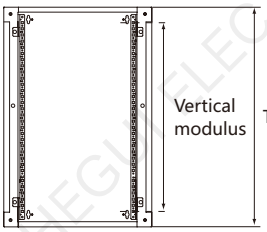
Giantele®

A new generation of Prism E standardized low-voltage distribution electrical equipment



www.giant-electric.com

ZHEJIANG ZHEGUI ELECTRIC CO., LTD.



Product model routine labeling recommendation

Prism E - M / D

- P: solid door
  D: double door
  T: glass door
- M: Open package
  F: dark package
- Product name

Product model complete labeling recommendation

Prism E - M / D / W600 x 1100 x D236

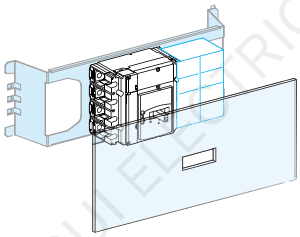
- W*H*D
- P: solid door
  D: double door
  T: glass door
- M: Open package
  F: dark package
- Product name

Note: If Prism E is not marked, the default door is M open installation and P solid door.

Technical parameter										
Electrical characteristic										
Maximum rated current In(A)	Open installation	630A/1000A (1)								
	Concealed installation	160								
Rated insulation voltage Ui (V AC)		800								
Rated operating voltage Ue (V AC)		400								
Rated impulse withstand voltage Uimp (kV)		8								
Frequency fn (Hz)		50 / 60								
Maximum rated short-time withstand current Icw (kA/1s)		50								
Maximum rated peak withstand current Ipk (kA)		105								
Mechanical characteristic										
Cable entry		Top/bottom								
IP level	Open installation	30/31/40/41/54								
	Concealed installation	30/40								
Class I		09 Glass door /10 Solid door								
Size (mm)	module	9	13	17	21	25	29	33	36 (2)	
	Open height	500	700	900	1100	1300	1650	1850	2000 (including base)	
	Surface depth	236 (solid door transparent door) /250 (open door) 306							506	
	Hidden depth	221						NO		
	Breadth	600 (IP 30/31/40/41/54), 600 300 (IP 30/40)							800	
Cabinet door	Solid door IP 30/31/40/41/54	YES								
	Open to the door IP 30/31/40/41	YES						NO		
	Clear door IP 30/31/40/41/54	YES							NO	
Applicable standard										
Design verification criteria		GB / T 7251.1 GB / T 7251.2; IEC61439.1 IEC61439.2								
IP standard		IEC60529								
Empty tank standard		GB/T 20641								
Environmental condition										
operation		indoor								
Highest altitude (m)		2000								
Average ambient temperature (℃)		35								
Pollution level		3								
Other										
Cabinet material		Cold-rolled steel plate								
Shell spraying		Electrostatic spraying epoxy resin powder								
Colour		RAL7035								

(1) For the application of the 1000A solution, contact the authorized service support team or the low-voltage equipment Marketing Department.
(2) Open-mounted cabinet height 2000mm (36 mold) is only applicable to 630A~1000A solution.

Functional unit



The functional unit is defined in the GB/T 7251.1 standard as follows:
"It is part of a complete set of equipment and consists of all electrical and mechanical parts with exactly the same function, including switching appliances." Each component is part of the distribution cabinet and includes:

- Special mounting plate for equipment installation.
- Prevent direct contact with live parts on the front panel.
- Device connectivity or power distribution solutions.

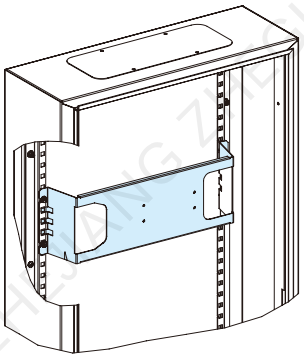
The functional units are modular and optimized, arranged vertically in the cabinet.

The system includes all the components needed for functional unit installation, power supply and field connection.

The components of the functional unit are designed and tested according to the characteristics of the components.

The design of functional unit ensures the reliability of equipment operation and the safety of personnel.

Mounting plate



Components are mounted on mounting plates. The space occupied by the mounting plate matches the size of the device to achieve the optimal space occupancy in the cabinet.

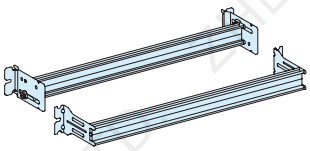
Various types of mounting plates are available for devices rated at 630A/1000A and below:

- Compact NS.
- Compact NSX.
- Easypact CS.
- Modular element.
- Automatic switching switchgear 32A to 630A.

The mounting plate is fixed to the column of the housing by specially designed square clamp nuts and screws and can be mounted directly from the front of the cabinet to ensure electrical continuity between exposed conductive parts.

The mounting plate has grooves for taut cables and auxiliary connections.

Modular guide



Modular guide rails are symmetrical and made of high-strength aluminum alloy.

The guide rail is fixed to the column of the housing by specially designed square clamp nuts and screws to ensure electrical continuity of the exposed conductive parts.

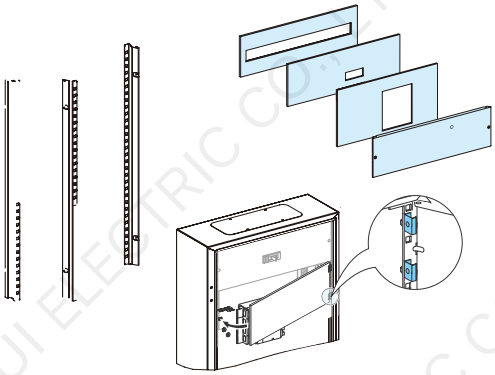
The end of the bracket extends beyond the edge of the rail and can be used to assist in securing modular components.

Different types of guides:

- Fixed modular guide rail.
- Adjustable modular guide rail.

The guide can be fitted with components, modular power distribution modules, contactors, transformers, various auxiliary equipment and terminals, and all cable routing accessories such as cable ties and trough supports, and ground neutral bus supports.

Front panel and reserved space



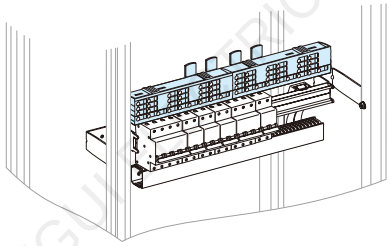
For added safety, these front panels allow the operator only access to the control and setup parts of the element, which ensures that IPxxB protection is achieved.
Each device comes with its own front panel with matching openings.
The solid front panel covers the reserved area.

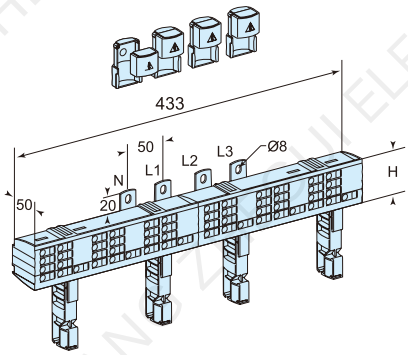
The front panel is fixed to the front panel bracket with specially designed screws to ensure electrical continuity of the exposed conductive parts.

The front panel bracket is fixed to the housing by screws and allows the user to complete the installation and removal of the front panel bracket by removing it.

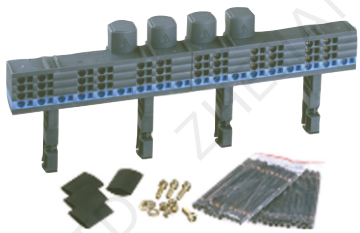
Special hinges enable easy opening of the front panel and improve operation and maintenance efficiency.

200A Multiclip power distribution module





极数	(mm)
2P	24
3P	44
4P	52



Each row of modular components can be fed. This distribution module can be easily installed by simply clipping it onto modular rails above/below each row of components. The power distribution module can be assembled before or after device installation. The 200A Multiclip distribution module provides you with:

Security

- The insulation isolates the incoming terminals.
- Spring terminals provide a perfect and reliable connection.
- Prevent Direct contact (IPxxB).

Flexibility

- Micro circuit breakers can be added and removed at any time.
- It is easy to realize the functions of hot swap and on-line phase modulation of the circuit breaker.

Conveniences

Compatible with all types of miniature circuit breakers, all models of modular components can be mixed
The installation can be used with different pole number of micro circuit breakers.

Electrical characteristics

- Rated operating current In 200A.
- Rated insulation class Ui 750.
- Pulse withstand voltage Uimp 8.
- Short-circuit withstand current: does not affect circuit breaker cascades.

Apply

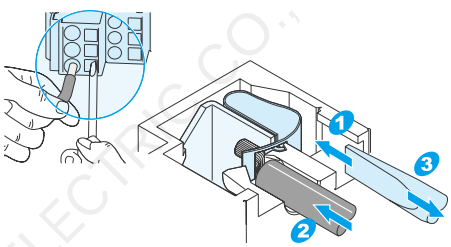
- Upstream power supply Connects a 50mm² cable with wiring terminals or a 20 x 3mm soft busbar.
- The downstream load is connected to a 10mm² wire up to Imax 50A.
- Each phase has 12 connection points and the neutral line has 18 connection points.

Package

- 2 packages of 100mm pre-stripped 10mm2 wires.
- Inlet terminal screws, terminal covers and heat shrink tubes.

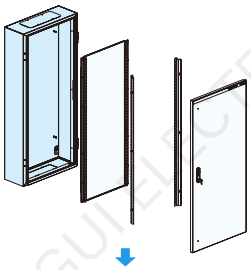
Standard
The product conforms to GB14048.7/IEC60947-7.

Spring terminal

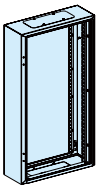


- The outgoing circuit is connected from the front to the spring terminal.
- The contact pressure is automatically adjusted according to the size of the wire and is not affected by the operator. The contacts are not affected by vibration and temperature changes.

Open mounted IP30/40



Open installation IP30 container



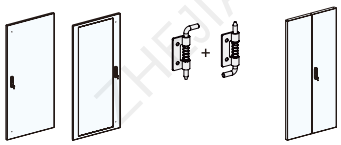
\+

Integrated mounting plate (5)
Front Panel support (1)



\+

Flat or clear doors or double doors (2)



\+ Sealing strip



Open installation IP40

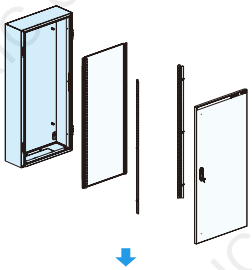
Open installation IP41

\+

Door locks and trademarks or lock plates



Open mounted IP31/41



Open installation IP31 container



\+

Integrated mounting plate (5)
Front Panel support (1)

\+

Flat or clear doors or double doors (2)

\+ Sealing strip

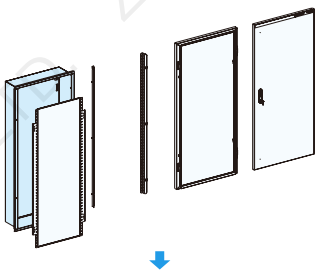
Open installation IP40

Open installation IP41

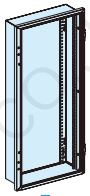
\+

Door locks and trademarks or lock plates

Concealed IP30/40

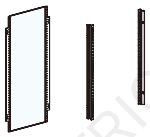


Concealed IP30 container



\+

Integrated mounting plate
Front Panel support (1)



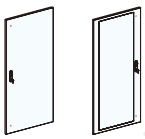
\+

Hide the door frame



\+

Flat or clear doors



Sealing strip

\+



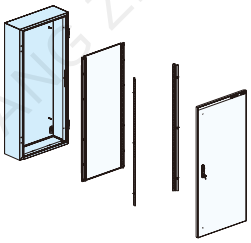
Concealed IP40

\+

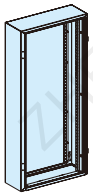
Locks and logos



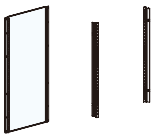
Open mounted IP54



Open installation IP54 container



\+



\+

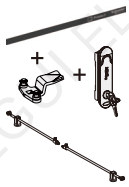


\+ Sealing strip



\+

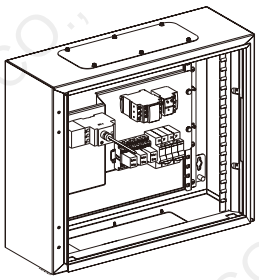
Door locks and trademarks or lock rods (4)

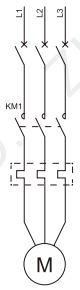


(1) When the front panel scheme is selected, the front panel bracket needs to be selected.
(2) 9 mold to 25 mold has the option of opening the door, the door is divided into left door and right door, non-interchangeable installation
(3) IP30/31/40/41 open installation, 29 mold, 33 mold, 36 mold need to lock rod.
(4) IP54 open installation, 17 mold 36 mold need to lock rod.
(5) 29 mold to 36 mold does not require an integrated mounting plate.

Pump starting control scheme

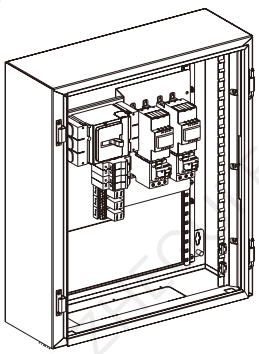
P (W)	In (A) 415	I (A)	Circuit breaker	contactor	Thermal relay	Intermediate relays and microbreaks	Cable specification (mm^2)	module
11	22	70	G 2L22	LC1D32...C	LRD35	3 x RXM4A 2 x C65	2 x 6	9M

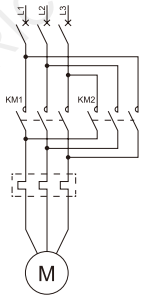




Fan starting control scheme

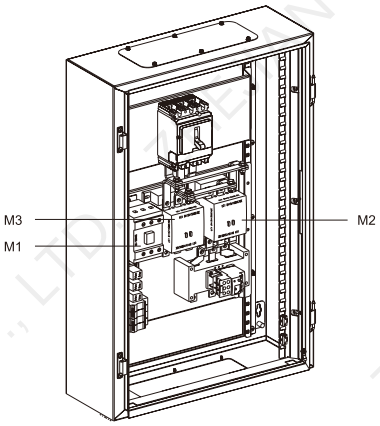
P (W)	In (A) 415	I (A)	Circuit breaker	contactor	Thermal relay	Intermediate relays and microbreaks	Cable specification (mm^2)	module
22	41	100	NSX100	2 x LC1D65A...C	LRD350C	3 x RXM4A 2 x C65	25	13M

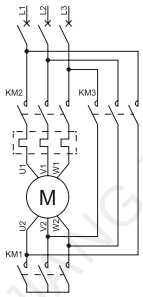




Star triangle start control scheme

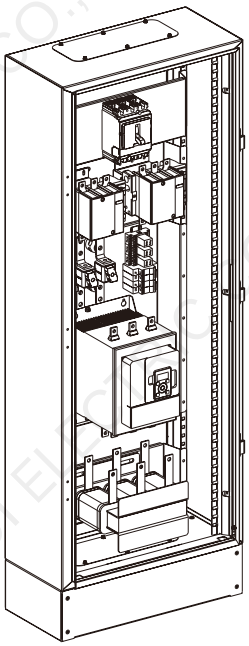
P (W)	In (A) 415	I (A)	Circuit breaker	contactor	Thermal relay	Intermediate relays and microbreaks	Cable specification (mm^2)	module
110	195	100	NSX250	1 x LC1D80 2 x LC1D150	LRD482C	3 x RXM4A 2 x C65	2 x 50	17M

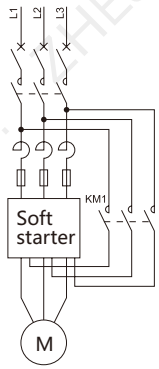




90W soft start solution

power（w）	Electric current (A)	Circuit breaker	contactor	Bypass contactor	Soft starter	Reactor model number	fuse	Fusing current (A)	Cable cross-sectional area (mm)	module
90 (标准负载)	160	NSX250	LC1D205C	LC1D205C	ATS480C17	1L250U100T	DF430400	400	95	29M

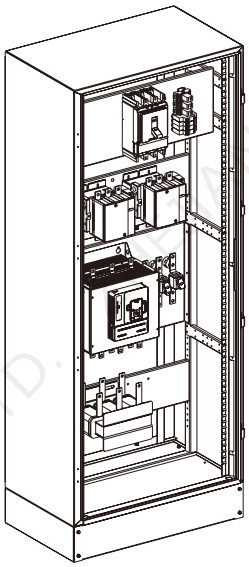


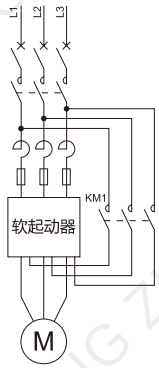


Note: (1) The 90W soft start solution does not provide a front panel.

132W soft start solution

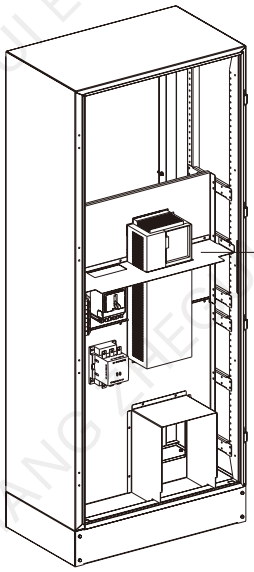
power（w）	Electric current (A)	Circuit breaker	contactor	Bypass contactor	Soft starter	Reactor model number	fuse	Fusing current (A)	Cable cross-sectional area (mm)	module
132 (重载)	230	NSX400	LC1D300C	LC1D300C	ATS480C25	1L250U100T	DF431700	700	185	36M

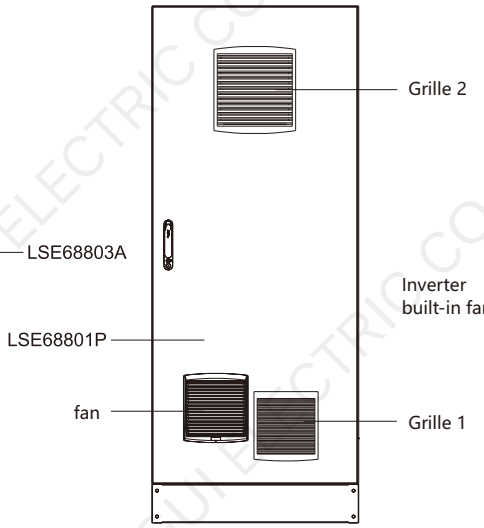


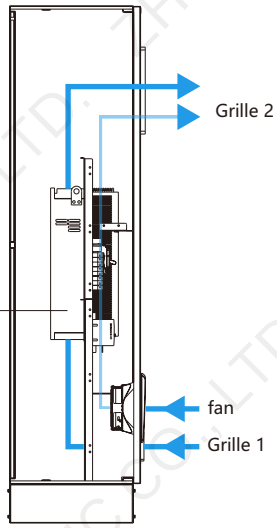


45 W frequency conversion control scheme

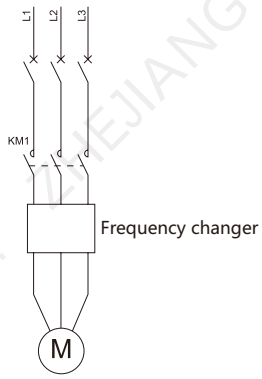
power (w)	Electric current (A)	Circuit breaker	contactor	Inverter type	Cable cross-sectional area (mm)	fan	Grille 1	Grille 2	module
45	80	NSX100	LC1D115	AT 930D45N4	35	NS C F300M	NS CAG223LPF	NS CAG291LPF	36M







Air duct diagram

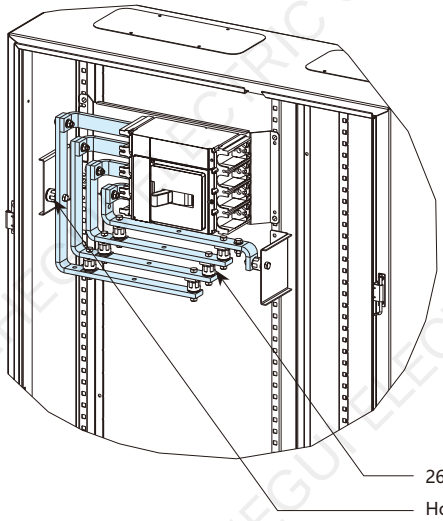


power (w)	Model number	Opening size	Ventilation quantity	Filtration efficiency
fan	NS C F300M	223x223	231m^3/h (136CFM)	/
Grille	NS CAG223LPF	291x291	/	88
	NS CAG291LPF	291x291	/	88

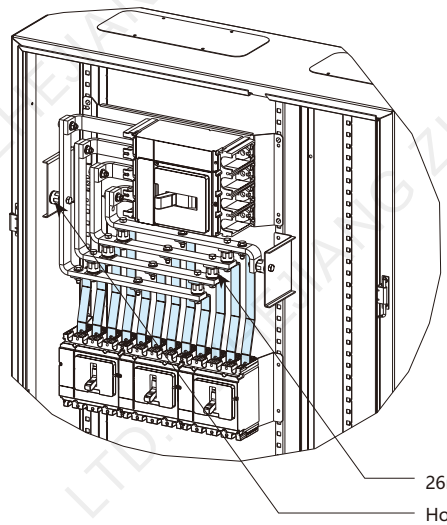
Note: (1) The 45W variable frequency control scheme does not provide a front panel.
(2) For specific assembly information, please refer to assembly drawing PME2012202.

ZHEJIANG ZHEGUI ELECTRIC CO., LTD.

Solution for horizontal copper bars below 630A

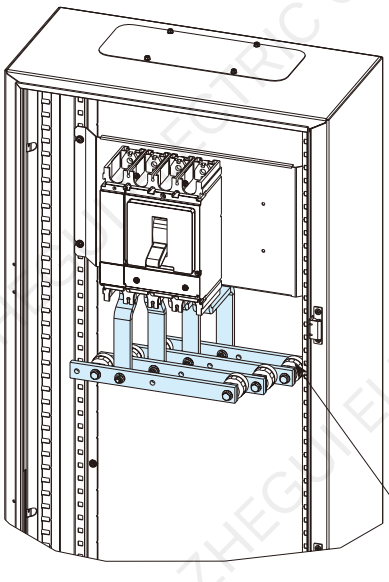


The incoming cables are lined horizontally	
Incoming switch	Vertical row size (mm)
NSX/C S630	30 x 10
NSX/C S400	30 x 6

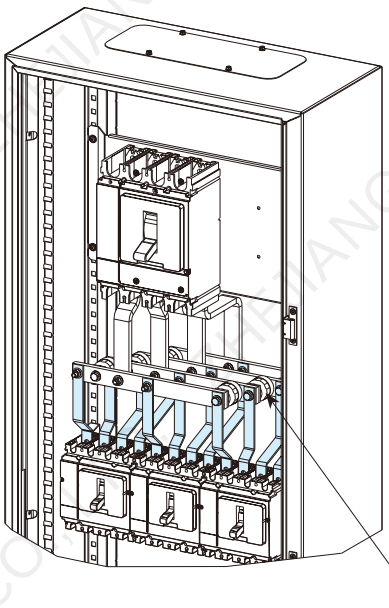


Vertical rows of incoming wires			
Incoming switch	Rigid copper bar specifications (mm)	Soft copper bar Specifications (mm)	Cable size (mm2)
NSX100	20 x 3	20 x 3	35
NSX160	20 x 3	20 x 3	95
NSX250	20 x 3	20 x 3	120
NSX 100m	15 x 5	15 x 5	50
NSX 160m	15 x 5	15 x 5	95

Solution for horizontal copper bars below 630A

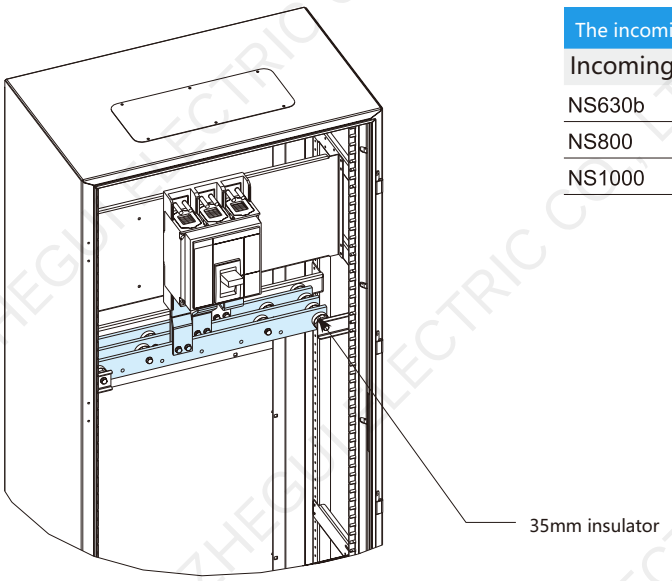


The incoming cables are lined horizontally	
Incoming switch	Vertical row size (mm)
NSX/C S630	30 x 10
NSX/C S400	30 x 6

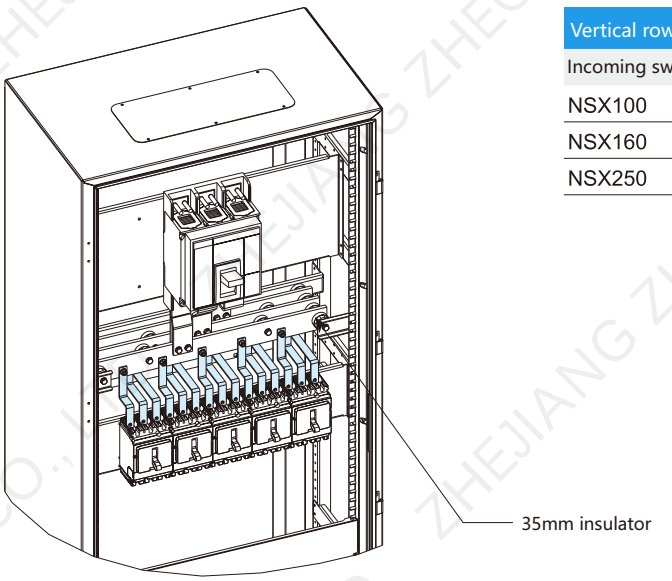


Vertical rows of incoming wires			
Incoming switch	Rigid copper bar specifications (mm)	Soft copper bar Specifications (mm)	Cable size (mm2)
NSX100	20 x 3	20 x 3	35
NSX160	20 x 3	20 x 3	95
NSX250	20 x 3	20 x 3	120
NSX 100m	15 x 5	15 x 5	50
NSX 160m	15 x 5	15 x 5	95

630A1000A Copper bar solution

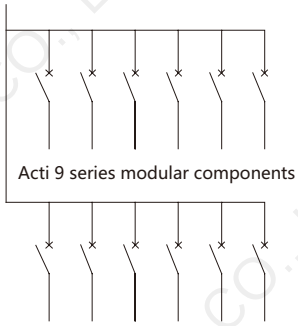
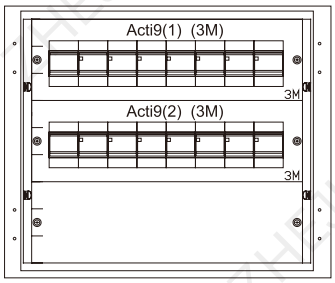


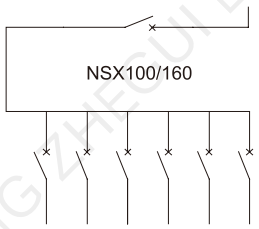
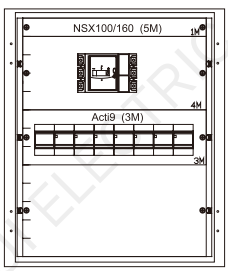
The incoming cables are lined horizontally	
Incoming switch	Vertical row size (mm)
NS630b	50 x 6
NS800	50 x 10
NS1000	2b x 50 x 6



Vertical rows of incoming wires			
Incoming switch	Rigid copper bar specifications (mm)	Soft copper bar Specifications (mm)	Cable size (mm2)
NSX100	20 x 3	20 x 3	35
NSX160	20 x 3	20 x 3	95
NSX250	20 x 3	20 x 3	120

630A1000A Copper bar solution

Scheme number	1	
Model number	Prism E 9M	
legend	Single line diagram	Cabinet layout
General lighting distribution box		
Main element	Surge protectors, measuring components, control components and other modular components Acti 9 series circuit breakers, isolating switches, rail sockets	3M below 40A", 4M above 40A
LxWxD(mm)	500 x 600 x 236	
Remark	The modular elements have an effective mounting width of 48 x 9mm per row	

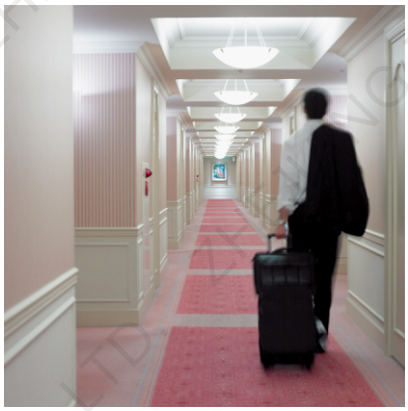
Scheme number	2	
Model number	Prism E 13M	
legend	Single line diagram	Cabinet layout
General lighting distribution box		
Main element	NSX100/160	5M
	Surge protectors, measuring components, control components and other modular components Acti 9 series circuit breakers, isolating switches, rail sockets	3M below 40A", 4M above 40A
LxWxD(mm)	700 x 600 x 236	
Remark	The modular elements have an effective mounting width of 48 x 9mm per row	

ZHEJIANG ZHEGUI ELECTRIC CO., LTD.

Improve equipment reliability





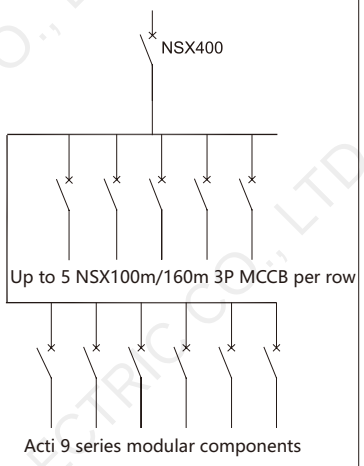
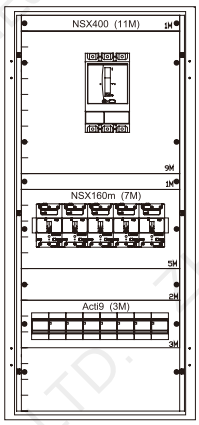




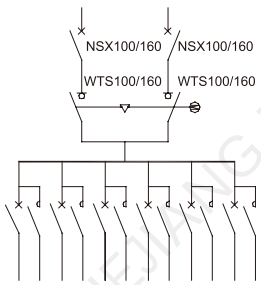
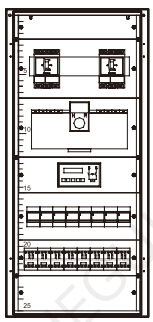


Prism E is combined with Zhegui Electric components to form a complete distribution system solution that fully utilizes component functions to meet customers' needs for safety, reliability, durability and aesthetics. Zhegui understands the needs and differences of customers and industries, and fully considers the interests of customers, and tailor-made distribution power system solutions for relevant industries, widely used in industrial, infrastructure, public and commercial buildings and many other fields.

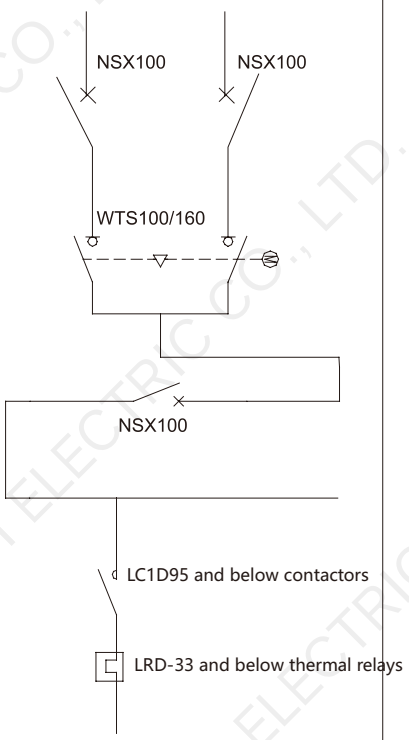
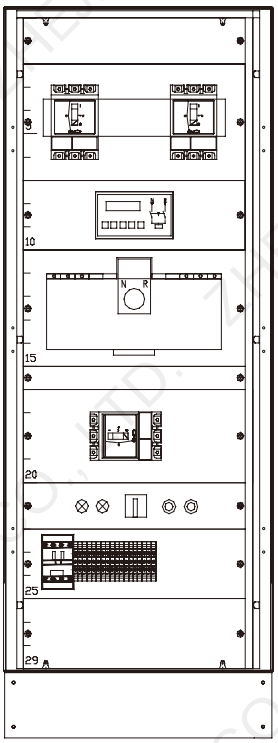
Air conditioning power distribution box

Scheme number	3	
Model number	Prism E 25M	
legend	Single line diagram	Cabinet layout
General lighting distribution box		
Main element	NSX400	11M
	NSXm	7M
	Acti 9 series circuit breaker, isolation switch, guide socket, surge protector, measuring element, control element and other modular components.	3M below 40A", 4M above 40A
LxWxD(mm)	1300 x 600 x 236	
Remark	The modular elements have an effective mounting width of 48 x 9mm per row. Up to five 3P or four 4P NSX100m/160m circuit breakers can be installed vertically per row	

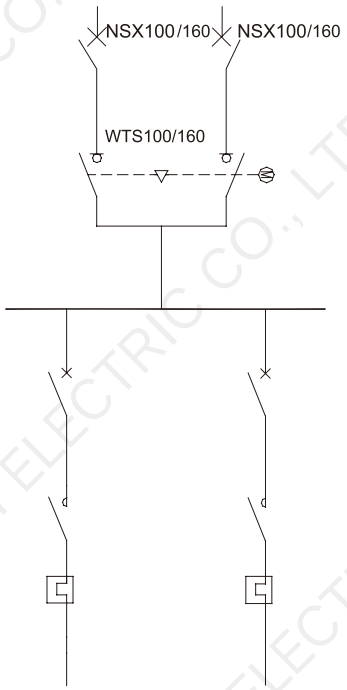
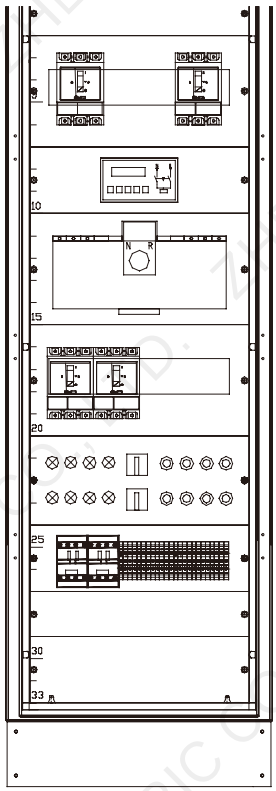
Emergency lighting distribution box

Scheme number	4	
Model number	Prism E 25M	
legend	Single line diagram	Cabinet layout
General lighting distribution box		
Main element	NSX100/160	7M
	WTS32/63/100/160 Tape controller	8M
	Acti 9 series circuit breaker, isolation switch, guide socket, surge protector, measuring element, control element and other modular components	3M below 40A", 4M above 40A
	Contactors LC1D38 and below, CT series modular contactors	3M
LxWxD(mm)	1300 x 600 x 236	
Remark	The modular elements have an effective mounting width of 48 x 9mm per row. Up to 8 contactors below LC1D38 per row; If CT modular contactor is selected, the vertical height modulus is 3M	

Air conditioning power distribution box

Scheme number	5	
Model number	Prism E 29M	
legend	Single line diagram	Cabinet layout
General lighting distribution box		
Main element	The NSX100/160 is installed vertically	7M
	WTS100/160 with controller	8M
	The NSX100 is installed horizontally	5M
	Indicator light, button, switch, etc	2M
	LC1D95 and below contactors, thermal relays	LC1D38 is below 3M, LC1D95 is below 4M
LxWxD(mm)	1650 x 600 x 306	
Remark	For smoke exhaust (positive pressure air supply) fan, maximum motor power 37W. Instrument, indicator light, button, transfer switch, etc. According to the actual size and quantity, determine its required space	

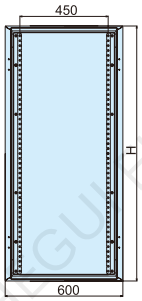
Emergency power distribution box (pump)

Scheme number	6	
Model number	Prism E 33M	
legend	Single line diagram	Cabinet layout
General lighting distribution box	 Up to 4 NSX100 3P MCCB LC1D95 and below contactors LRD-33 and below thermal relays per row	
Main element	The NSX100/160 is installed vertically	7M
	WTS100/160 with controller	8M
	Indicator light, button, switch, etc	7M (5M)
	LC1D95 and below contactors, thermal relays	LC1D38 is below 3M, LC1D95 is below 4M
LxWxD(mm)	1850 x 600 x 306	
Remark	For fire pump one full pressure starting, the maximum motor power 37 W. Instruments, indicators, buttons, transfer switches, etc. according to the actual size and quantity, to determine its required space. In this figure, the NSX100 is installed vertically with the indicator light, and the button uses 2M space	

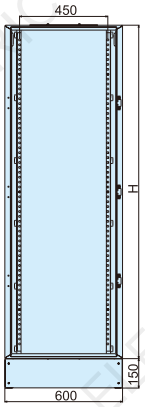
IP30/31/40/41 W600 open-mounted cabinet dimensions

Prism E cabinet

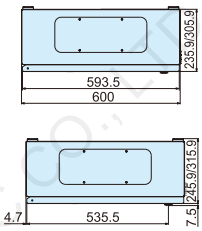
925 module



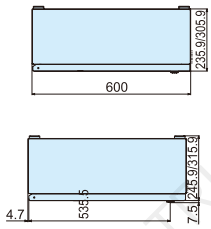
29 33 module



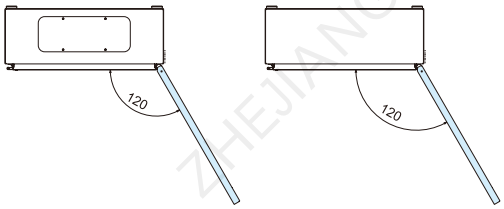
IP30/40



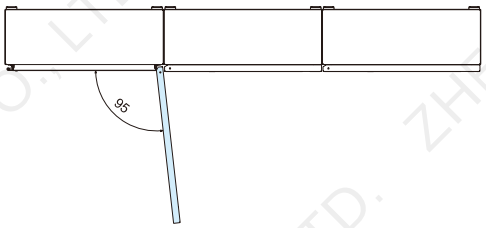
IP31/41



Opening Angle



120° Note: The maximum opening Angle is 120°

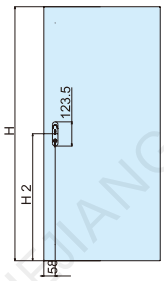


Note: The maximum opening Angle is 95 degrees when combining cabinets.

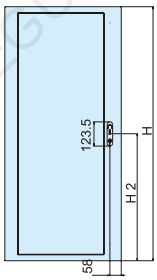
module	9	13	17	21	25	29	33
	500	700	900	1100	1300	1500	1700
	495	695	895	1095	1295	1495	1695

The door

Solid door

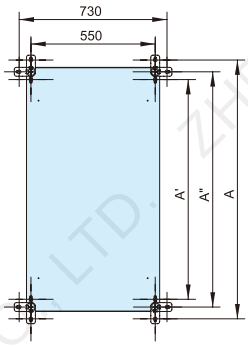


Glass door

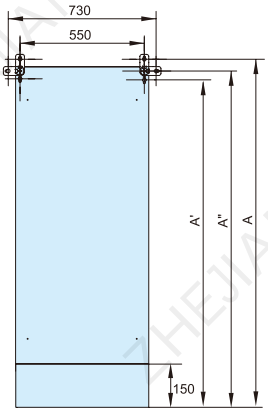


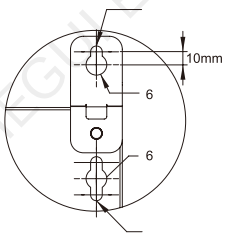
Wall mounting

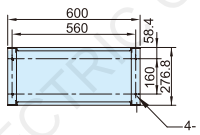
925 module



29 33 module



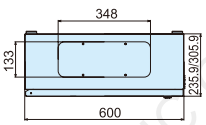




module	9	13	17	21	25	29	33
A	577	777	977	1177	1377	1690	1890
A	327	527	727	927	1127	1565	1765
A	397	597	797	997	1197	1600	1800

Note: (1) The size is the size of the cabinet base installed on the ground or the base, which can be installed with M8 bolts.

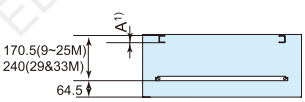
Top cable access



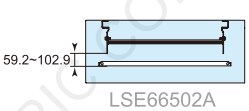
Note: 235.9 corresponds to 925M cabinets and 305.9 corresponds to 2933M cabinets.

Depth of rear front panel

Upright



Adjustable component guide



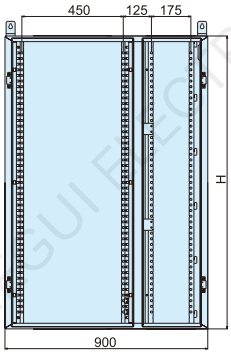
LSE66502A

Note: (1) A 26(925M) ， 95.5(29M 33M) 。

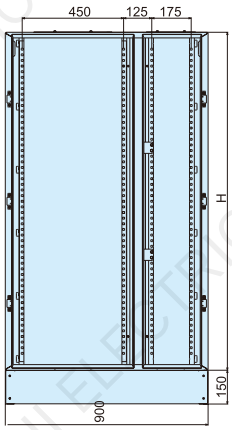
Note: Dimensions indicated on this page are theoretical design dimensions

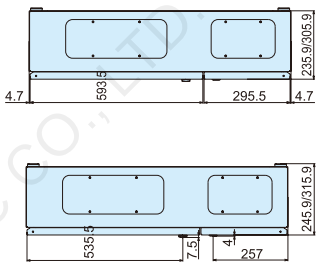
Prism E cabinet

925 module

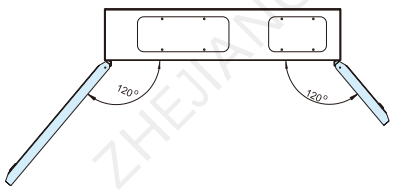


29 33 module





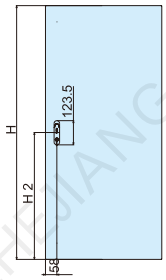
Opening Angle



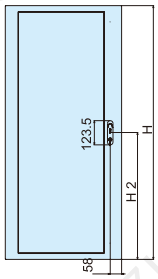
Note: The maximum opening Angle is 120°

The door

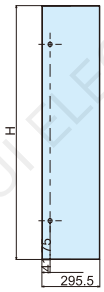
Solid door



Glass door



300 side door

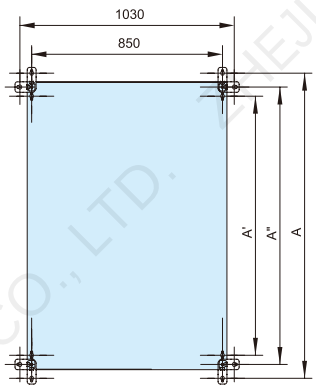


module	9	13	17	21	25	29	33
	500	700	900	1100	1300	1500	1700
	495	695	895	1095	1295	1495	1695

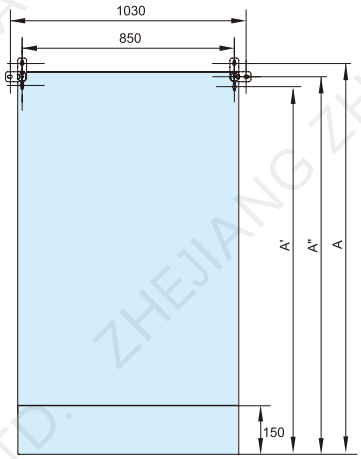
Note: (1) 300 side door round lock, 1733M 2 locks, 913M 1 locks, and by the customer or the factory to choose.

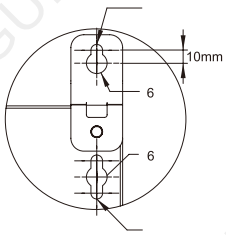
Wall mounting

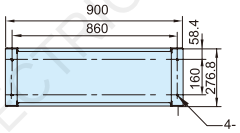
925 module



29 33 module



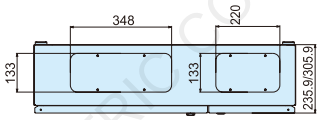




module	9	13	17	21	25	29	33
A	577	777	977	1177	1377	1690	1890
A	327	527	727	927	1127	1565	1765
A	397	597	797	997	1197	1600	

Note: (1) The size is the size of the cabinet base mounted on the ground or the base, which can be M8

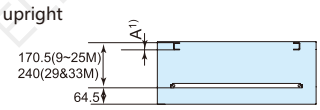
Top cable access



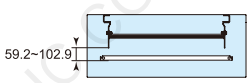
Note: 235.9 corresponds to 925M cabinets and 305.9 corresponds to 2933M cabinets.

Depth of rear front panel

upright



Adjustable component guide



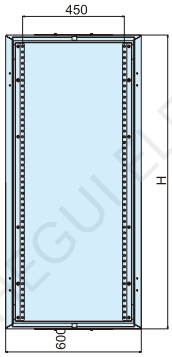
LSE66502A

(1) A 26(925M) ， 95.5(29M 33M) 。

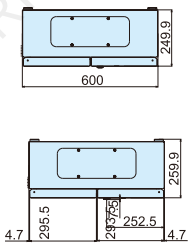
IP30/40/31/41 W600 pair open door cabinet dimensions

Prism E cabinet

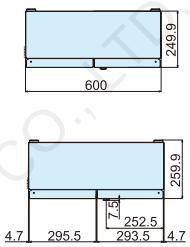
925 module



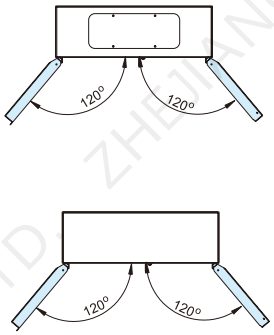
IP30/40



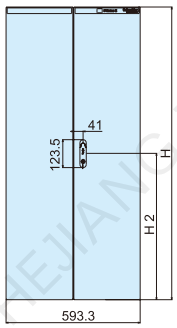
IP31/41



Opening Angle



Double doors

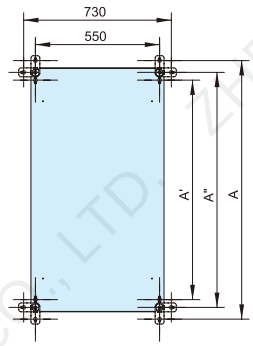


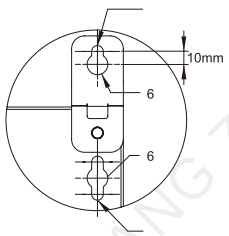
Note: The maximum opening Angle of the two doors is 120 degrees, and 15mm installation space should be reserved on both sides when the cabinet is installed side-by-side.

module	9	13	17	21	25
	500	700	900	1100	1300
	495	695	895	1095	1295

Wall mounting

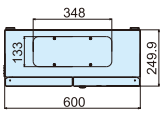
925 module





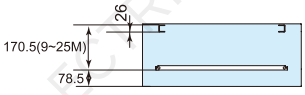
module	9	13	17	21	25
A	577	777	977	1177	1377
A	327	527	727	927	1127
A	397	597	797	997	1197

Top cable access

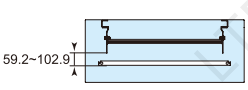


Depth of rear front panel

upright



Adjustable component guide

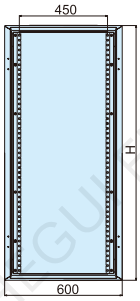


Giantele®

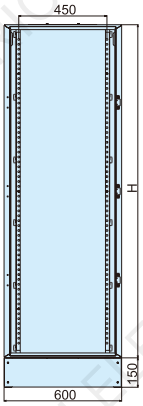
Ip54 W600 open-mounted cabinet size

Prism E cabinet

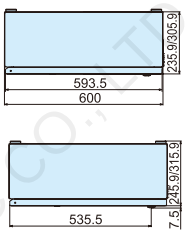
925 module



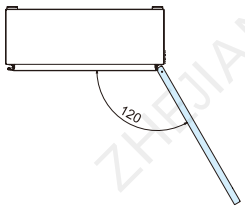
29 33 module



IP54



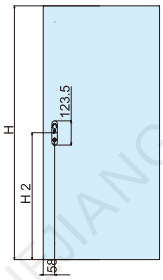
Opening Angle



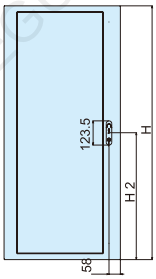
Note: The maximum opening Angle is 120°

The door

Solid door



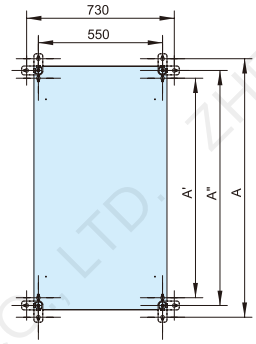
Glass door



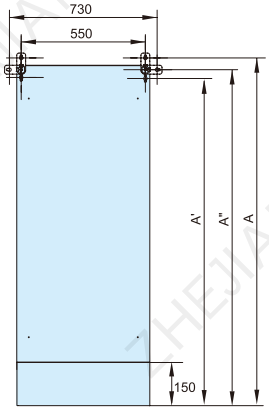
module	9	13	17	21	25	29	33
	500	700	900	1100	1300	1500	1700
	495	695	895	1095	1295	1495	1695

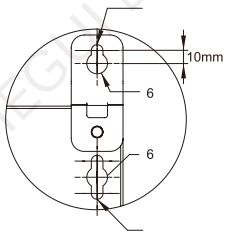
Wall mounting

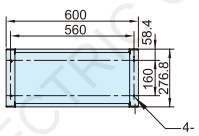
925 module



29 33 module





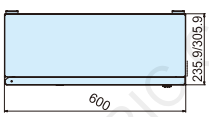


Base mounting Dimensions (1)

module	9	13	17	21	25	29	33
A	577	777	977	1177	1377	1690	1890
A	327	527	727	927	1127	1565	1765
A	397	597	797	997	1197	1600	1800

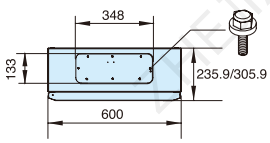
Note: (1) The size is the size of the cabinet base installed on the ground or the base, which can be installed with M8 bolts.

Top cable access





Cable flange



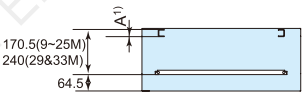
Cable cover (2)

Note: (1) The top wiring needs to be opened by the customer, and then install the cable flange head scheme, and meet IP54.

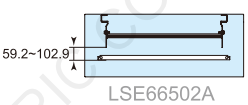
(2) The customer can also use the cable cover plate, and the cable cover plate under the pressure of 18 3mm(LSE66840A) sealing strip, and installed with 8 waterproof bolts with waterproof washers.

Depth of rear front panel

upright



Adjustable component guide



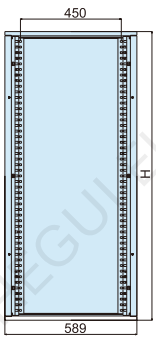
LSE66502A

(1) A 26(925M) ， 95.5(29M 33M) 。

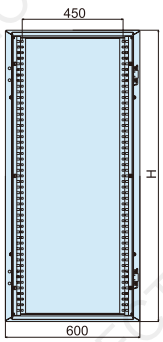
IP30/40 W600 concealed cabinet size

Prism E cabinet

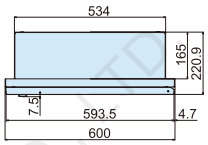
925 module

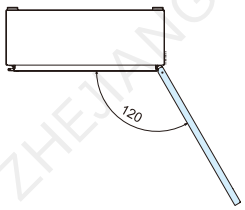


Cabinet size



Including door frame size

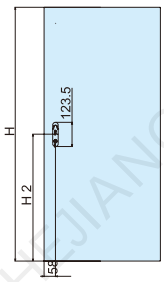




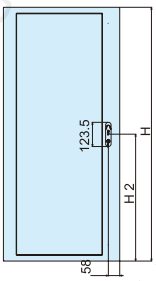
Note: The maximum opening Angle is 120°

The door

Solid door



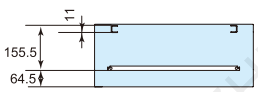
Glass door



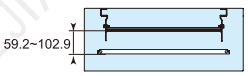
module	9	13	17	21	25
	500	700	900	1100	1300
	495	695	895	1095	1295
	488	688	888	1088	1288

Depth of rear front panel

upright



Adjustable component guide



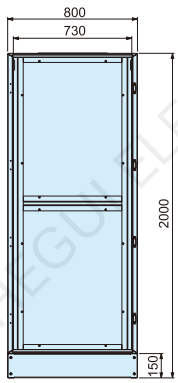
LSE66502A

ZHEJIANG ZHEGUI ELECTRIC CO., LTD.

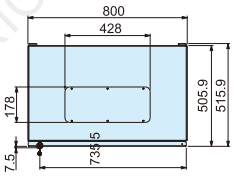
Giantele®

IP30/40 W600 concealed cabinet size

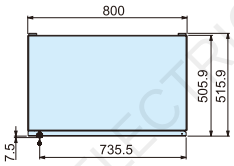
Prism E cabinet



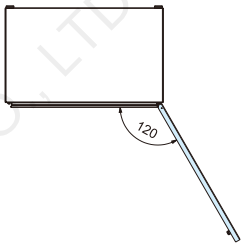
IP30/40



IP31/41/54



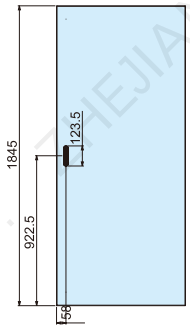
Opening Angle



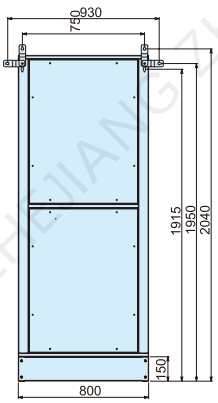
Note: The maximum opening Angle is 120°

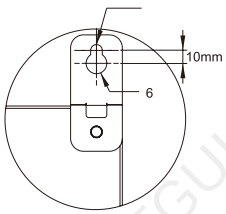
The door

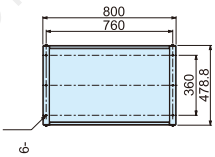
Solid door



Wall mounting



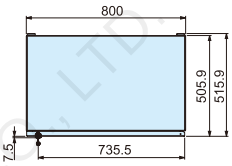




Base mounting Dimensions (1)

Note: (1) The size is the size of the cabinet base installed on the ground or the base, which can be installed with M8 bolts.

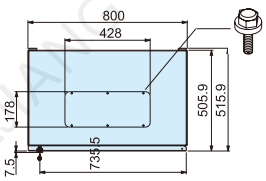
Top cable access



Cable flange head Solution (1)



Ip54 Cable flange head



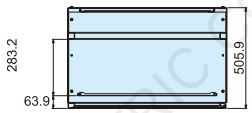
Cable cover (2)

Note: (1) The top wiring needs to be opened by the customer, and then install the cable flange head scheme, and meet IP54.

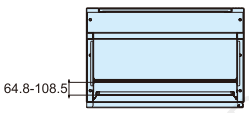
(2) The customer can also use the cable cover plate, and the cable cover plate under the pressure of 18 3mm(LSE66840A) sealing strip, and installed with 6 waterproof bolts with waterproof washers.

Depth of rear front panel

upright



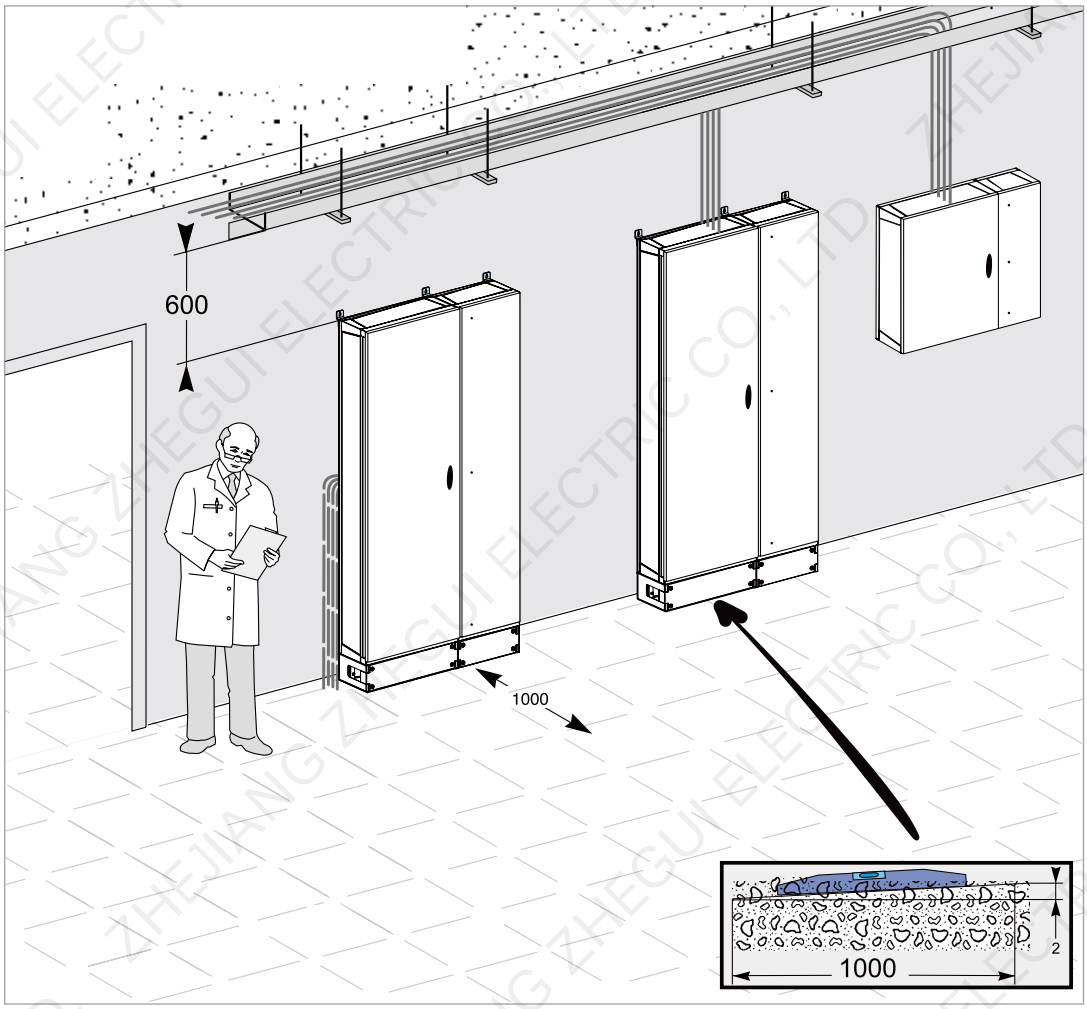
Adjustable component guide



LSE68502A

ZHEJIANG ZHEGUI ELECTRIC CO., LTD.

Site installation diagram



- The installation site must be clean, the ground must be flat, and the inclination must meet the requirements (2mm/m). The wall must be flat and not exceed ±6mm/m.
- There should be at least 1000mm space in front of the switchgear so that the door can be fully opened.
- Install the door according to the direction of the component to be removed.
- There should be at least 500 mm (600 mm recommended) space above the switch cabinet for cable access.



Our goal is the sea of stars!

ZHEJIANG ZHEGUI ELECTRIC CO,. LTD.

Address: No.316 Weishiyi Road , Yueqing City,
Zhejiang Province, China
ProvinceTel: 0577-62657695/626577696
Email address:service@giantele.com
Website: www.giant-electric.com

ZHEJIANG ZHEGUI ELECTRIC CO., LTD.