

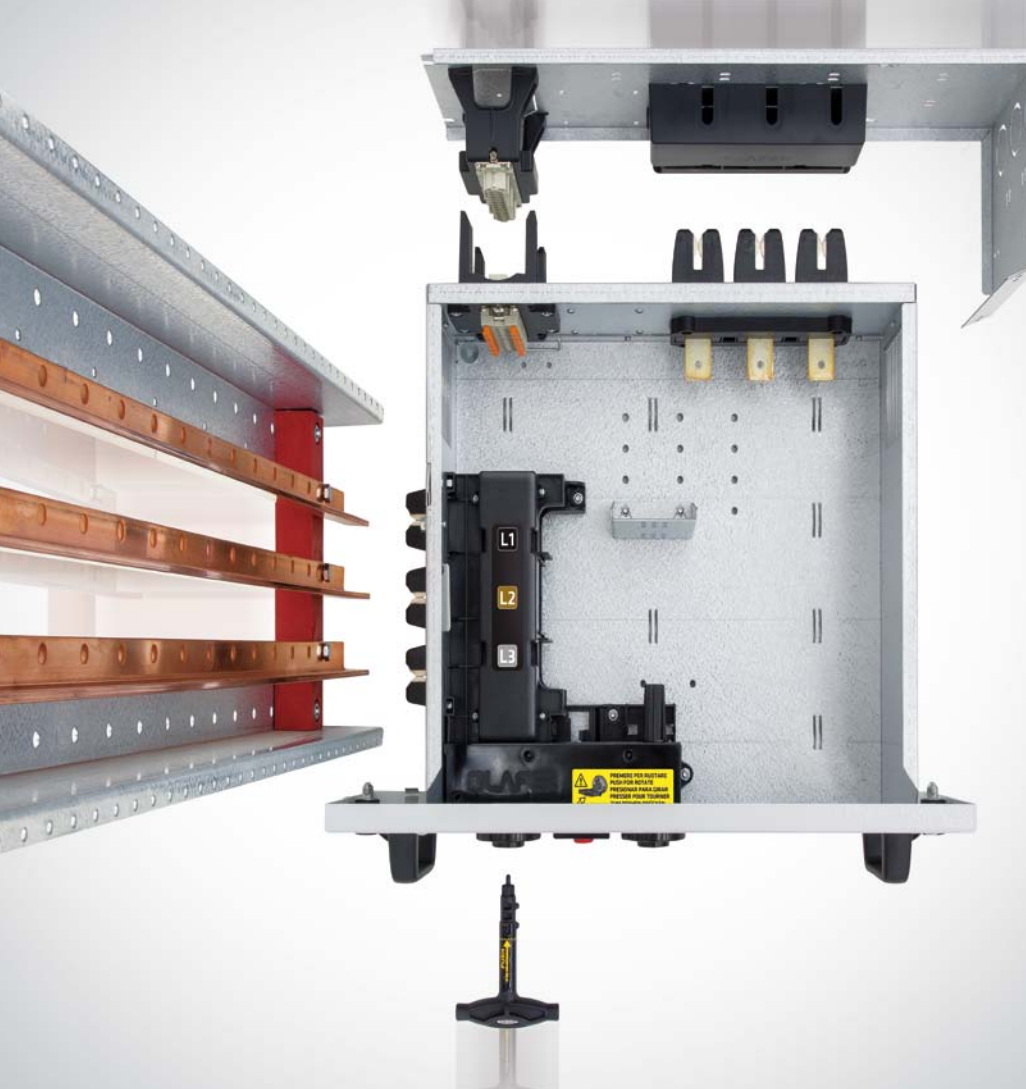


Lafer. Around you

ME-Cub

Motor Control Center
with withdrawable units
up to 3200 A





SwitchLAF™

Simple, economic, quick.

An innovative disconnecting switch that enables the installation and the quick replacement of the drawer **only in three steps**.



user guide
video

COMMISSIONING OF THE DRAWER

drawer in "test" position



drawer in "disconnected" position



drawer in "connected" position



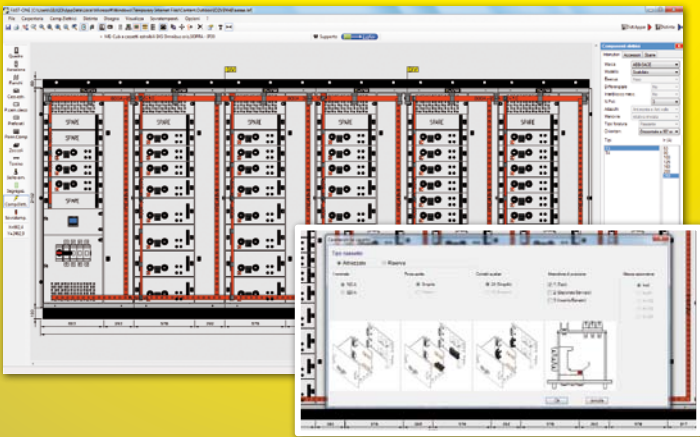
REPLACEMENT OF THE DRAWER





FAST-ONE™

Quick, intuitive, developed.
Imagine the cabinet,
with FAST-ONE you realize it.



New function for "on-line buying".

Possibility of checking the availability of products in stock for the collection or the consignment.

Fast-one is a Windows environment package for the drawing of electrical cabinets and the creation of bill of materials and respective costs.

What FAST-ONE can do:

- Frontal view and plan of the cabinet structure.
- Entry and replacement of assembly parts.
- Possibility to choose devices of all brands (ABB, SCHNEIDER, SIEMENS, etc.) with automatic loading of the panel for each circuit breaker.
- Creation of the bill of materials used in the drawing and possibility of sending the project by e-mail directly to Lafer.
- Automatic determination of insulators and busbar systems dimensions according to electrical features.
- Quotation and updated cost estimate.
- Determination of the overtemperature inside the cabinet.
- Possibility of customizing the project with customer's logo or header.
- PDF and DWG export.
- Available in 5 languages: Italian, English, German, French and Spanish.

FAST-ONE™ solution changes your way of working cleverly. The easy, quick, efficient configurator accelerates the production phases and optimizes the verifications eliminating automatically the errors. It reduces costs and time, it makes the design phase more fluid, it simplifies the manufacturing, the assembly and the installation of your projects. Today you can order the products in ready delivery. Universal and modular, it is the maximum freedom without useless restrictions.

FAST-ONE™. Studied and developed with you and for you.

ME-Cub

Motor Control Center with withdrawable units up to 3200 A



Designed for starting and motor control center.

They offer a quick wiring solution with many solutions: single drawer, double drawer and mixed cabinet.

Main characteristics

- Assembled structure made of sheet with a thickness of 2 mm.
- Degree of protection from IP30 (open version) to IP55 with transparent door with toughened glass.
- Compartment with side and horizontal partitions, rear wiring plate with female connector for auxiliary circuits and power supply pliers.
- Withdrawable unit with customizable front panel, SwitchLAF™ disconnecting switch, male connector for auxiliary circuits and power contacts.
- Possibility of side connection.
- Installation of circuit breakers of all leading manufacturers (ABB, Schneider, Siemens, etc.).
- Epoxy powder coating after phosphating in RAL 7035 B (other colours on request).
- Patented and certified earth connection system.
- Plinth with reinforced covering flanges for a handling on rollers.
- Full range of internal finishing accessories to provide solutions for any requirement.
- On request, cabinet in stainless steel.

Certifications



IEC 61439-1	Test n. B0008006	Resistance of the short circuit $I_n = 2500 \text{ A}$ and $I_{cc} = 70 \text{ kA}$ for 1 sec. <ul style="list-style-type: none"> • Verification of the short circuit. • Verification of the connection between equipment masses and the protection circuit.
IEC/TR 61641 CEI 17-86	Test n. B0009515	Arc conditions due to internal fault 70 kA for 300 msec.
IEC 61439-1 IEC/TR 61641	Test n. B0007840	Verification of overtemperature limits. <ul style="list-style-type: none"> • Verification of overtemperature limits. • Verification of dielectric properties: industrial frequency and impulse tests. • Verification of air clearance and creepage distances.
CEI EN 60529	Test n. B0011835	Verification of degree of protection IP55 category 2.
IEEE Std 693-2005 IEC 60068-2-57 IEC 62271-300 Transelec	Test n. B3020295	Seismic test with acceleration 1,0g

Typology



Cabinet: assembled structure made of sheet with a thickness of 2 mm. Cabinet with access from the back.



Cabinet with cable housing: assembled structure made of sheet with a thickness of 2 mm with cable housing for cables and terminal block. Cabinet with access from the front.



Mixed cabinet: single cabinet or cabinet with cable housing equipped with withdrawable units, fixed units, etc.



Cabinet with glass door: single cabinet or cabinet with cable housing supplied with glass door and internal withdrawable units. Degree of protection up to IP55.



Inox: on request, cabinet in stainless steel.

Details



Side bus-bars: placed on the left for the connection of the power supply pliers and the SwitchLAF™ disconnecting switch.



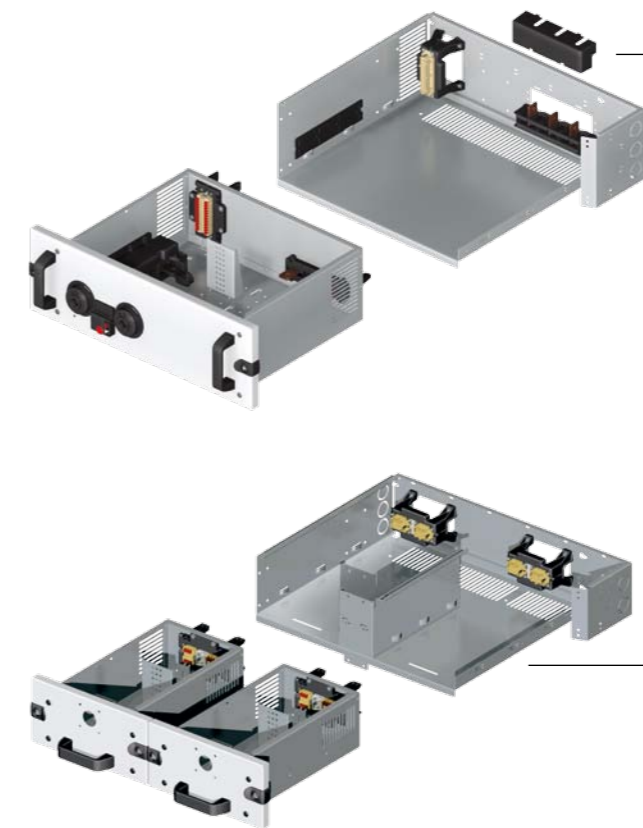
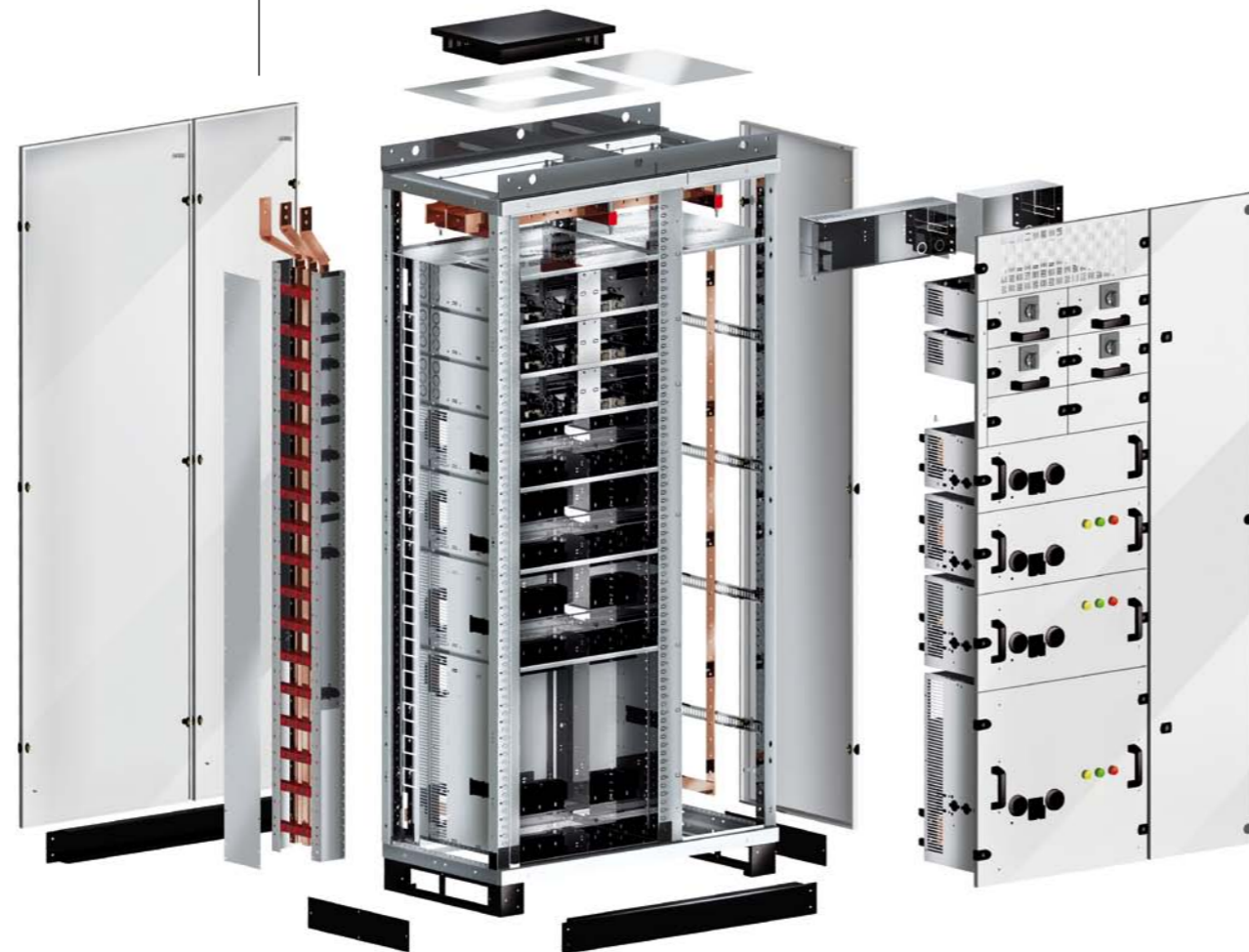
Linear bus-bar system: bus-bar system up to 3200 A placed on the top.



Auxiliary connections and cables space: placed on cable housing and at the back of the single cabinet.



Upper segregation: made of Aluzinc sheet steel, which can be used to fix the cable ducting.



Drawers



Single drawer:

- SwitchLAF™ disconnecting switch.
- male connector 24 poles for auxiliary circuits.
- power supply pliers.
- position switch.
- bracket for circuit breaker.
- locking device of the drawer.



Functional unit for single drawer:

- side cover on bus-bars space.
- female connector 24 poles for auxiliary circuits.
- contacts power supply pliers.



Double drawer:

- male connector for auxiliary circuits max 100 A.
- bracket for circuit breaker.
- locking device of the drawer.



Functional unit for double drawer:

- female connector for auxiliary circuits max 100 A.

Accessories



Safety:

- safety of "withdrawn drawer".
- safety of "not connected drawer".



Position switches:

- position switch "disconnected drawer".
- position switch "withdrawn drawer".



Identification system of the drawer: a system to identify correctly the position of the drawer in the cabinet.



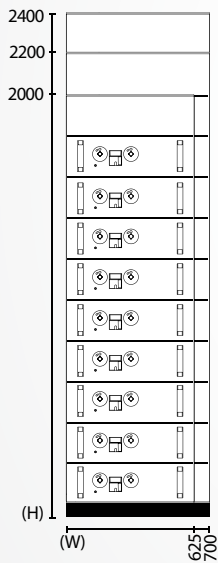
Double connector: auxiliary circuits 48 poles.



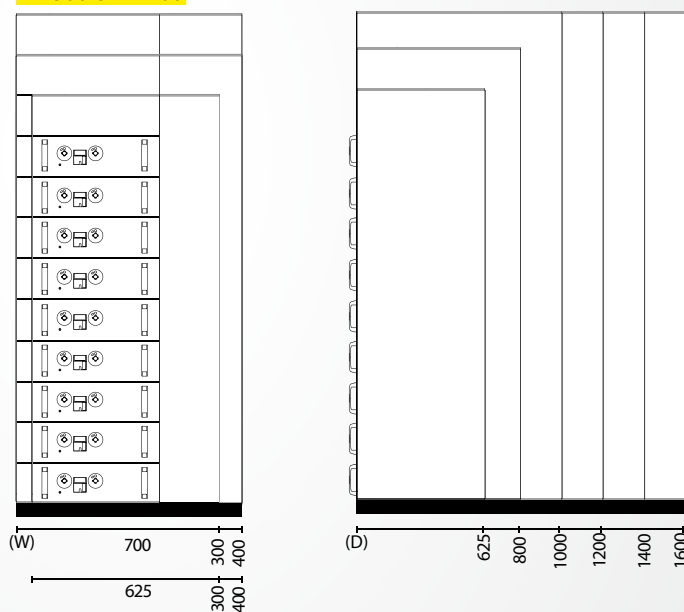
Double pliers: star-delta starting.

Technical specifications

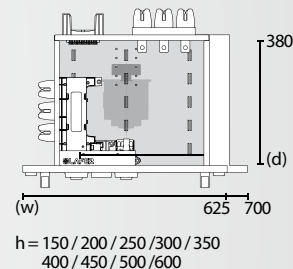
Cabinet



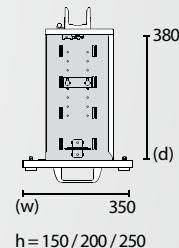
Cabinet with cable housing
L = 300 e L = 400



Single drawer



Double drawer



	Width (W) mm	Height (H) mm	Depth (D) mm
Cabinet	625 (24 modules)	2000 / 2200 / 2400	625 / 800 / 1000
	700 (24 modules)	(usable space = H - 200)	/ 1200 / 1400 / 1600
Cabinet with cable housing	625 + 300 (24 modules)	2000 / 2200 / 2400 (usable space = H - 200)	625 / 800 / 1000 / 1200 / 1400 / 1600
	700 + 300 (24 modules)		
	625 + 400 (24 modules)		
	700 + 400 (24 modules)		
Back to back cabinet	On request		

Electrical data	Voltage ratings	Rated insulation voltage (U_i)		1000 V
		Rated operational voltage (U_o)		690 V
Rated impulse withstand voltage (U_{imp})		6 / 8 / 12 kV		
Rated frequency (f_n)		50 / 60 Hz		
Current ratings	Rated current (I_n)	Main busbars	Up to 3200 A	
		Distribution busbars	400 / 630 / 800 A	
Resistance of internal arc	Rated short-time withstand current for 1 sec. (I_{cw})		70 kA	
	Permissible current under arcing conditions ($I_{p,arc}$)		70 kA	
	Permissible arc duration (t_{arc})		300 ms	
Clamps on withdrawable units			160 / 320 A	
Auxiliary contacts connectors			16 A	
Auxiliary contacts			24 / 48	

Mechanical characteristics	IP degree of protection	Internal	Up to IP2X
		External enclosure	From IP30 to IP55
Drawers height (h)	150 / 200 / 250 / 300 / 350 / 400 / 450 / 500 / 600		
IK test (shock resistance)	IK09 glazed door		
	IK10 blind door		
Access	From the front / Side / Rear		
Execution	Form 3b / Form 4b		
Materiel	Structure	Pickled plate, 15/10 - 20/10 mm thick	
	Accessories	Aluzinc® sheet steel, 15/10 - 20/10 mm thick	
Powder coating	Standard	RAL 7035 B light grey (orange peel)	
	On request	Powder RAL colours and stainless steel	
Plastic components	Halogen-free, flame retardants, self-extinguishing, CFC-free		
Options	Busbar system	Silvering/ Tinning	
	Components	Position switch "disconnected drawer"	
		Position switch "withdrawn drawer"	
		Identification system of the drawer	