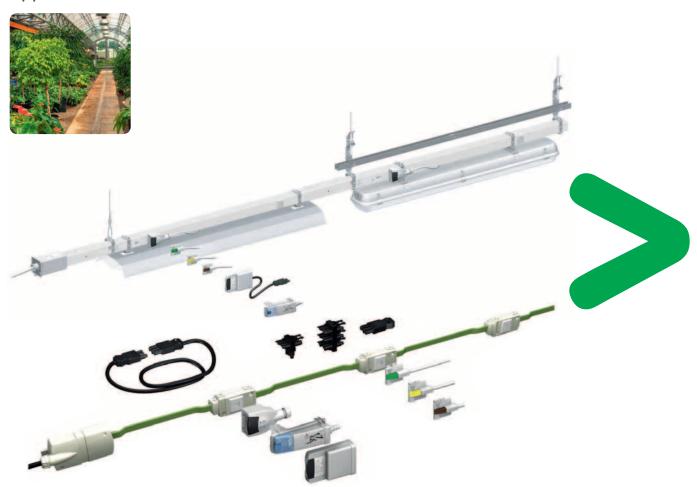
Canalis®

In greenhouses

Application datasheet





Your needs



For new constructions, upgrading or rehabilitation of:

- > horticultural and market gardening greenhouses,
- > rigid greenhouses with metal reinforcements (industrial buildings).

To ensure the quality and freshness of their produce, farmers require a reliable electrical installation offering all guarantees.

By means of automated systems present at every point, the customer regulates:

- > lighting,
- > power supply of lighting lines,
- > power supply of rolling blinds.



Lighting

Lighting has a decisive influence on plant behaviour:

> more light generates more growth.

Weak poor quality lighting leads to mediocre productivity.





Power supply to lighting lines · ·

The entire power supply system must generate as little shade as possible, while at the same time ensuring accessibility.





Power supply to roller blinds · · · ·

Use of rolling blinds is essential to:

- > avoid overheating in the case of excessive sunshine,
- > preserve heat at night.



Our Solutions



- > **Upgradeable:** extremely easy addition of components and modification of network, to allow for changes in crops and new investments.
- > Continuity of supply: simplified maintenance allowing addition, displacement and replacement of live loads, without interfering with the activity.
- > **Economic:** lighting management with DALI to adjust the light depending on the natural luminosity.

The advantages of a range based on

50 years of experience

Canalis KBB supports and supplies lamps. It satisfies the following needs:

- > compliance with lead times: installation mounting time is cut by 3,
- > cost reduction: lighting management through DALI

With Canalis, the installation can easily be upgraded over time. Moreover, it is possible to modify illumination levels in event of changes in operation (horticulture, market gardening etc.).

Canalis KBB allows the creation of three-phase distribution in 3 x 12 mm², using the 2 conductor layers connected in parallel. Voltage drops are limited and operating efficiency increased.



Use of Canalis KS:

- > reduces the number of cables and thus the shadows cast,
- > increases installation legibility. Protection devices are placed at each lighting line,
- > modifies the installation considerably. Addition of lighting lines, modification of centre distance between lines is simplified by use of the busbar distribution principle: there are no additional cable to lay.



Supply of rolling blind motors by **Canalis KDP**:

- > cuts cabling times by 3,
- > makes it possible to replace a faulty motor with power on without disturbing the rest of the installation,
- > guarantees connection reliability by means of elastic contacts.



A comprehensive offer

The ideal solution for achieving your electrical installations



Canalis is part of a comprehensive offer of products that are perfectly coordinated to meet all medium and low voltage electrical distribution requirements. All of these products have been designed to work together: electrical, mechanical and communication compatibility.

The electrical installation is thus both optimised and has improved performance:

- > better service continuity,
- > increased personnel and equipment safety,
- > guaranteed upgradeability,
- > efficient monitoring and control.

You therefore have all the advantages at hand in terms of know-how and creativity for achieving optimised, safe, upgradeable and compliant installations.



Schneider Electric products

Prefabricated lighting busbar trunkings



Canalis KBA/KBB

Canalis KDP: flexible busbar trunking

Nominal current 20 A.

2 or 4 live conductors.

Tap-off connectors: 10 and 16 A.

Tap-off every 1, 2 metres to 3 metres.

Degree of protection IP55.

Packaged in a reel.

Canalis KBB: rigid busbar trunking

Nominal current 25 or 40 A.

2 to 8 live conductors.

Tap-offs every 0.5 metre to 1.5 metre.

Tap-off connectors: 10 and 16 A.

Degree of protection IP55.

Control bus

Prefabricated medium power busbar trunkings



Canalis KS: rigid trunking

Nominal current 100 to 1000 A.

4 live conductors.

Tap-offs every metre on each surface.

Connectors and tap-off units: 25 to 400 A.

Degree of protection IP55.

Application example

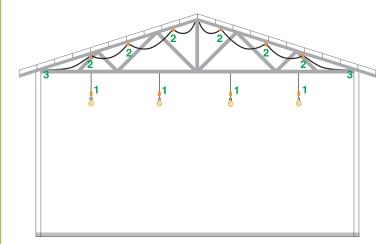
The horticultural greenhouse

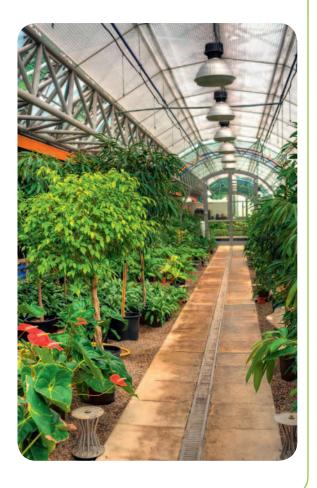
Specificities

- > Surface/greenhouse unit 1500 m² (100 metres x 15 metres).
- > Loads
 - 4 lighting lines equipped with 600 W horticultural lamps,
 - 16 rolling blinds for one greenhouse unit.

Equipment installed

- > 4400 metres of **KBB** 40 A + 150 **KBC** connectors for supplying lighting lines (1).
- > 50 metres of KDP + 12 KBC for controlling rolling blinds (2).
- > 15 metres of KS 400 A for supplying lighting lines (3).





The Canalis advantages

- Its modularity means that **Canalis can adapt to the greenhouse infrastructure** and easily ensure optimum lighting exactly where it is required.
- The installation is upgradeable and allows for changes in crops, rearrangements inside the greenhouse or, quite simply, the needs of progressive investment.
- Maintenance is simplified: defective lamps are replaced with power on and at any time.
- Mounting times are cut by 3 with KBB lines, and by 2 for lighting as a whole.
- Running time greater than 10 years for all busbar trunking.





Other applications

- > Livestock production building
- > Logistic centres
- > Cruise ships
- > Garages
- > Car parks
- > Hypermarkets
- > Industrial workshops
- > Flooring tile plants
- > Electronic plants
- > Car factories
- > Trade fairs and exhibitions
- > Solution iBusway for Data Center
- > Solution iBusway for Lighting management

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