# PW-Tech

## Power Center cabinets for low voltage power distribution up to 6300 A





Lafer. Around you

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## Power Center cabinets for low voltage power distribution up to 6300 A

**Devoted to energy distribution.**

**They offer many solutions to any wiring typology, accessibility and segregation form.**

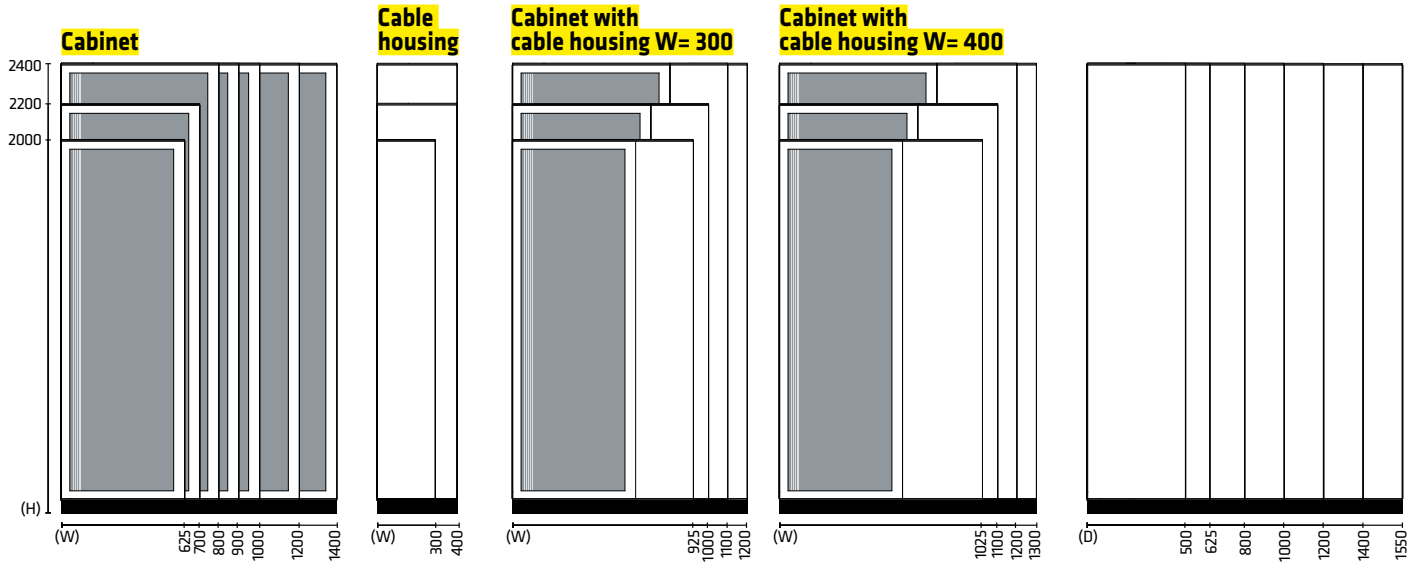
**Main characteristics**

- Assembled structure made of sheet with a thickness of 20/10 mm.
- Plinth with reinforced flanges with a thickness 20/10 mm for handling on rollers.
- Degree of protection from IP30 (open version) to IP55 with blind door or transparent door with toughened glass.
- Possibility of side connection with other Lafer cabinets too (MC-Cub, ME-Cub and Automation).
- Installation of devices of all manufacturers (ABB, Schneider, Siemens, etc.).
- Epoxy powder coating after phosphating in RAL 7035 B (other colours on request).
- Stainless steel cabinet on request.
- Patented and certified earth connection system.
- Internal finishing accessories for all kinds of exigences.

## Certifications

| | | |
|---|---|---|
| IEC 61439-1 | **test n° B0008006**<br>**test n° B5002265** | **Short circuit In=6300 A e Icc=150 kA per 1 sec.**<br>• Short circuit verification<br>• Verification between the equipment masses and the protection circuit. |
| IEC/TR 61641<br>CEI 17-86 | **test n° B0009515**<br>**test n° B5014994** | **Internal arc fault verification 105 Ka for 300 msec.** |
| IEC 61439-1<br>IEC/TR 61641 | **test n° B0007840**<br>**test n° 02472-15-0378** | **Overtemperature limits verification.**<br>• Dielectric properties verification: impulse and industrial frequency test.<br>• Clearance and creepage distance verification. |
| CEI EN 60529 | **test n° B0011835** | **Degree of IP55 protection category 2 verification.** |
| IEEE Std 693-2005<br>IEC 60068-2-57<br>IEC 62271-300<br>Transelec | **test n° B3020295** | **Seismic test with acceleration 1,0g** |

# Technical specifications




| | Width (W) mm | Height (H) mm | Depth (D) mm |
|---|---|---|---|
| **Cabinet** | 625 (24 modules) | 2000 / 2200 / 2400 (usable space = H - 200) | 500 / 625 / 800 / 1000 / 1200 / 1400 / 1550 |
| | 700 (24 modules) | | |
| | 800 (34 modules) | | |
| | 1000 (46 modules) | | |
| | 1200 (54 modules) | | |
| | 1400 (62 modules) | | |
| **Cable housing** | 300 | 2000 / 2200 / 2400 (usable space = H - 200) | 500 / 625 / 800 / 1000 / 1200 / 1400 / 1550 |
| | 400 | | |
| **Cabinet with cable housing** | 625 + 300 (24 modules) | 2000 / 2200 / 2400 (usable space = H - 200) | 500 / 625 / 800 / 1000 / 1200 / 1400 / 1550 |
| | 700 + 300 (24 modules) | | |
| | 800 + 300 (34 modules) | | |
| | 625 + 400 (24 modules) | | |
| | 700 + 400 (24 modules) | | |
| | 800 + 400 (34 modules) | | |
| **Back to back cabinet** | On request | | |

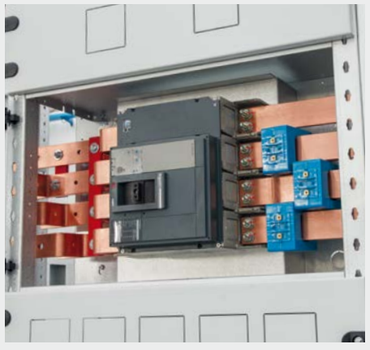
| | | | |
|---|---|---|---|
| **Electrical data** | Voltage ratings | Rated insulation voltage ($U_i$) | 1000 V |
| | | Rated operational voltage ($U_e$) | 690 V |
| | | Rated impulse withstand voltage ($U_{imp}$) | 8 / 12 kV |
| | | Rated frequency ($f_n$) | 50 / 60 Hz |
| | Current ratings | Rated current ($I_n$) | Up to 6300 A |
| | | Rated short-time withstand current for 1 sec. ($I_{cw}$) | 150 kA |

| | | | |
|---|---|---|---|
| **Mechanical characteristics** | IP degree of protection | Internal | Up to IP2X |
| | | External enclosure | From IP30 to IP55 |
| | Covers height (h) | 150 / 200 / 250 /300 / 350 /400 / 450 / 500 /600 / 700 / 800 / 900 / 1000 | |
| | IK test (shock resistance) | IK09 glazed door | |
| | | IK10 blind door | |
| | Access | From the front / Side / Rear | |
| | Execution | Form 1 / Form 2a / Form 2b / Form 3a / Form 3b / Form 4a / Form 4b | |
| | Material | Structure | Pickled plate, 15/10 - 20/10 mm thick |
| | | Accessories | Aluzinc® sheet steel, 15/10 - 20/10 - 25/10 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 | |
| | Bars treatment | Alubar | standard: tin |
| | | | on request: Nickel/ Silver |
| | | Copper | standard: none |
| | | | on request: Tin/ Nickel/ Silver |

All Lafer cabinets have been designed to be used in indoor environments. In case of outdoor applications, customers should require the supply of the specific rain canopy. Lafer shall not be held liable for any damage resulting from the non-observance of these guidelines.

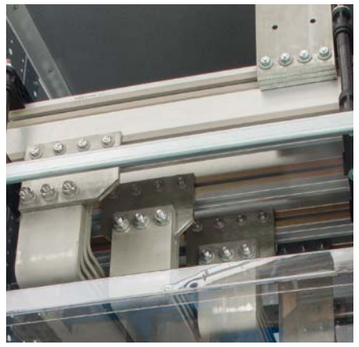
# Typology

**Cabinet with back access:**
cabinet with sections up to form 4b.
Vertical and horizontal busbar system placed at the back.

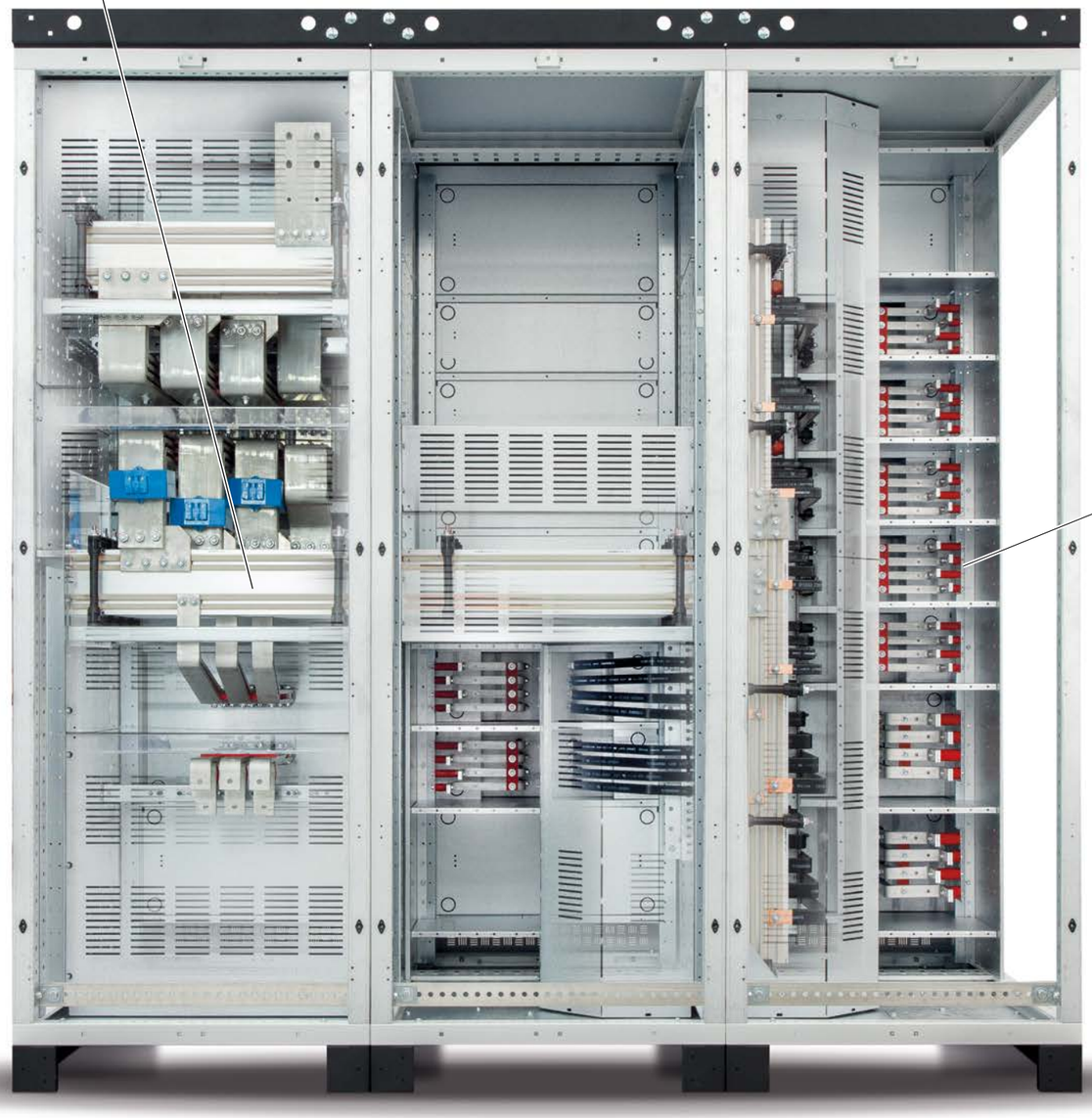


**Cabinet with frontal access:**
cabinet with sections up to 4a form.
Vertical busbar system placed on the side and horizontal busbar system placed on the top.

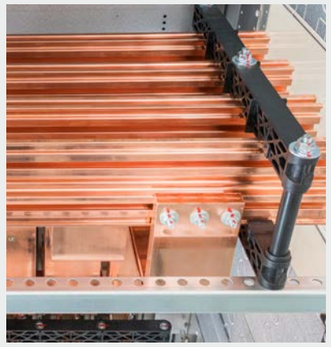
# Smart Energy Plus

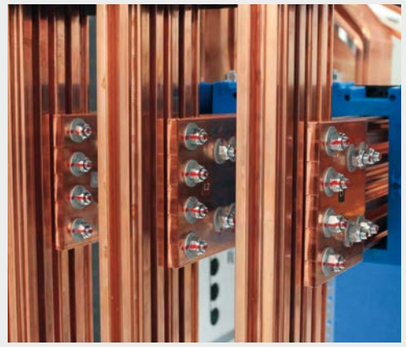


**Smart-Energy plus busbar system:**
anodized aluminium with nickel contact surface applied with cold spray technology up to 6300 A.



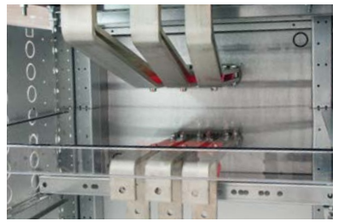
# Smart Energy Copper



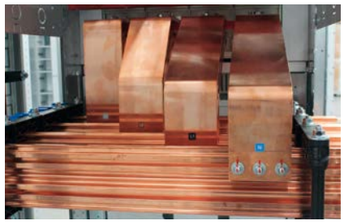


**Smart-Energy copper busbar system:**
extruded copper busbar up to 6300 A.

# Connections

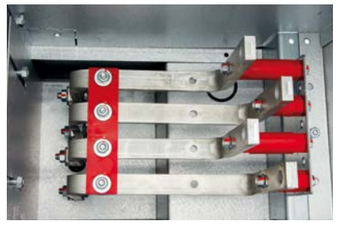


**Alubar circuit breakers connection:**
Tin-plated aluminium connections between circuit breakers and main busbar from 250 A up to 4000 A (nickel-plated or silver-plated aluminium on request).



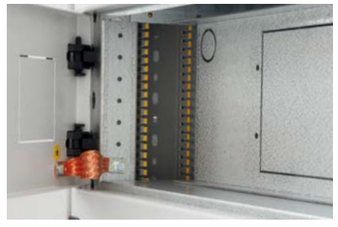
**Copper circuit breakers connections:**
connections up to 6300 A.

# Terminals extension



Copper or Aluminium **extension of horizontal or vertical circuit breakers terminals**.

# Internal details



**Compartment:** with hinged cover, wiring plate,horizontal partition and Aluzinc sheet steel side segregation.

**ModularDINTM system:** rapidity of assembly and disassembly of LDIN modular rails, with the new joint system without screws. It is compatible with the majority of splitter blocks available on the market.