



EWC-PC

**POWER CENTER FOR LOW VOLTAGE POWER
DISTRIBUTION UP TO 6300A**



POWER CENTER

1.General description

EWC-PC Power Center is a LV distribution switchboard particularly suitable for applications requiring high performance and a high level of reliability.

They are generally installed downstream the MV/LV transformers or generator groups and contain the main and distribution circuit-breakers of the LV plant.

They consist of standardized section based on a easy-to-fit modular designed permitting to suit any plant configurations, electrical diagrams and installation sites.

The wide range of sections with rear or front access, offers different solutions satisfying any need in terms of installation and space requirements.

Switching and regulation operations on the equipments, as well as the access and routine maintenance of the switchboard can be carried out in maximum safety for personnel and with no danger of accidental contact with live parts.

USE

Thanks to their versatility and high performance, EWC-PC Power Center switchboards can be used in power plants, industrial plants, ship-board plants and anywhere else that is required:

- personnel safety
- flexibility
- reliability
- rapidity of use and maintenance
- easy installation and connections
- possibility of extensions and modifications

STANDARDS

EWC-PC Power Center switchboards was designed and built in compliance with the main national and international standards:

- EN 60439-1;
- IEC 439-1;
- other harmonised European Standards.

TESTS

Type tests

EWC-PC Power Center switchboards are subjected to the type tests foreseen in the standards.

On request the documentation from national and international laboratories are available.

Routine tests

All the switchboards are subjected to the routine tests foreseen in the standard EN 60439-1:

- inspection of the assembly
- inspection of wiring
- electrical operation test
- dielectric test
- checking of protective measures and of the electrical continuity of the protective circuits
- checking of insulation resistance

TRANSPORT

All EWC-PC Power Center cubicles can be handled according to the customer's requirements:

- Thanks to:
- Plinths with reinforced removable flanges.
 - Structure connection L bars.

- It is possible to:
- Palletize the cubicle.
 - Handle it by jib crane, bridge crane or rollers.

EWC GROUP srl reminds you that in all handling operations it is advisable to check that the ropes and chains are in good conditions and that the correct centre of gravity of the structure to be handled has been correctly assessed

2.Main characteristics:

DESIGN ASPECTS

Thanks to its experience developed throughout the years EWC GROUP srl has created EWC-PC, the new structure for primary low voltage distribution. Thanks to a company policy that aims at meeting the customers' diversified requirements, with their versatility the EWC-PC cubicles provide an answer to all types of cabling.

TECHNICAL CHARACTERISTICS OF THE PRODUCT

The modular EWC-PC cubicle is manufactured with a sheet metal load bearing structure with a thickness of 20/10 mm and can be easily assembled according to construction standards. Each internal component is subject to an industrial treatment with a galvanising process (sendzimir/aluzinc), while the external part is epoxy polyester powder coated in shade RAL 7035 (other shades upon request).

The structures are available with an IP30 or IP54 protection level according to the different requirements of the user. Higher protection levels are subject to an agreement between EWC GROUP srl and the customer.

PRACTICALITY AND ADVANTAGES

All EWC-PC cubicles have been studied to answer to 3 requirements:

- Simplicity in creating the bus pathway. The modular characteristics of all internal components allow the pathway to be created according to fixed points thus requiring extremely little time.
- Bus pathway optimisation. Taking the new market demands into consideration the EWC-PC cubicles allow for the creation of the bus system, of connectors and of connections with a considerable saving on copper.
- Easy-to-fix internal components. All internal components have been manufactured so that they can be assembled by a single operator with highly innovative fixing systems.

CELL VENTILATION

As well as maintaining the required protection level, the ventilation system of the EWC-PC cubicles allows the preservation of the electrical characteristics of the various appliances as indicated by the manufacturers. The system is based on natural air circulation.

FIRE SAFETY

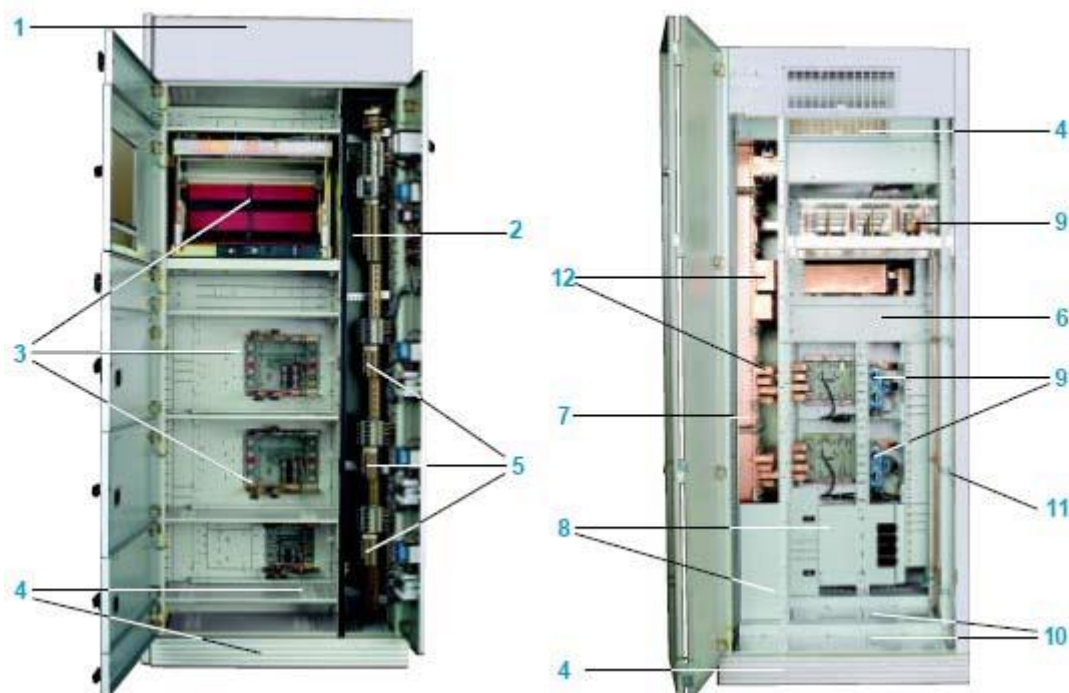
The use of insulating materials that do not spread fire and the internal metal segregations make the structure safe against the spreading of fire.

EFFICIENT INSULATION

The whole bus system is designed and manufactured with air insulation. The insulators that form the bus anchoring system are made from blocks of stratified polyester glass (a non-hygroscopic material with elevated mechanical characteristics).

Front

Rear



1. Compartment for connection between section
2. Auxiliary space
3. Circuit-breakers compartments
4. Ventilation abat-vents
5. Terminal blocks auxiliary circuit
- 6 Power connection space
7. Distribution busbar
8. Protection barriers
9. Outgoing terminals
10. Removable cover plate for cables enter/exit
11. Cable-support
12. Connection for circuit-breakers breakers



3. Technical specifications:

	Width (W) mm	Height (H) mm	Depth (D) mm
Cabinet	625 (24 modules)	1800 / 2000 / 2200 / 2400 (usable space = H - 200)	625 / 800 / 1000 / 1200 / 1400 / 1600
	700 (24 modules)		
	800 (34 modules)		
	900 (36 modules)		
	1000 (46 modules)		
Cable housing	300	1800 / 2000 / 2200 / 2400 (usable space = H - 200)	400 / 500 / 625
	400		
Cabinet with cable housing	625 + 300 (24 modules)	1800 / 2000 / 2200 / 2400 (usable space = H - 200)	625 / 800 / 1000 / 1200 / 1400 / 1600
	700 + 300 (24 modules)		
	800 + 300 (34 modules)		
	900 + 300 (36 modules)		
	625 + 400 (24 modules)		
	700 + 400 (24 modules)		
	800 + 400 (34 modules)		
	900 + 400 (36 modules)		
Back to back cabinet	On request		

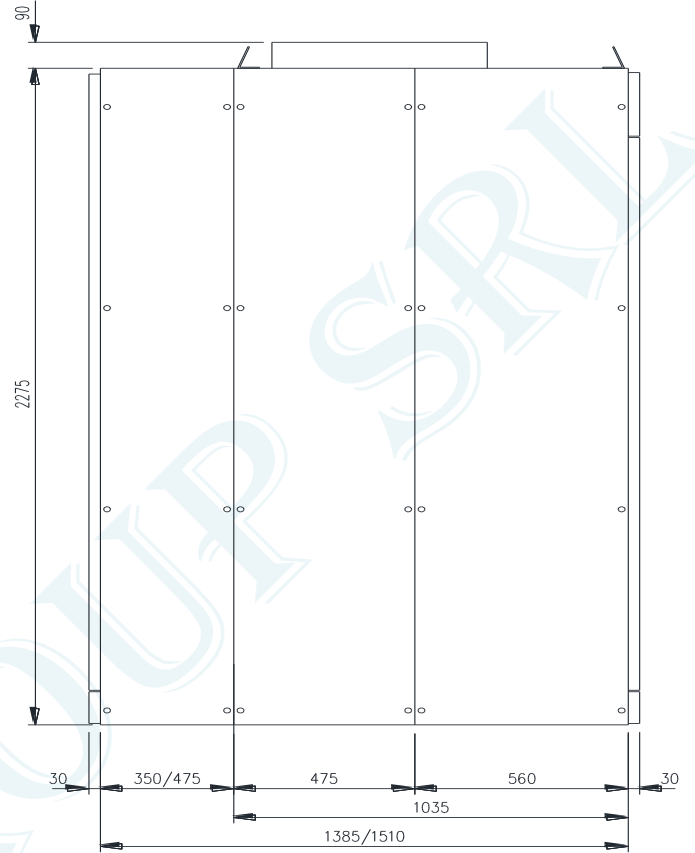
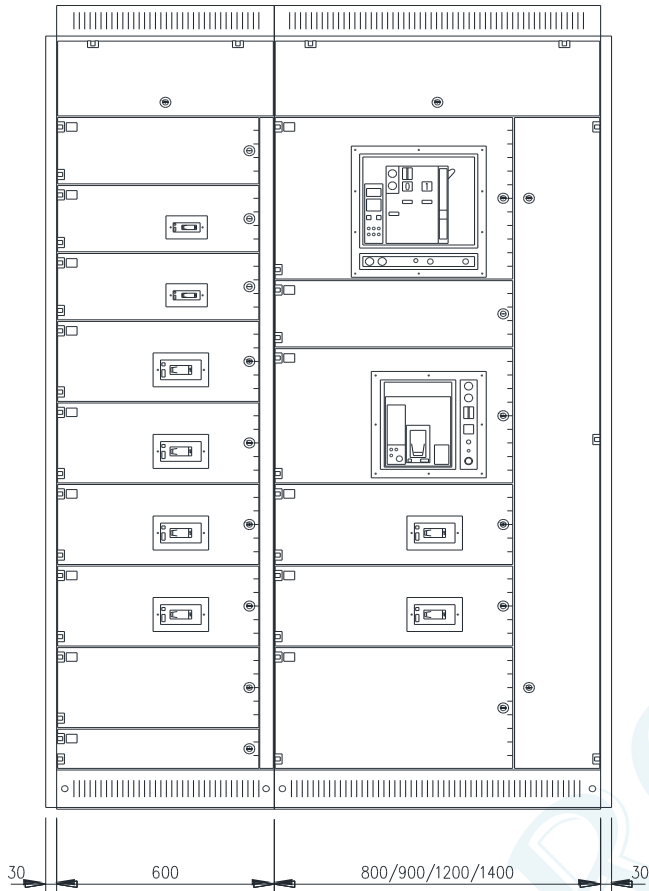
Electrical data	Voltage ratings	Rated insulation voltage (U_i)	1000 V
		Rated operational voltage (U_e)	690 V
		Rated impulse withstand voltage (U_{imp})	6 / 8 / 12 kV
		Rated frequency (f_n)	50 / 60 Hz
	Current ratings	Rated current (I_n)	Up to 6300 A
		Rated short-time withstand current for 1 sec. (I_{cw})	150 kA

Mechanical characteristics	IP degree of protection	Internal	Up to IP2X	
		External enclosure	From IP30 to IP55	
	Drawers 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		
	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		

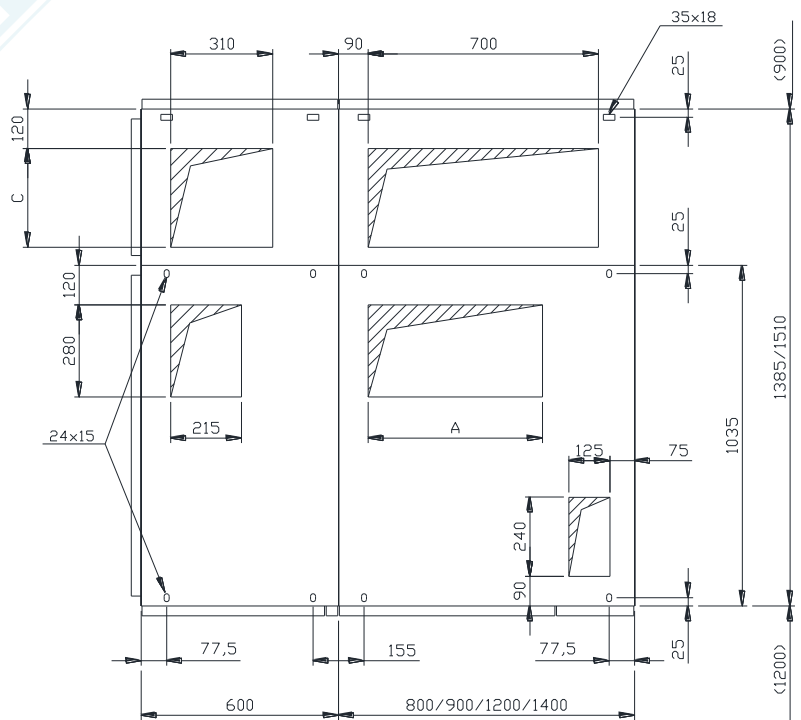


Front

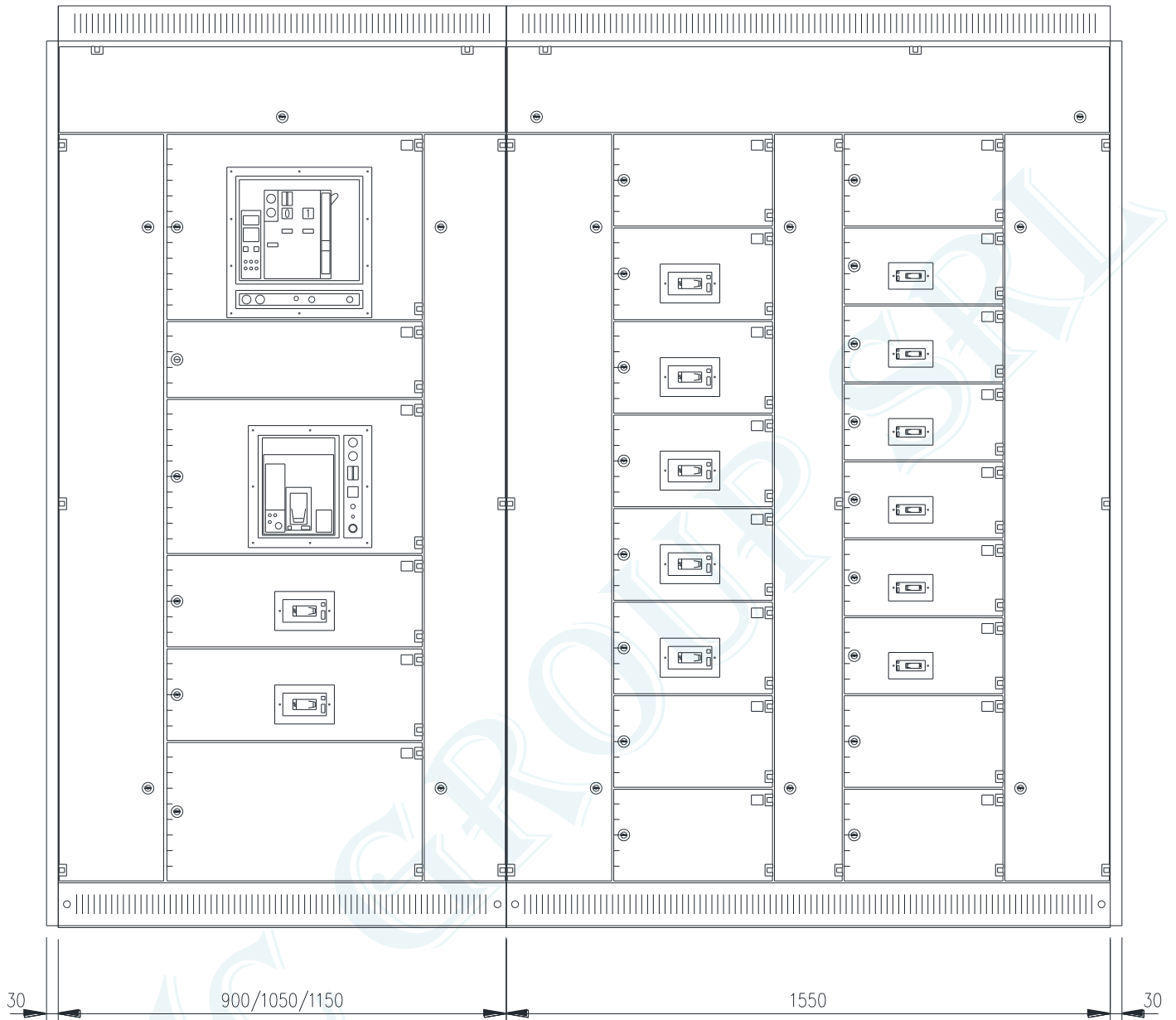
Side



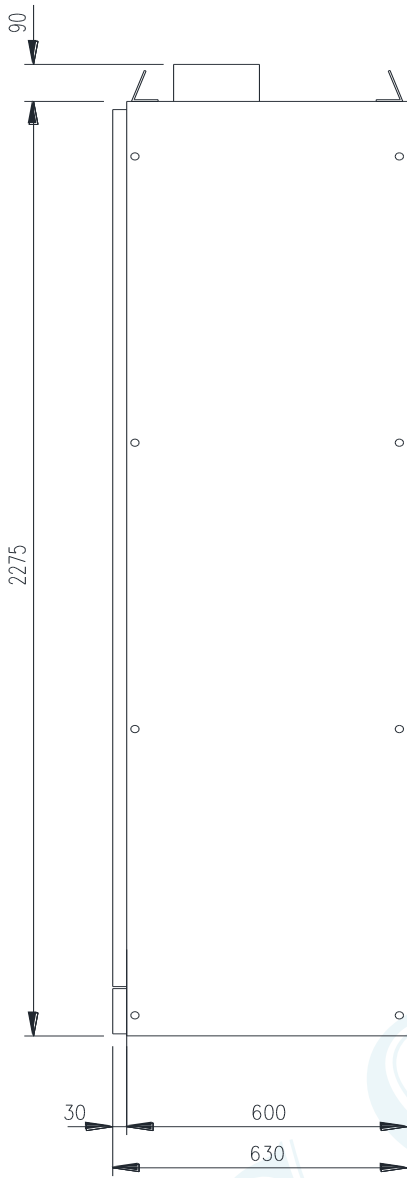
Depth (mm)	Width (mm)					
	600	800	900	1200	1400	
1035	A	215	430	530	660	860
350	B	310	600	700	800	1000
	C	180	180	180	180	180
475	B	310	600	700	800	1000
	C	300	300	300	300	300



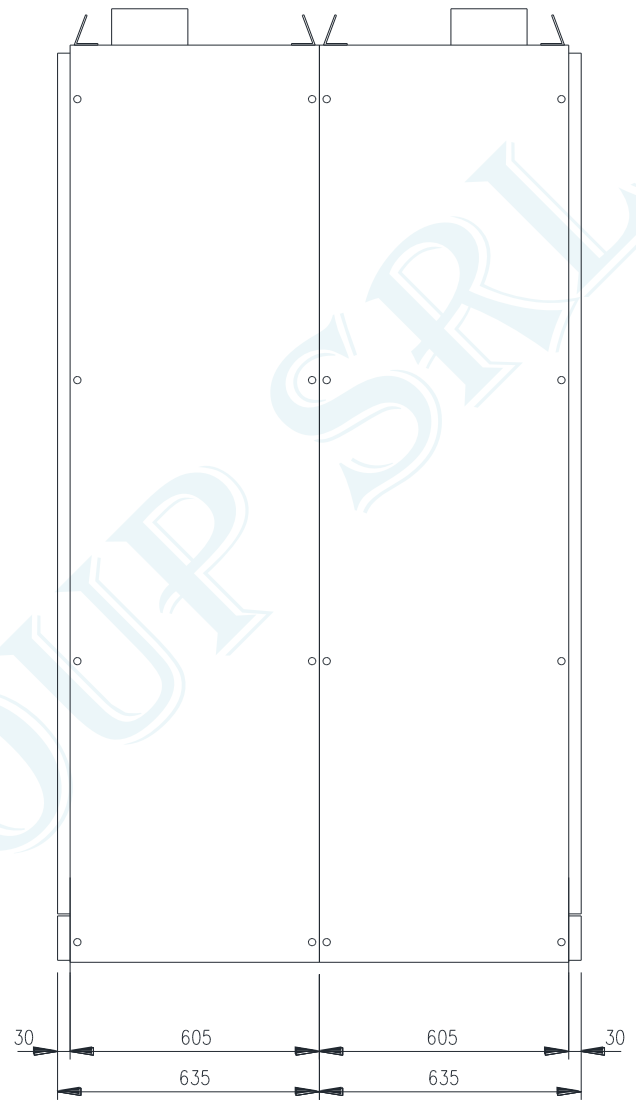
Front



Side simple front

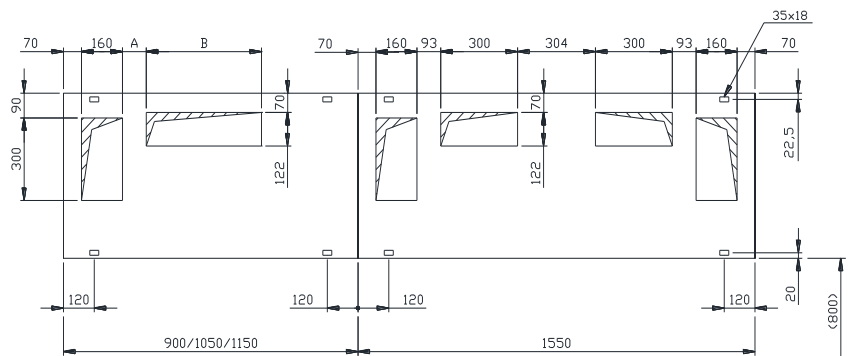


Side back to back

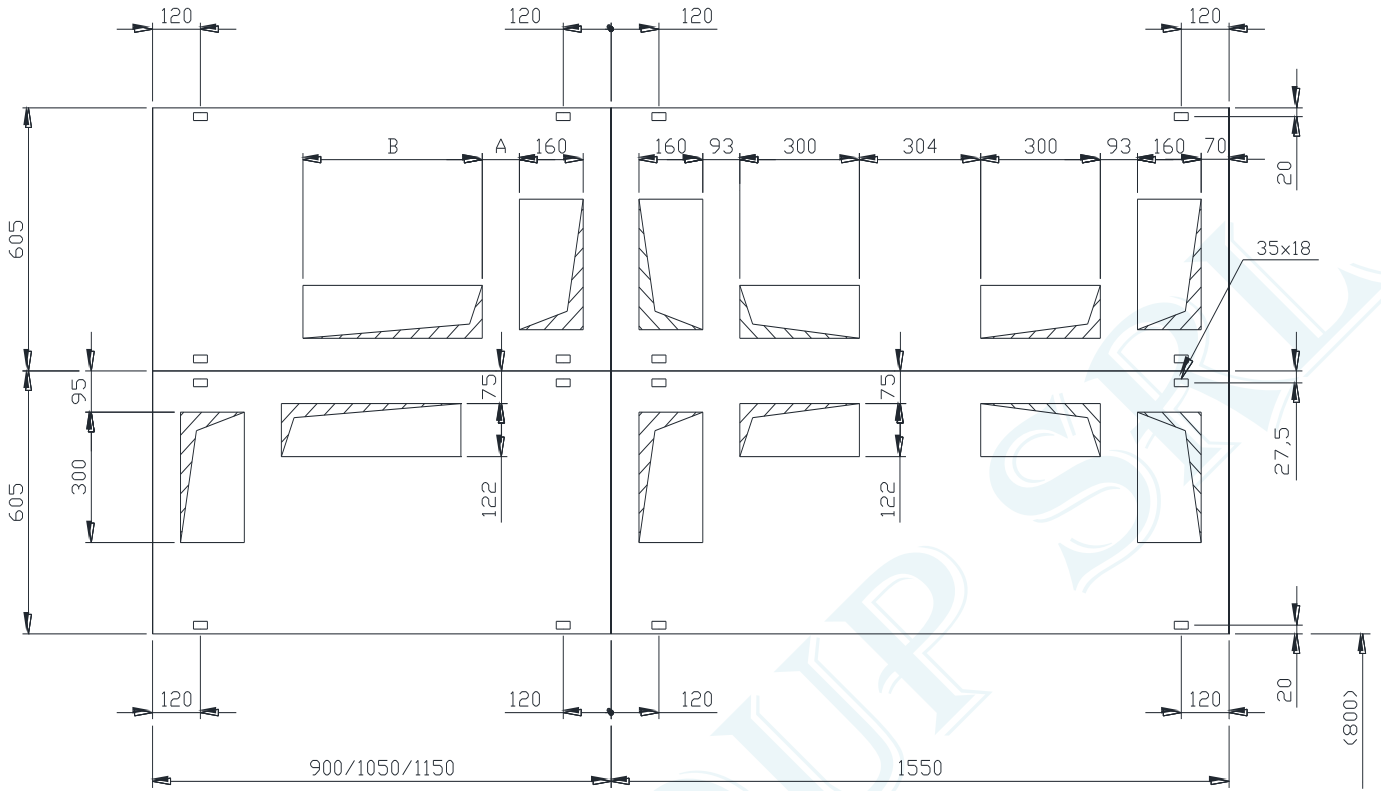


Simple front

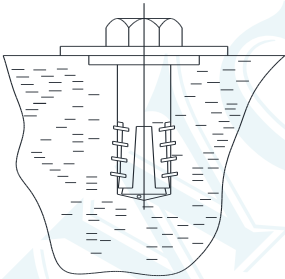
	Width (mm)			
	900	1050	1150	1550
A	93	93	60	-
B	300	450	600	-



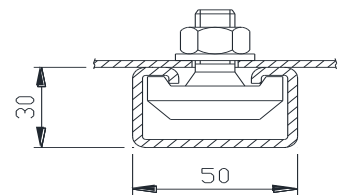
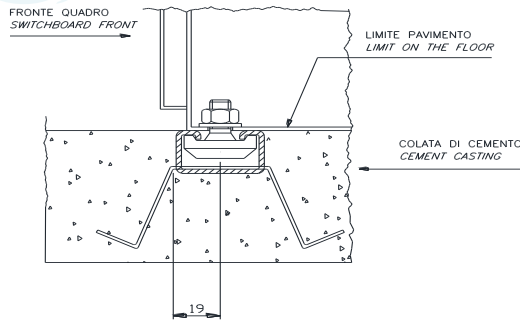
Back to back



Fixing bolts



Base irons



CONTACT US



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