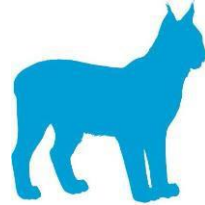


SPECIFICATION TEXT

J SERIES 63-100-160 A



Plug-in low power busbar

Subject: Busbar trunking system from 63 A to 160 A for the low power plug-in busbar

SPECIFICATIONS BINDING QUALITY

Busbar trunking system with aluminum conductors UNI 3570 or electrolytic copper with 99.9 ETP one-bolt joint and aluminium protective housing. The outer housing shall perform the function of the PE conductor and ensure electrical continuity throughout the busduct.

Busbars and accessories (straight elements, end feed units, end caps, fixing hangers, joints) must comply with IEC 61439/1 e /6 and be part of the same system certified by the Manufacturer.

The insulation voltage must be 1000 V and the operating voltage 400 V with 5 conductors with 100% phase section. Degree of protection IP40 up to IP55.

The system is suitable for installation on ceiling, wall and riser without derating.

Electrical data

Rated currents: 63-100-160 A

Rated operational current at room temperature: $T_{med24h} = 43 \text{ }^{\circ}\text{C}$ (24-hour average).

Rated insulation voltage U_i : 1000 V

Rated frequency: 50-60 Hz

Certifications

Busbars must have passed all the type tests indicated in IEC 61439/1 and /6 and the short circuit test declared by a certified laboratory (INRIM or equivalent). The minimum values for the short circuit are the following:

Rating [A]	I_{cw}	I_{pk}
160	6,0	10,2
100	3,5	5,3
63	2,3	3,5

External housing

The external housing of the busbar must be in aluminium to limit inducted currents.

The housing must be completely closed and unventilated to offer mechanical protection and prevent dust ingress.

The housing must be included in the initial supply and be an integral part of the busbar. Additional external coverings are not allowed without the consent of the busbar manufacturer.

Straight elements

Standard straight elements are 3 m long. Elements 1 m long are available.
The maximum distance between two consecutive suspension brackets is 3 m.

Conductors

The conductors must be aluminium EN AW 6101 or copper CU ETP 99.9 % without additional treatment. The main insulation must be in air with self-extinguishing supports.
The temperature on the casing must not exceed 55 K over temperature at rated current.

Joints

The joint must be fast system type.
Contact must be guaranteed by direct overlapping of the conductors.
The pressure will be guaranteed by elastic elements that do not contribute to the direct passage of the current.
The covering of the joint must have the possibility of inserting gaskets to limit the ingress of dust.
The joint must be such that an element can be replaced without having to move the remaining elements of the installed line.

Plug-in points for tap off boxes

The plug-in points must be 3 or 6. The plug-in points must be able to be closed by rubber plugs to prevent dust ingress.
It must be possible to use all the plug-in points at the same time.
The points must have a horizontal or vertical insertion axis as required.

Fixing hangers for busbars

The fixing hangers of the busbar will be metal and must be installed with a pitch no greater than that indicated by the Manufacturer.

Voltage drop

The voltage drop must be calculated at the rated current and at the reached thermal regime.

Fire resistance

The busbar must be fire resistant and does not allow secondary triggering according to IEC 61439/6 paragraph 10.101.
The busbar shall not extend the fire from one room to another by elements equipped with a fire barrier according to IEC 61439/6 paragraph 10.102.
The plastic materials of the busbar shall resist abnormal heat according to IEC 61439/6 10.102 paragraph 10.2.3.2.
In case of fire, the busbar must not emit toxic gases.

Tap off boxes

The contacts of the tap off boxes must be overlapping. The tap off box contacts will be in direct contact with the conductors line and kept in contact by elastic elements. The elastic elements must not contribute directly to the passage of current.
The PE contact must be the first to engage when the box is inserted and the last to disengage when the box is pulled out.
The opening of the cover must guarantee the sectioning of the box.

REFERENCE STANDARDS

IEC 61439/1-6 IEC 61439/1-6 CEI EN60529

CE Marking

ISO9001 Certification

REQUIREMENTS AND TESTS

Certificates of type

Routine tests (test reports available on request)

DOCUMENTATION ACCOMPANYING THE PRODUCT

Declaration of compliance with the manufacturer's product

Datasheets

Installation, use and maintenance.