all devices in the ScreenMaster paperless recorder range, the RVG200 features extensive security measures to protect against unauthorized tampering with process data, compliant with FDA 21 CFR Part 11 requirements. Standard security features include the ability to configure and allocate multiple users with individual password and access rights. All recorded data is also securely stored by the RVG200’s 256MB of internal flash memory, which can be expanded to 2GB if required.

A further protection feature is the inclusion of a lock fitted to the media door, preventing unauthorized access to the memory card and front USB port. In addition, the RVG200’s configuration and field terminals can be sealed with a tamper-evident security seal, ideal for regulatory controlled processes. Data integrity is protected by an internal audit trail, which logs any configuration changes made and
records who made the changes and when, as well as the details of all data files created and many other events key to process data security, such as calibration changes.

Added measures to protect the security of archived data are also included in ABB’s DataManager Pro analysis software, which automatically checks the integrity of the encrypted data files to ensure the data collected is valid. In conjunction with the RVG200’s Ethernet connection, this software also provides fully automatic collection of data files from multiple RVG200 recorders, thereby keeping DataManager Pro’s database constantly up to date, ready for detailed analysis using the software’s powerful data review tools.

The RVG200’s full IP66 and NEMA 4X front face protection make it suitable for use in a variety of applications, including hosedown environments and those subject to high levels of dust and humidity. This makes the RVG200 ideally suited for installation next to the process and not hidden away in the control room, providing local operators with the information they need at their fingertips.

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