

Introduction of New Flexible Engineering Cabinet

Brief introduction

Sinexcel now has developed a new flexible engineering cabinet, of which the depth is 600mm. This new cabinet could meet the demand of some projects in New Zealand, America, Australia, and other countries, where a 600mm cabinet is needed in the power distribution room.

The dimension of the new cabinet is 800*600*1000(mm), the new cabinet could be installed with AHF or SVG modules, setup with 3 modules in maximum. The detailed information about this cabinet is available in this article, if there are any doubts or questions about it, you could contact Sinexcel directly . .

Drawings and dimensions

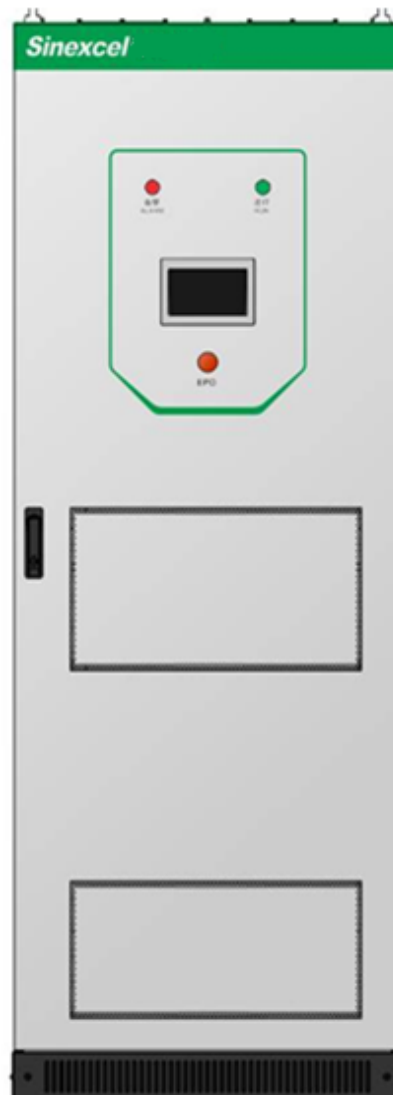


Fig1. Sketch of the new cabinet
the dimensions of the cabinet is 800mm*600mm*2200mm, displayed as the drawing below

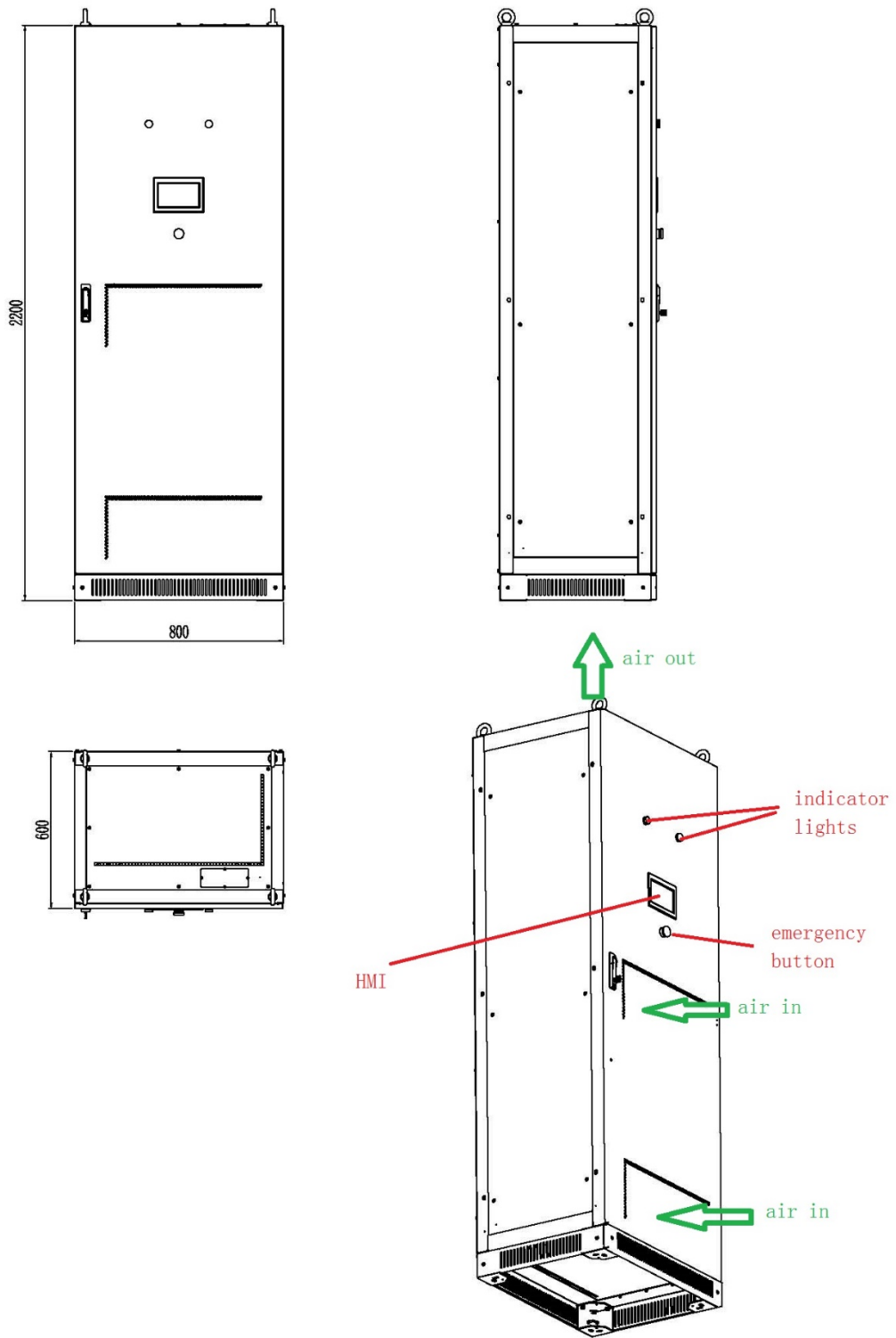


Fig 1. External dimensions of the new cabinet

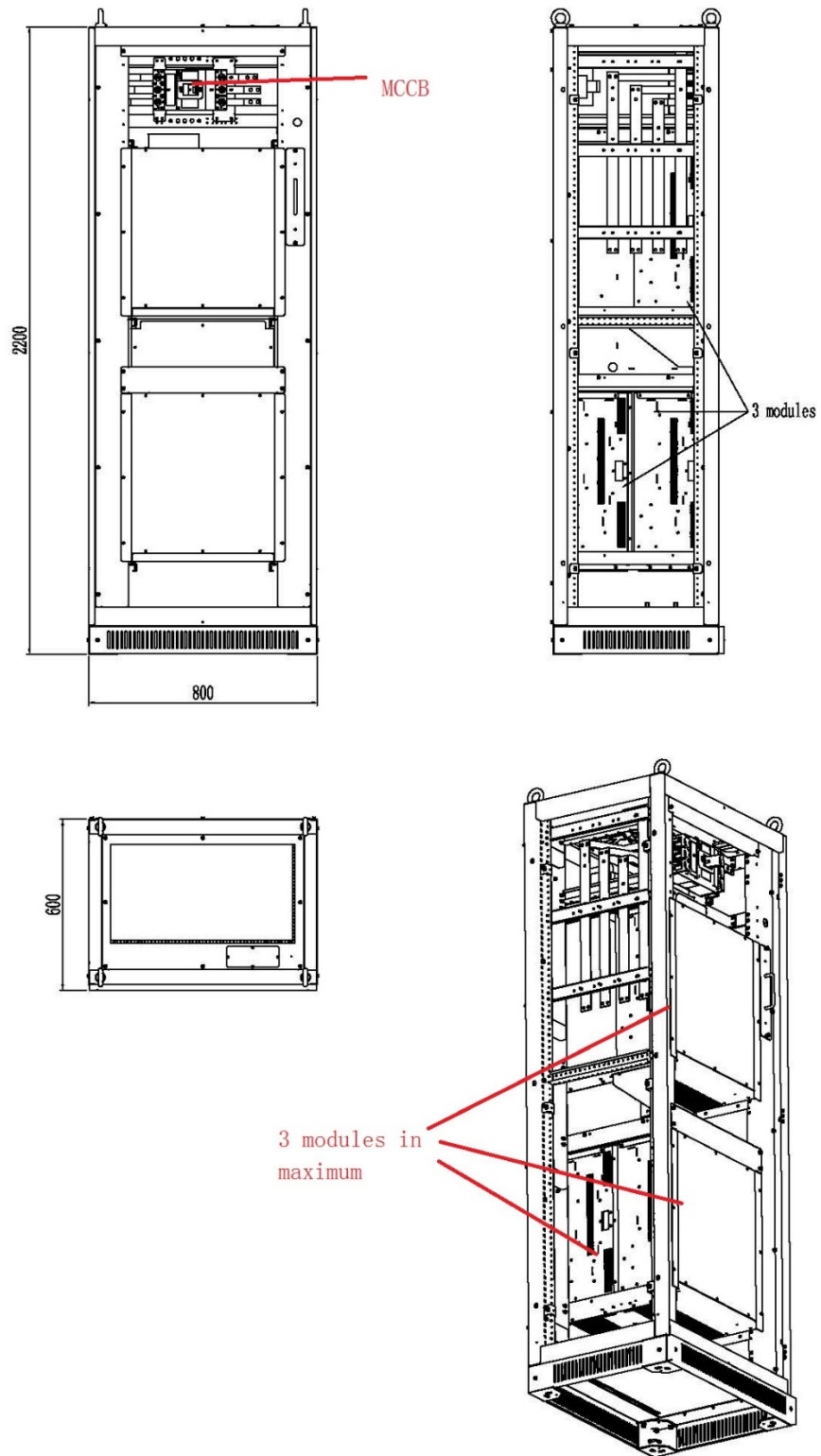


Fig2. Internal structure of the new cabinet

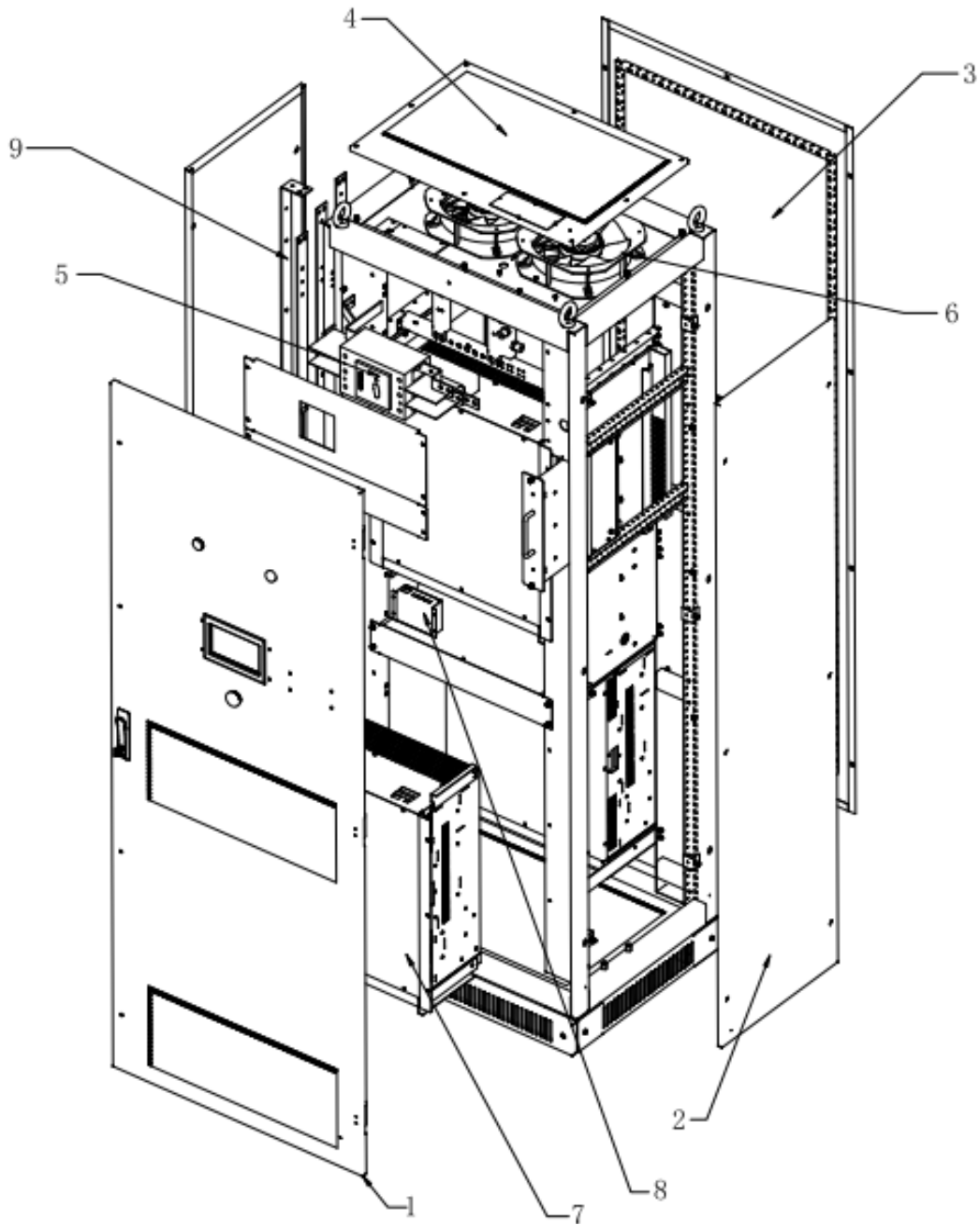


Fig 3. Sketch of the components

Number	Component	Number	Component
1	Front board	2	Side board
3	Rear board	4	Top roof board
5	MCCB	6	Fans
7	Module	8	Dry board socket
9	Inside copper bar	/	/

Key features and benefits

- **Smaller dimension.**
the depth is only 600mm ,suitable in a tiny power distribution room .
- **installed adjoining to the wall.**
the cooling air gets in from the front side and out from the top side , which makes it could be installed close to the wall ,even adjoining to it . 30cm space from the ceiling would be enough for the cabinet because of the efficient ventilation design .
- **Elegant and efficient ventilation.**
the cabinet has a centralized air duct ,which makes the cool air and warm air totally separated , all the warm air would be pumped out directly by the fans , no whirlwind , better cooling performance .
- **Simple front maintenance.**
the maintaining work could be done on the front side of the cabinet ,. a group of special power connecting terminals are used on the right side of cabinet . in the occasion when a module is broken down , a little power line change on the power terminals would cut the broken modules out , not going to affect other modules .
- **Adapt to various AHF/SVG modules**
the available modules are listed in the table below.

Type	400V rack-mounted	480V /690V wall-mounted	Installation quantity
AHF	150A	ALL	1-3
SVG	100kvar	ALL	1-3

- **Power line in front the top side**
The cabinet could only get the power line in from the top side , and the copper bar is not available for now .
- **HMI and monitoring**
The normal Sinexcel 7 inch HMI could be installed on the cabinet, offering a good interface and control for the cabinet.

Technical data and specification

grid parameters	
rated input voltage	400V、480V、690V
rated input frequency	45Hz ~ 62Hz
Circuit topology	3P3W /3P4W
Current transformer	800:5 ~ 10,000:5
Performance indicators	
Potential module quantity	1-3,alternative
Cooling air requirement	Forced cooling , 3000m ³ /h
Air duct	in from the front side,out from the top side
Communication and monitoring capabilities	

Communication ports	RS485、 Ethernet
Communication protocols	Modbus、 TCP/IP
Protection functions	Over-voltage protection ,under-voltage protection, short-circuit protection ,etc.
Fault alarms	Available ,500 recorder in maximum
Monitoring	7 inch HMI
Mechanical properties	
Dimension	800*600*2200 (w*d*h)
Mounting type	Installed on the ground ,could be adjoined to the wall
Power incoming	Incoming from the top , copper bar is not available
Combination	Could not be combined with other cabinets
Net weight	<350kg
Color	RAL 7035
Environmental requirements	
Attitude	≤1500 m; Between 1500 m to 4000 m, according to GB/T3859.2, the power decreases by 1% for every additional 100 m
Ambient temperature	-10°C~40°C (may derate capacity if ambient temperature exceeds 45°C)
Relative humidity	5% to 95%, non-condensing
Protection class	IP20
Storage temperature	-40°C~70°C