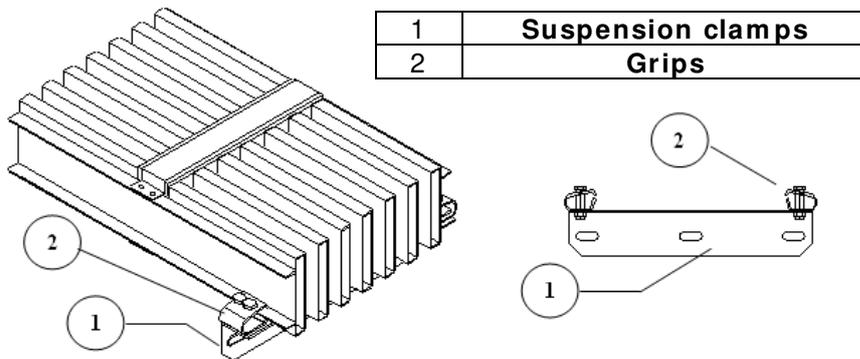


ASSEMBLY INSTRUCTIONS - LINE

1. Check if the position of the equipment (e.g. transformer and panel) matches with the drawing of the ISOLSBARRA and check if the laying level of the busbar is the same shown in the drawing, both in vertical and in horizontal position;
2. Fix the support brackets, or what required to the busbar suspension, with drillings suitable for the suspension clamps we supply. Consider that:
 - a) the optimum distance between the two suspension clamps (1) is 1.5 – 2 meters;
 - b) the suspension clamps and the relative support brackets must be at a minimal distance of 300 mm from the junction of two elements;



3. Considering the order of the joints, as shown in the drawing, choose the first ISOLSBARRA element (I.E. starting from the switch gear), lift it on the level of laying and fix it on the suspension clamps without tightening completely the grips (2);
4. (To execute only if the line's protection level is IP66). Insert the thermo shrinking sleeves and at the end of the jointing element and slip them over the insulating sheathing, before setting the next element. Sometime it's possible to find the plate close to the joint fastened with screws and not with rivets: this is made to allow to dismount the plate and easily insert the IP66 sleeve;
5. Following the instruction points from 3 to 4, identify and set the second ISOLSBARRA element. Check that the two terminals, fit to play as jointing parts (one with slotted holes and the other with threaded bushes):
 - ✓ are aligned to each other;
 - ✓ match with the position of the joints on the drawing;
 - ✓ follow the same order.
6. Go on matching each bar with the supplied disk springs and screws without screwing the screw till the end (See Schedule 1 for screw type). If the distance between the busbars isn't sufficient to insert the screws, use a lever and enlarge temporary the space between two bars.

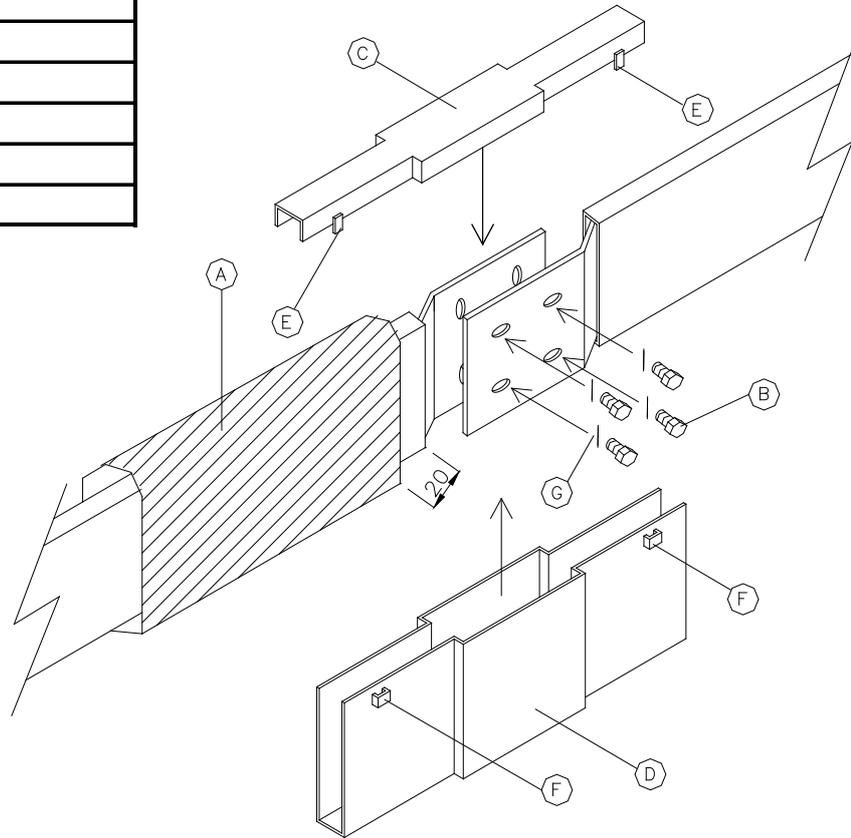
TABLE 1

CONDUCTOR THICKNESS	GALVANIZED SCREW	STAINLESS SCREW	DESCRIPTION
4 mm	MV018	MV058	SCREW HEX.HEAD M10x16
5 mm	MV013	MV041	SCREW HEX.HEAD M10x20
6 mm	MV013	MV041	SCREW HEX.HEAD M10x20
6,9 mm	MV013	MV041	SCREW HEX.HEAD M10x20
8 mm	MV014	MV042	SCREW HEX.HEAD M10x25
10 mm	MV014	MV042	SCREW HEX.HEAD M10x25

7. Repeat these steps for every single ISOLSBARRA element that composes the line;

8. Check the installation of the prefabricated busbar matches with the drawing. An adaptation is possible but it depends on the slotted holes of the junction and on the suspension clamps;
9. Complete the installation of the electrical joints as shown below;

(A)	Thermoshrinking sleeve (IP66)
(B)	Screws
(C)	Up of cover joint
(D)	Cover joint body
(E)	Clips
(F)	Clips seats
(G)	Disk spring



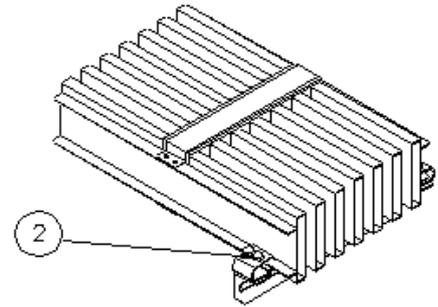
IP42

1. Execute the electrical junctions with screws (B) and disk springs (G) supplied as equipment using a torque wrench (60 Nm for Cu – 40 Nm for Al).
2. Insert the cover joint body (D) checking that interaxe of the joint of bars correspond to the interaxe of the cover joint body.
3. Insert the cover (C) in order to introduce the clips (E) in their seats (F) so that they are well fasten.

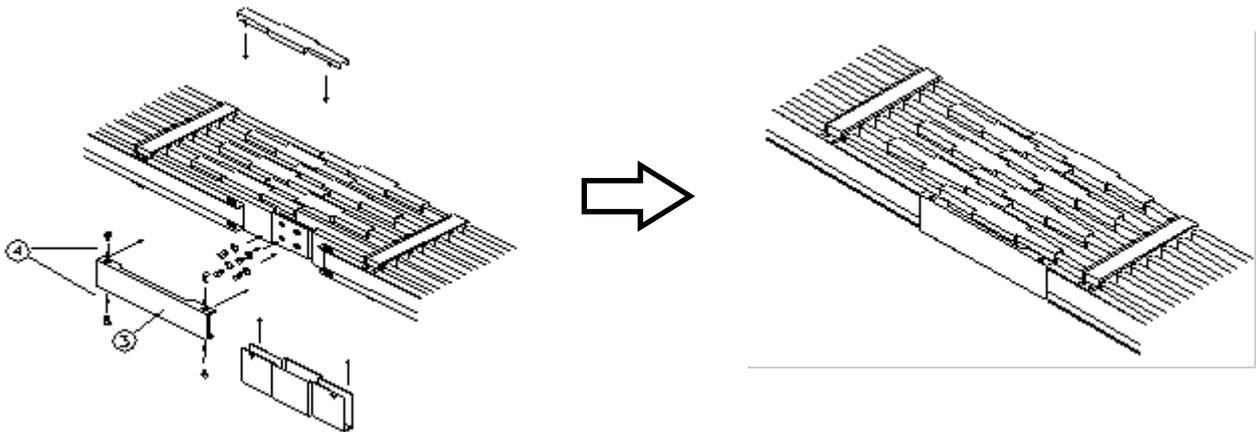
IP66

1. Insert thermoshrinking sleeve (A) on the bar before approaching the second junction element.
2. Execute the electrical junctions with screws (B) and disk springs (G) supplied as equipment using a torque wrench (60 Nm for Cu – 40 Nm for Al).
3. Slip the thermoshrinking sleeve (A) over the junction and with warm-air heater (from 150°C to 200°C) shrink it until it is completely adhesive to the line. It's device the use of a warm-air heater with a thermostat.
4. Insert the cover joint body (D) checking that interaxe of the joint of bars correspond to the interaxe of the cover joint body.
5. Insert the cover (C) in order to introduce the clips (E) in their seats (F) so that they are well fasten.

10. Tighten the screws of the suspension clamp grips (2) up to 20Nm, checking that, once the tightening is completed, the grips are still convex, allowing thus the expansion of the line;



11. Complete the electrical connection of all the unipolar elements of the busbar: assembly the two continuity elements of the lateral structures with flanged screws (4).



I N S T R U C T I O N S F O R T H E A N T I - S L I D I N G E L E M E N T (O N L Y F O R T E R M I N A L H E A D E R W I T H P H A S E C A R R I E R O R P H A S E S R O T A T I O N)

A preassembled anti sliding element is provided for the terminal header with phase carrier or phases rotation without elbows. This element prevents the mutual sliding of the conductors during the mounting. The operations for the mounting are the following:

1. Position the terminal header vertically.
2. Realize the connection with the subsequent ISOLSBARRA element as shown in the assembly instructions from point 1 to point 11.
3. Remove the anti sliding element. From this point, the anti sliding element is no longer useful.
4. Connect the conductors of the terminal header to the electrical equipment (for instance switchgear, transformer, etc.).



Example of installation of an anti sliding element

After the installation, before setting the line at work, verify that the exit of the conductors compared to the flange (measure "x") is the same as in the construction drawing.

