ABB Emax 2 is the first low voltage circuit breaker with integrated IEC 61850 communication standard for micro and smart grid applications

**Emax 2 features direct communication capabilities for seven of the most used industrial protocols**

Zurich, Switzerland, March 19, 2015 – ABB, the leading power and automation technology group, launched Emax 2 which is the first low voltage air circuit breaker with an integrated IEC61850 communication module. It enables data exchange with electrical substation automation systems as well as intelligent network devices for micro and smart grid applications.

Electrical substations need the capability to monitor and connect all their electrical systems. Planning for contingencies in case of system failure, damage can be considerably minimized by protecting equipment in one zone from another, via communication.

“With ABB’s Emax 2, substations now have a low voltage solution to communicate horizontally between the various network devices using G.O.O.S.E. messaging,” says Giuseppe Scali, ABB's Global Product Manager for air circuit breakers. ”Based on the international standard for electrical automation systems, Emax 2 is the only low voltage breaker featuring an IEC 61850 communication module. It enables the exchange of data between medium voltage systems without any additional external devices.”

SolVin, a leading European vinyl manufacturer, has recognized ABB’s Emax 2 as a solution for upgrading their low voltage substation. SolVin plans to install several Emax 2 circuit breakers in its PVC plant in Jemeppe, Belgium, in order to make the full integration between the low voltage and medium voltage side.

The plant’s MV circuit breakers will be able to communicate with the air circuit breakers in the LV switchboard. In case of a fault on the LV side, the MV circuit breakers will not be affected due to the IEC 61850 interlock function. Infact, this function allows the LV circuit breaker to send a G.O.O.S.E.\* message to the upstream MV circuit breaker telling it to remain closed. Additionally, messages are 30% faster than other hard wired control solutions.

ABB Emax 2 offers complete integration. All the circuit breakers can be equipped with communication modules, which can be installed directly on the terminal box at any time. It can be used with Modbus, Profibus and Devicenet and with the modern Modbus TCP, Profinet and Ethernet IP protocols.

ABB Emax 2 is a groundbreaking evolution of a circuit breaker into a Power Manager, introducing a more connected world.

ABB (www.abb.com) is a leader in power and automation technologies that enable utility, industry, and transport and infrastructure customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in roughly 100 countries and employs about 140,000 people.

For help with any technical terms in this release, please go to: <http://www.abb.com/glossary>

\*Generic Object Oriented Substation Event