Recent developments in the sphere of ethernet communication networks and the growing need to monitor energy consumption have led to the use of smart supervision systems for installations in shopping centres, banks, hotels, office blocks and small to medium sized industries.

Maintenance electricians, plant operators and energy managers are becoming increasingly more interested in efficient solutions for:

- Analyzing energy consumption and the main electrical quantity trends
- Monitoring alarms and states
- Planning servicing work

This means that low voltage switchboards must become smart systems that provide crucial information for plant management.

The conventional method for switchboard control is to equip the circuit breakers with complex communication systems. In addition, a system integrator is often required to program the supervision software and put the system into service. When applied to switchboard supervision, a solution of this type can strongly affect the costs and flexibility of an offering.

SACE Emax 2 introduces Ekip Link, a new system for low voltage switchboards that provides centralized control from the switchboard front or remotely via the web. The system offers a plug-and-play solution, one that can be used immediately and simply without requiring any sort of specific programming.
The Ekip Link system
The flexible and efficient way to control switchboards

Distinctive features of the Ekip Link system
The Ekip Link system is comprised of the, preprogrammed, Ekip Control Panel and up to 30 Emax 2 circuit breakers equipped with the Ekip Link module. Any Emax 2 circuit breaker, regardless of trip unit type, can be connected to the system, creating an economic alternative to meet the needs of any application.

Standard ethernet components, such as cables and network switches, are all that is needed to complete the connection. Additional distinctive features of the Ekip Link system are:

- Centralized control using the generously sized color touch screen on the switchboard front
- Information that is always available thanks to remote access via a web browser
- Plug-and-play system. No programming required.
- Cost-effective solution: all the functions are available without the need to install costly supervision systems

A plug-and-play system
Once the Ekip Link modules have been connected to the Ekip Control Panel with cables and network switches, the system is put into service in just a few simple steps:

1. automatic scan of the devices connected
2. choice of graphic layout: the “design” function provides a comprehensive library for easily drawing the installation’s single-line diagram
3. supervision start-up
Access via web
The Ekip Control Panel can be remotely controlled using the web server function that it is supplied with. It allows secure access to all plant information via any web browser. The standard equipment includes two web accesses, but can be upgraded to five as an additional option.

Integration with industrial communication systems
The Ekip Link system can coexist with a higher level communication system for process control or extended plant supervision.
SACE Emax 2 circuit breakers are the first in the market to offer a vast range of native protocols without the use of external converters; from conventional Modbus RTU, Profinet and DeviceNet serial protocols to the most modern versions based on ethernet Modbus TCP/IP, Profinet and Ethernet IP.

Integration of Tmax and Emax circuit breakers into Ekip Link
Tmax and Emax circuit breakers equipped with Modbus RTU communication can also be integrated into Ekip Link by connecting them directly to the RS 485 serial port on the Ekip Control Panel. This guarantees a complete and integrated solution.

The offer
The complete Ekip Link system offering includes:

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
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<tbody>
<tr>
<td>Ekip Control Panel for 10 circuit breakers</td>
<td>1SDA074311R1</td>
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<tr>
<td>Ekip Control Panel for 30 circuit breakers</td>
<td>1SDA074312R1</td>
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<tr>
<td>Ekip Control Panel license extension to 30 circuit breakers</td>
<td>1SDA074313R1</td>
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<tr>
<td>Optional alarm dispatcher for Ekip Control Panel</td>
<td>1SDA074314R1</td>
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<tr>
<td>Optional 5 web client accesses for Ekip Control Panel</td>
<td>1SDA074315R1</td>
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<tr>
<td>Ekip Link module</td>
<td>1SDA074163R1</td>
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