



ZUCCHINI BUSBAR SYSTEM



 **legrand**

ZUCCHINI BUSBARS

An integrated and complete energy distribution system



Medium voltage



Green T.HE transformers



Busbars



MAS distribution boards and cabinets



Circuit breakers

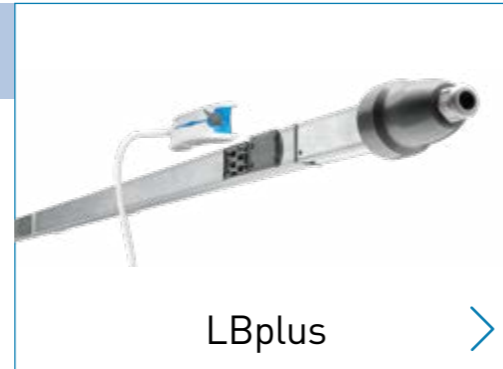


UPS

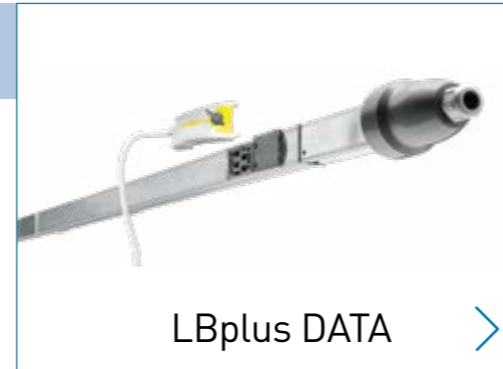
[CLICK AND FIND OUT MORE](#)

ZUCCHINI BUSBARS

LOW POWER



LBplus



LBplus DATA



MEDIUM POWER



Minisbarre MS



Medium Rating XCM



Trolley System TS



HIGH POWER



XCP-HP



XCP-S



RCP IP68



BUSBARS
A wide range
of solutions

CLICK
AND FIND OUT MORE

The advantages of the distribution system with busbars



- Quick installation
- Simplicity in design
- Safety and durability
- Installation flexibility
- Fire resistant
- Compactness and small size
- Energy efficiency
- Overall economy
- Reduced environmental impact
- Total recyclability of materials
- Reduced electromagnetic emissions

ZUCCHINI BUSBARS
LBPLUS

LBplus



LBplus LBplus is a low power busbar trunking system (from 25A to 63A) with IP55 protection degree. The most suitable solution for **lighting and energy distribution.**

Advantages



FLEXIBLE SYSTEM



3 IN 1 (MECHANICAL, ELECTRICAL, PLUG)



60% TIME REDUCTION OF INSTALLATION



SAFETY



SIMPLICITY

Products



Type **A**



Type **B**

Applications



Parking



Warehouses



Industry


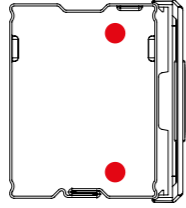
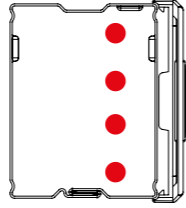
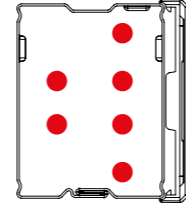

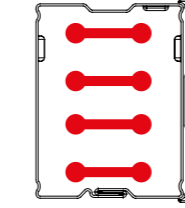

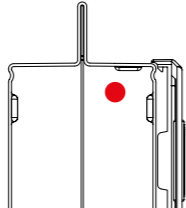
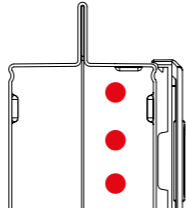
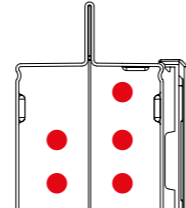
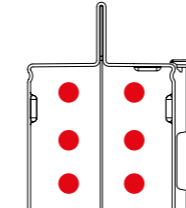
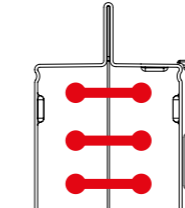


Shopping centers

Technical features

- 2 product lines:
 - LBplus Type A (moderate suspended loads);
 - LBplus Type B (heavy suspended loads + an internal metal separator for emergency circuits);
- Currents from 25A to 63A;
- Internal conductors: from 2 to 8;
- Standard protection degree IP55;
- Plug-outlet covers, IP55, hinged and unlosable;
- Degree of impact-resistance IK 07;
- Straight elements: 3m and 1.5m;
- Outlets on one or both sides;
- Plugs 10A-16A-25A (single-phase, three-phase, fuse protection, phase selection);
- Flexible joints (to change line directions);
- Common accessories for type A and B;
- Compliance with IEC 61439-6 standard;
- Installations: floor, wall, ceiling or pendant;
- Web tool

ZUCCHINI BUSBARS
LBPLUS

		252	254 - 404	256	258 - 408	634	Short circuit resistance (kA at 0.1s)			
	Suspension brackets distance	2 conductors 25A	4 conductors 25-40A	6 conductors 25A	8 conductors 25-40A	4 conductors 63A	Ambient temperature.	Rated current		
								25	40	63
TYPE A	 up to 3 m						40°	2,2	2,7	2,7
TYPE B	 up to 7 m						40°	2,2	2,7	2,7

For each version the structure (steel) acts as PE

ZUCCHINI BUSBARS
LBPLUS DATA

LBplus DATA



LBplus DATA is an evolution of the LBplus busbar trunking system. The most suitable solution for **intelligent lighting with DALI & 0-10V protocol and low power distribution.**

Advantages

DALI PROTOCOL
(COMMUNICATION
WITH KNX)

ENERGY
EFFICIENCY

SAFETY

Products



Applications



Logistics



Warehouses



Industry



Shopping centers


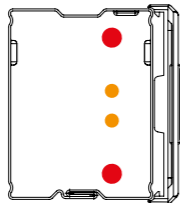
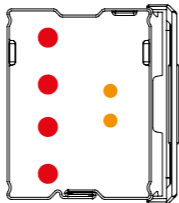
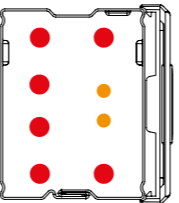
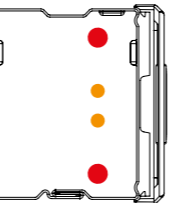
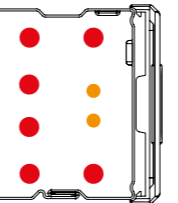
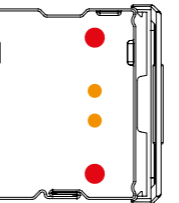
Technical features

- LBplus Data (only type A available);
- Internal conductors: from 4 to 8 (min 4 bus conductors 2+2) of which 2 conductors dedicated to the D+ & D- bus;
- 2 protocols, 0-10V and DALI;
- 0-10V and DALI communications with KNX;
- Straight elements: 3m and 1.5m;
- Taken on one or both sides

PRODUCTS

- Plug dedicated to the D+ & D- DATA signal;
- Plugs 10A-16A-25A (single-phase, three-phase, fuse protection, phase selection);
- Flexible joints (for changing line directions);
- Common accessories with LBplus type A;
- Compliance with IEC 61439-6 standard;
- Same features as Lbplus (Rating, IP55, IK07, Plug-outlet covers, IP55 and unlosable)

ZUCCHINI BUSBARS
LBPLUS DATA

		252	254	256	402	406	634	Short circuit resistance (kA at 0.1s)		
Suspension brackets distance	2 conductors 25A	4 conductors 25-40A	6 conductors 25A	2 conductors 40A	6 conductors 40A	2 conductors 63A	Ambient temperature	Rated current		
								25	40	63
<p>TYPE A (+ dati)</p>  <p>up to 3 m</p>							40°	2,2	2,7	2,7

For each version the structure (steel) acts as PE

ZUCCHINI BUSBARS
MS (MINISBARRE)

MS bars (minisbarre)

Busbar trunking system from 63A to 160A.
Aluminum and copper conductors.
The most suitable solution for **small/ medium energy distribution.**



Advantages



FLEXIBLE
SYSTEM



SYNERGY OF
ZUCCHINI SYSTEMS



WIDE RANGE OF
TAP-OFF BOXES



SAFETY



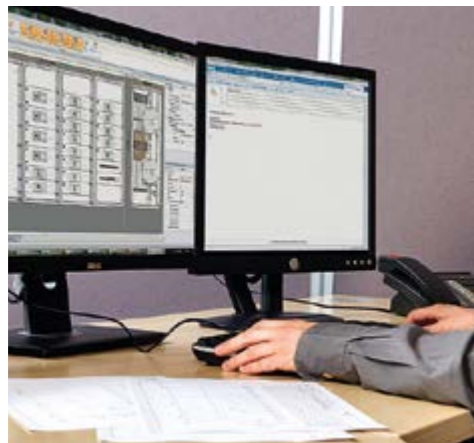
SIMPLICITY

ZUCCHINI BUSBARS
MS (MINISBARRE)

Products



System integrated with the BTicino/Legrand offer



PSZ software compatible with Autodesk & Revit

Applications



Warehouses



Laboratories



Workplaces

Technical features

- Current: 63A – 100A – 160A;
- 63A and 100A (Al version);
- 160A (Cu version);
- Number of conductors 4 (3P+N);
- Degree of protection IP40 (with accessories IP55);
- Length of straight elements: 1-1.5-2-3m;
- Straight elements with customized lengths;
- Outlets on both sides;
- Tap-off boxes (16A-32A-50A-63A);
- Empty tap-off boxes from 4 to 16 DIN modules or with built-in fuse protection;
- Flexible joints (for changing line directions);
- Compliance with IEC 61439-6 standard;
- Installations: wall / riser mains

Short circuit resistance (kA at 0.1s)				
Type	Ambient temperature	Rated current		
		63	100	160
MS	40°	3,5	5	5,5

Available in versions: 3 phases + neutral
The structure (steel) acts as PE

ZUCCHINI BUSBARS
XCM (MEDIUM RATING)

XCM bars (medium rating)

Busbar trunking system from 160A to 1000A.
Aluminum and copper conductors.
The most suitable solution for transport and distribution of energy **in medium and large industries, in riser power supplies, in data center applications and in buildings used for services and the tertiary sector**



Advantages



FLEXIBLE SYSTEM



INTEGRATED AND CERTIFIED SYSTEM



SIMPLICITY



SAFETY



IDEAL FOR EXTREME ENVIRONMENTAL CONDITIONS



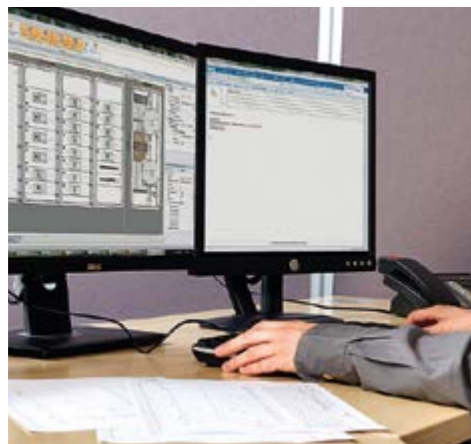
COMPATIBLE WITH EXISTING BTICINO AND LEGRAND PRODUCTS

ZUCCHINI BUSBARS
XCM (MEDIUM RATING)

Products



System integrated with the BTicino/Legrand offer



PSZ software compatible with Autodesk & Revit

Applications



Industries



Data Centers



Commercial buildings

Available in the versions:
3 phases + neutral
3 phases + neutral + 100% functional earth

Note (*): at 0,1s

Technical features

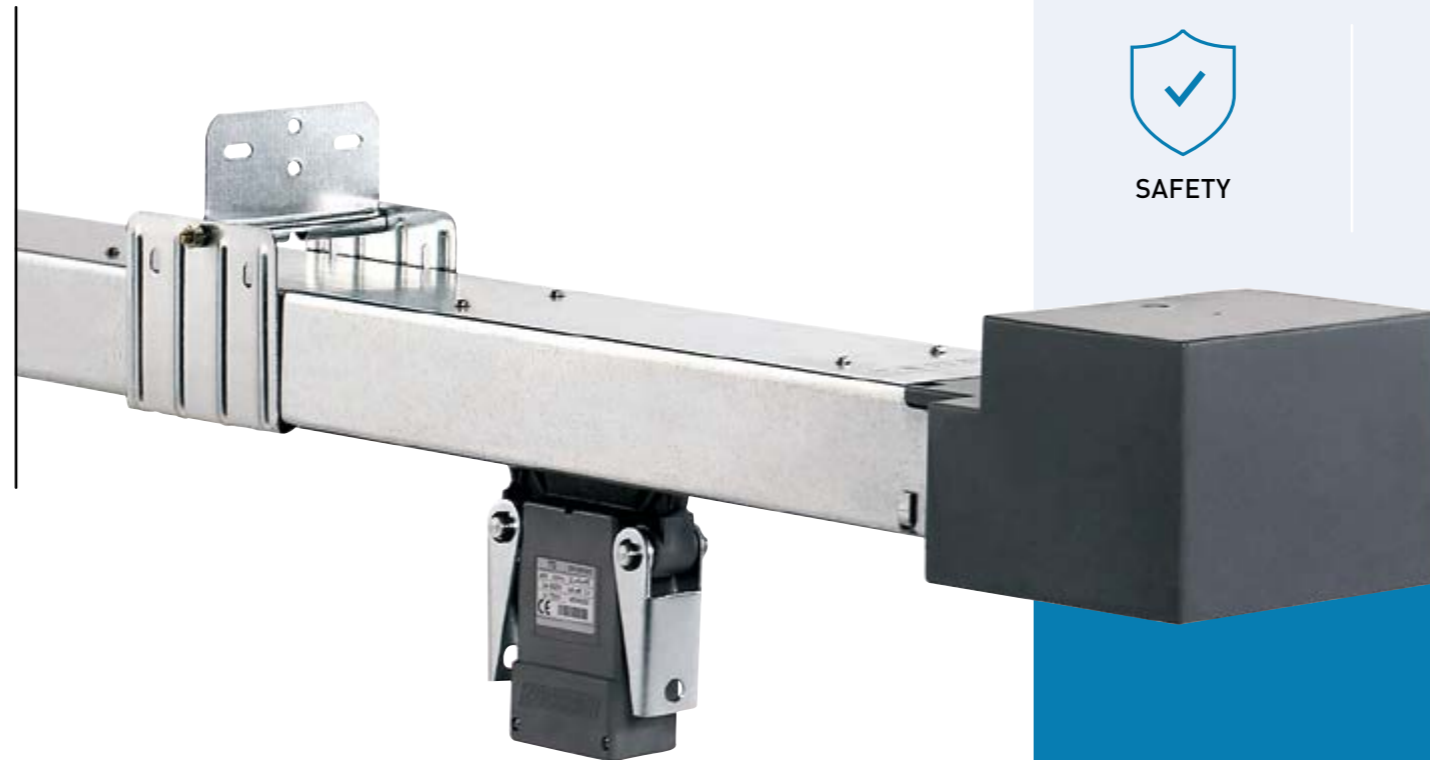
- Currents from 160A to 1000A
- Standard IP55 protection rating.
- 3/4/5 conductors available
- Available in Al (160A-1000A) or Cu (250A - 1000A) versions
- Wide range of plastic and metal tap-off boxes
- Complete range: straight elements, elbows, feed units, fixing supports...

Short circuit resistance (kA at 1s)					
Type	Ambient temperature	Rated current			
		160	250	315	400
Aluminum	40°	15 (*)	25 (*)	25 (*)	25
Copper	40°	-	25 (*)	25 (*)	30 (*)
		500	630	800	1000
Aluminum	40°	30	36	36	36
Copper	40°	-	36	36	36

ZUCCHINI BUSBARS
TS (TROLLEY SYSTEM)

TS bars (Trolley System)

TS (Trolley System) is the range of busbars for the power supply to **moving users such as: bridge cranes, transfer motors, assembly lines, etc.**



Advantages



FLEXIBLE
SYSTEM



SPEED
INSTALLATION



SIMPLICITY



SAFETY



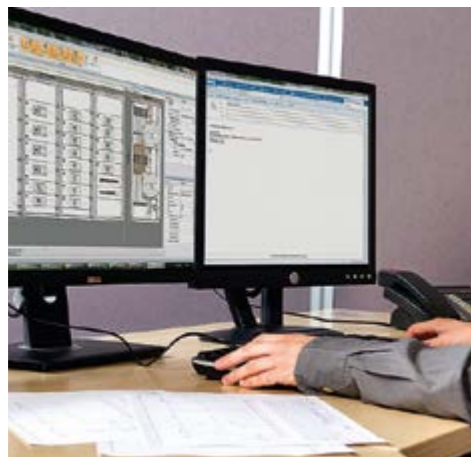
HIGH
ROBUSTNESS

ZUCCHINI BUSBARS
TS (TROLLEY SYSTEM)

Products



Energy transport



PSZ software compatible with Autodesk & Revit

Applications



Industries



Overhead cranes



Movement of large machines

Technical features

- Currents from 63A to 150A
- Standard IP20 protection degree.
- Available with 4/5 wire connection
- Compliance with the IEC EN 61439-6 standard
- Power socket carriages
- Complete range: straight or curved elements, expansion elements, suspension and installation accessories...

ZUCCHINI BUSBARS
XCP-S AND XCP-HP

Bars XCP-S XCP-HP

Busbar trunking system (from 630A to 6300A) up to IP65.
The most suitable solution for the transport and distribution of energy **in industrial, commercial and service plants.**



Advantages



FLEXIBLE SYSTEM



INTEGRATED AND CERTIFIED SYSTEM



SIMPLICITY



SAFETY



IDEAL FOR EXTREME ENVIRONMENTAL CONDITIONS



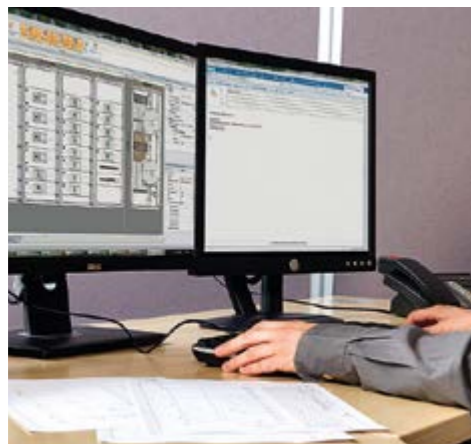
COMPATIBLE WITH EXISTING BTICINO AND LEGRAND PRODUCTS

ZUCCHINI BUSBARS
XCP-S AND XCP-HP

Products



System integrated with the BTicino/Legrand offer



PSZ software compatible with Autodesk & Revit

Applications



Industries



Food industry



Commercial and construction services

Technical features

- Currents from 630A to 6300A (extended range)
- IP55 as standard protection rating. IP65 available on request.
- 3 conductor combinations available
- Available in Al (630-5000A) or Cu (800-6300A) versions
- New range of dedicated junction boxes (plastic or metal)
- Complete range: straight elements, corners, fittings, fixing supports...
- Ambient temperature 35°C (XCP-S) or 50-55°C (XCP-HP)
- Icw up to 150kA (XCP-HP)

ZUCCHINI BUSBARS
XCP-S AND XCP-HP

Number of internal bars of XCP-S and XCP-HP

Rated current	630A	800A	1000A	1250A	1600A	2000A	2500A	3200A	4000A	5000A	6300A
XCP-S Aluminium	Single bar configuration						Double bar configuration			*	-
XCP-S Copper	-	Single bar configuration						Double bar configuration			*
XCP-HP Aluminium	Single bar configuration						Double bar configuration			*	-
XCP-HP Copper	-	Single bar configuration						Double bar configuration			*

* Triple bar

Short circuit resistance (kA at 1s)

Type	Ambient temperature	630A	800A	1000A	1250A	1600A	2000A	2500A	3200A	4000A	5000A	6300A
XCP-S Aluminium	35°	25 (*)	25 (*)	36	42	42	50	65	80	100	120	-
XCP-S Copper	35°	-	25	36	42	42	50	65	80	100	120	150
XCP-HP Aluminium	50°	36	36	50	70	70	85	120	120	150	150	-
XCP-HP Copper	55°	-	36	50	70	70	85	120	120	150	150	150

Available in versions: | 3 phases | 3 phases + neutral | 3 phases + neutral + functional earth 100% | 3 phases + double neutral

For each version the casing (steel) acts as PE

Note (*): at 0,5s

ZUCCHINI BUSBARS
RCP IP68

Bars RCP IP68

Resin busbar trunking system from 630A to 6300A and IP68.
The most suitable solution for energy transport **in outdoor applications.**



Advantages



FLEXIBLE
SYSTEM



INTEGRATED AND
CERTIFIED SYSTEM



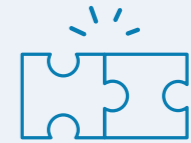
SIMPLICITY



SAFETY



IDEAL FOR EXTREME
ENVIRONMENTAL
CONDITIONS



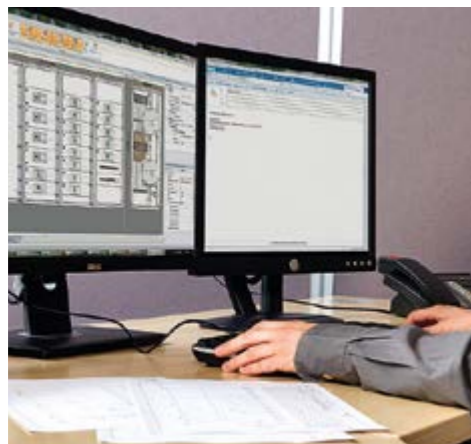
COMPATIBLE WITH
EXISTING BTICINO AND
LEGRAND PRODUCTS

ZUCCHINI BUSBARS
RCP IP68

Products



System integrated with the BTicino/Legrand offer



PSZ software compatible with Autodesk & Revit

Applications



Industries



Petrochemical industry



Chemical plants



Energy transport in extreme conditions

Technical features

- Nominal currents from 630 to 6300A
- Complete insulation with epoxy resin
- Insulation of individual conductors with polyester film
- Insulation voltage up to 1000V
- Compact dimensions
- Without maintenance
- For energy transportation only
- Copper Conductors: copper bars with purity greater than 99.9%
- Aluminum Conductors: aluminum alloy bars, with surface treated with different galvanic processes
- Degree of protection: IP68
- Compliance with EN 61439-6 regulations

ZUCCHINI BUSBARS
RCP IP68

RCP is available in versions with aluminum (630 - 5000A) or copper conductors (800 - 6300A)

Rated current	630A	800A	1000A	1250A	1600A	2000A	2500A	3200A	4000A	5000A	6300A
RCP Aluminium	Single bar						Double bar			*	-
RCP Copper	-	Single bar					Double bar			*	

* Combination of 2 busbar trunking lines in parallel.
2x2500 A for the version with aluminum conductors and 2x3200 A for the version with copper conductors.

Short circuit resistance (kA at 1s)

Type	Ambient temperature	630A	800A	1000A	1250A	1600A	2000A	2500A	3200A	4000A	5000A	6300A
Aluminum	40°	20	36	36	50	50	60	60	100	100	100	-
Copper	40°	-	40	40	40	65	65	65	100	100	100	100

Available in versions: | 3 phases | 3 phases + neutral | 3 phases + neutral + 100% functional earth

ZUCCHINI BUSBARS

THE IEC EN 61439 PRODUCT STANDARD

CHAPTER 4

The busbar trunking can be completely configured as a product belonging to the electrical panel category, in fact it is designed for:

- Distribute electricity
- Be equipped with appropriate junction boxes with electrical protection and control devices (automatic switches, contactors, etc.)

Even in terms of construction it resembles an electrical panel, in fact it is provided with:

- An external mechanical protection casing made of metallic or insulating material
- The appropriately blocked conductors are positioned inside the casing

Therefore, normatively the busbar trunking refers to the IEC EN 61439 series of standards and in particular to the general part (IEC EN 61439-1) and to the specific part (IEC EN 61439-6). Specifically, the IEC EN 61439-6 standard applies to busbar ducts, equipment made up of a system of conductors including one or more bars spaced apart and supported by insulating materials (insulators), all contained in a casing (duct) to which they can be applied shunt devices and protection equipment, and their accessories; it also applies to busbars intended to power lighting devices via shunt units.

A prefabricated busbar conduit is composed of a main unit (rectilinear element) to which devices are subsequently connected to perform different functions: power supply boxes, fixing devices (wall or suspension brackets), shunt devices (pre-wired or terminal plugs, boxes for modular, moulded-case or fuse switches), complementary elements for changing direction (flexible elements, T, Z, X elements).

The Standard lists the mechanical and electrical requirements with which the busbar trunking must comply and provides the methods for verifying these requirements. The busbar trunking must be checked using one of the following two methods permitted by the standard:

- Verification through individual tests
- Verification by comparison with a reference project (via a checklist)

However, the verification of the shunt units of the busbar ducts is different and, by their nature, they are similar to small switchboards and for this reason, the shunt units can also be verified by calculation as for electrical switchboards.

The busbar conduit is therefore an extremely standardized and tested product whose assembly is guided by the instructions of the original manufacturer and therefore, once the work is finished, there is the guarantee of a construction compliant with the rule of the art.

Performance of industrialized busbar trunking

The system concept applied to the busbars gives them the characteristics of an industrialized product which translate into significant advantages for the end user, not least that of greater reliability and the consequent increase in the level of safety that can be obtained.

The «original manufacturer» (manufacturer of the parts making up the busbar system) has the responsibility of carrying out the type tests to ensure the product's compliance with the specific standard and providing the assembly instructions. The installer is responsible for choosing the components suitable for the purpose and assembling them; at the end it will carry out the system checks required by the IEC 61439-6 standard to ensure the success of the assembly and therefore issue the declaration of conformity of the system.

 **legrand**