

Busbar trunking systems

Canalis®

In cruise ships

Application datasheet



Merlin Gerin
Square D
Telemecanique

Schneider
 **Electric**
Building a New Electric World

The customer's needs



Save time and money...

The customer's main expectations are:

- Compliance with installation deadlines
- Quick, easy upgrading
- Simplified maintenance

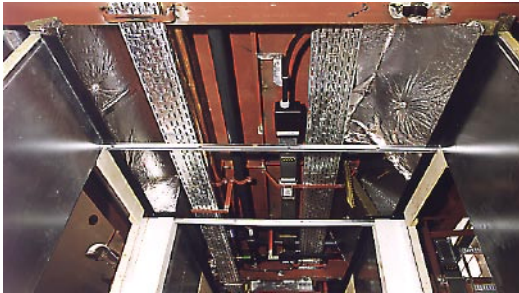
Supplying decks with electricity



■ Supply the deck switchboards with:

- Power
- The HVAC network (heating/ventilation/air conditioning...)
- The secured network
- VDI weak currents, etc.

Supplying cabins



■ Supply the electrical enclosures in cabins with:

- Power sockets
- Lighting
- Heating, air conditioning, etc.
- VDI (telephone, internet network, video)



Lighting corridors and common parts



■ Create background lighting in restaurants, bars, discotheques, entertainment halls.

■ Create lighting scenarios according to the time and use of rooms.

■ Conventional lighting in boutiques and shops (duty free, hairdresser's, sauna, etc.).

■ Emergency lighting.

The Canalis solutions

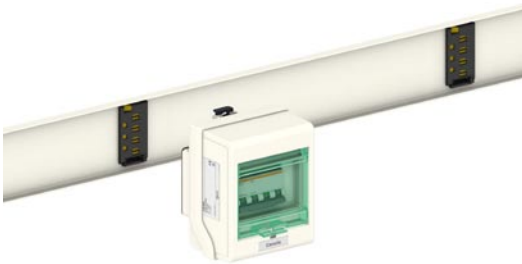
The advantages of a range based on 30 years' experience

- **Safe:** a prefabricated and factory-tested system: a manufacturer's guarantee avoiding all installation defects.
- **Competitive:** a solution that is competitive as from initial installation.
- **Economic:** a prefabricated system cutting installation times by two. Canalis reduces worksite contingencies and thus complies with delivery times. Its compact size ensures space savings with respect to cables.
- **Reliable:** reliable marine certified products (BV, GL, DNV, ABS).



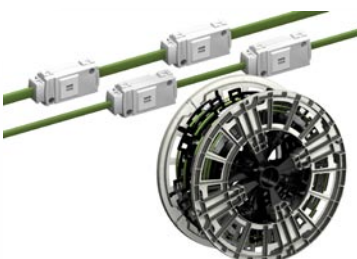
Supplying decks with electricity by **Canalis KS** risers to serve all decks on the ship.

- **Ease of installation:**
 - reduced weight and dimensions
- **Safety:**
 - halogen-free product
 - reduced calorific value
 - a fire barrier solution tested between all decks
- **Flexibility :**
 - the presence of a large number of hatches on all decks allows addition of additional loads with power on
- **Continuity of supply:**
 - Canalis enhances installation legibility and maintainability
 - all electrical contacts are of the elastic type and require no maintenance



Supplying the electrical enclosures in cabins by **Canalis KN** installed in the suspended ceilings.

- **Ease of installation:**
 - prefabricated components facilitating installation in small spaces
- **Safety:**
 - halogen-free product
 - reduced calorific value
- **Flexibility:**
 - ease of cabin adaptation according to varying needs of customers (nationality, VIP customers, etc.)
- **Continuity of supply:**
 - Canalis enhances installation legibility and maintainability
 - all electrical contacts are of the elastic type and require no maintenance



Production of lighting circuits with **Canalis KDP** installed in the suspended ceilings.

- **Ease of installation:**
 - prefabricated components facilitating installation in small spaces
- **Safety:**
 - halogen-free product
- **Flexibility:**
 - Ease of upgrading of lighting circuits in event of change in room use (change of customers, etc.)

Application example

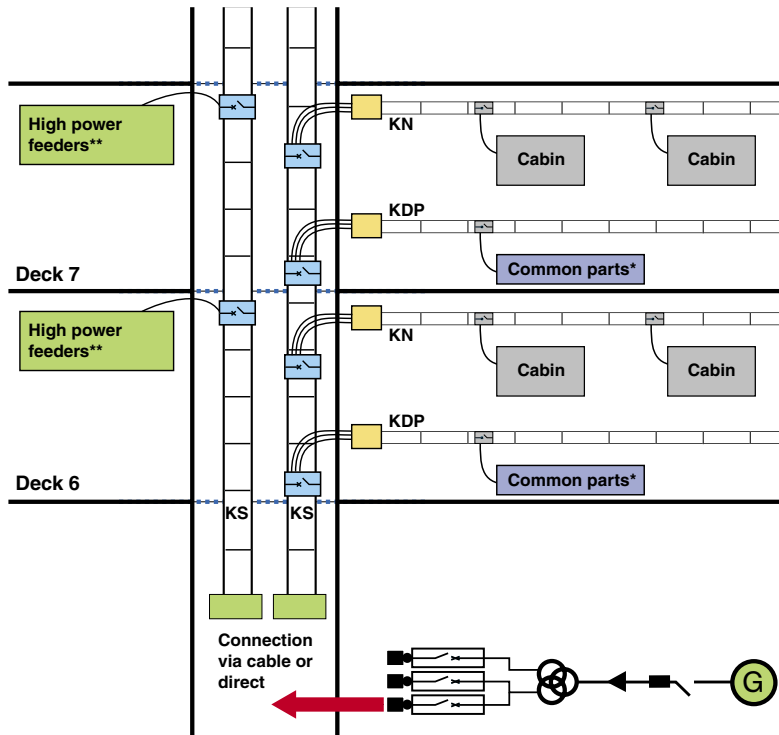
The standard cruise ship

Specific features

- 80 000 to 100 000 tons for approximately 2000 passengers.
- 6 decks equipped with cabins.
- 3 decks equipped with shops.

Equipment installed

- 300 metres of Canalis KS risers equipped with fire barriers.
- 3 km of Canalis KN in the suspended ceilings of corridors for cabin supply.
- 50 km of Canalis KDP for lighting of corridors and common parts.



* Common parts: corridors, entertainment halls, restaurants
** High power feeders: air conditioning, laundry, etc.

The Canalis advantages

Thanks to its modularity, Canalis adapts to the ship's infrastructure. It ensures with ease production of optimum lighting exactly at the point required.

Maintenance is simplified: faulty devices can be replaced with power on and at any time by the personnel in charge of ship servicing. Contacts are life-guaranteed thanks to copper-silvered technology.

Mounting times are considerably reduced thanks to the flexibility of the KDP and its light weight (40% lighter than copper).

Sustainable development and protection: KN – KS are guaranteed halogen-free. IP55 for KN and KS. Manufacturer's warranty more than 10 years for all busbar trunkings. Riser KS is equipped with fire barrier components.

A comprehensive offer

A new path 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.

The Schneider Electric products

Prefabricated busbar trunking systems

- **Canalis KS:** rigid busbar trunking
 - Nominal current 100 to 1000 A
 - 4 live conductors
 - Tap-off points every metre on each side
 - Tap-off connectors and units: 25 to 400 A
 - Degree of protection IP55
- **Canalis KN:** rigid busbar trunking
 - Nominal current 40 to 160 A
 - 4 live conductors
 - Tap-off points every 0.5 to 3 metres
 - Tap-off connectors and units: 16 or 63 A
 - Degree of protection IP55
- **Canalis KDP:** flexible busbar trunking
 - Nominal current 20 A
 - Tap-off points every 1.2 or 3 metres
 - Degree of protection IP55
 - Packaged in a reel



Canalis KS



Canalis KN



Canalis KDP



Electrical switchboard

- **Okken switchboard:** main switchboard
 - Rated current: 7300 A
 - Permissible short-term rated current l_{cw}: 50/80/100 kA/1sec
 - Degree of protection: IP22 (marine)
 - Standards: IEC 60439-1 IEC 60529
 - DNV certified

Other applications

- Garages
- Livestock production buildings
- Logistic centres
- Offices
- Hypermarkets
- Greenhouses
- Industrial workshops
- Flooring tile plants
- Electronic plants
- Car factories
- Trade fairs and exhibitions

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