

# Supervising lighting and ventilation to ensure human safety

“ In an underground car park, the important thing is ventilation and lighting. It's the users' safety that is at stake. When there is a problem somewhere, the supervision system must know it immediately. Understand what happened, to restore operation in a few minutes. But above all, a lighting ramp or a fan must never stop if the supervision system has a problem.”

Thanks to the **Acti 9 Smartlink**, all the final distribution switchboards are connected directly to the programmable logic controllers and their supervision system

Any tripping of a protective device is indicated immediately, via the iOF+SD24 auxiliaries.

The luminaires are controlled via iCT contactors, iTL impulse relays and their auxiliaries (iACT24, iATL24), and they also indicate their state.

Selector switches on the front panel of the switchboards allow maintenance personnel to take control over the automatic system and manually control the luminaires by push buttons. In that case, the position of the inhibition selector switch is also indicated on the Modbus network by the Acti 9 Smartlink interface.

Solution

Benefits

## For users

> **Ensure user safety and comfort** via precise and reliable supervision of the power supply.

> **Reduce operating costs:**

- through fast response in the event of a malfunction in the electrical switchboard.
- through a knowledge of the equipment's operating time, which can be used to plan preventive maintenance.

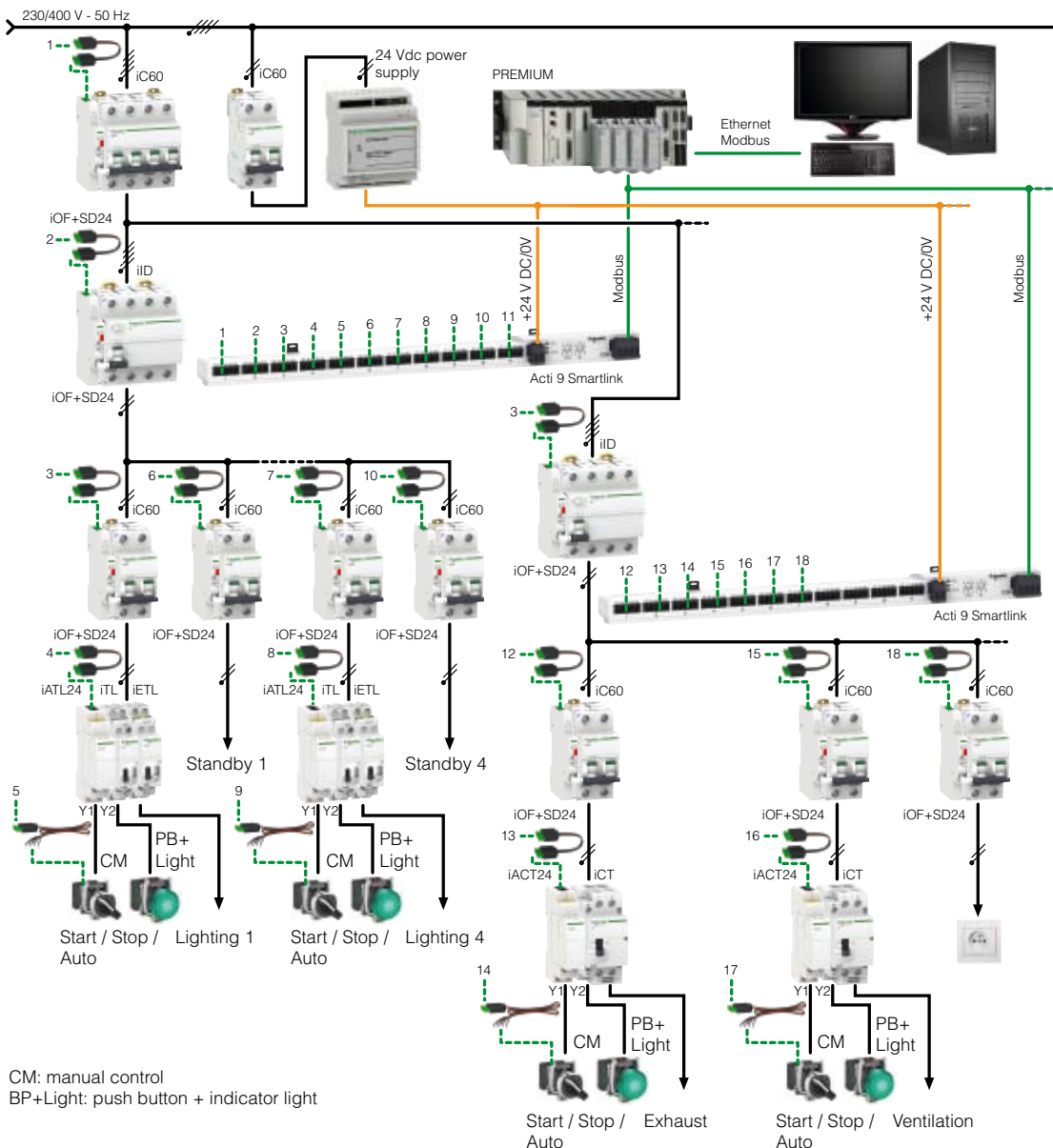
For professionals

+ Wiring performed quickly, without risk of error (inversion of cables, etc.).

+ "Thin wire" connections inside the switchboard identifiable immediately.

+ Can be handled with no tools thanks to plug-in connectors.

+ RS485 connection between the various switchboards and the programmable logic controllers.



**The Acti 9 communication system**

- Fully communicating switchboards, with no complex wiring or extra space requirements.

Acti 9 Smartlink can very simply connect all the switchboard equipment with a supervision and automatic control system

- Rail mounting, with a row of devices.
- Easy, fast wiring, thanks to 4 types of prefabricated connections and their one-click plug-in connectors.

- 11 channels, each performing all communications with one of the devices.

The iOF+SD24 auxiliaries make it possible to know the state of each protective device

- Single-click adaptation to circuit breakers, residual current circuit breakers and residual current devices.
- Reliability of indications attested by compliance with the IEC 60947-5-1, IEC 60947-5-4 standards, and dielectric strength (4 kV).

The iACT24 contactor auxiliary allows loads to be controlled by 3 signals:

- Of latched or pulsed form.
- Of local or remote origin.
- Automatic or by manual override.

The iACT24 also has:

- Reliability attested by compliance with the IEC 60947-5-1, IEC 61131-2 standards, and dielectric strength (4 kV).

- Storage in memory by Acti 9 Smartlink of the operating time of the loads and the number of contactor switching operations.

