Mega Link

Quick Installation Guide

Issue: V1.0
Date: 2026-10-14

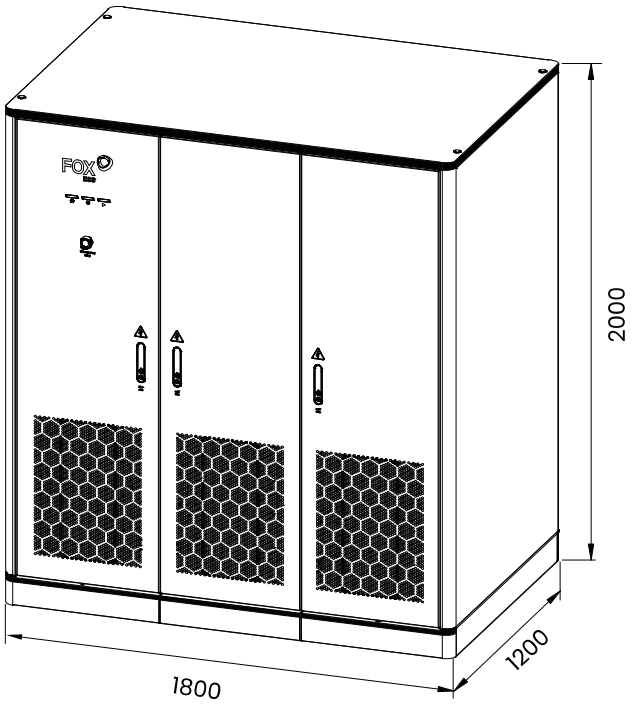
FOXESS CO., LTD.

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2. Only certified electricians are allowed to operate the device. Operation personnel must wear proper personal protective equipment (PPE).
3. Before installing the device, check that the package contents are intact and complete against the packing list. If any damage is found or any component is missing, contact your dealer.
4. The device damage caused by the violation of instructions in this document is not covered under warranty.

1 Introduction

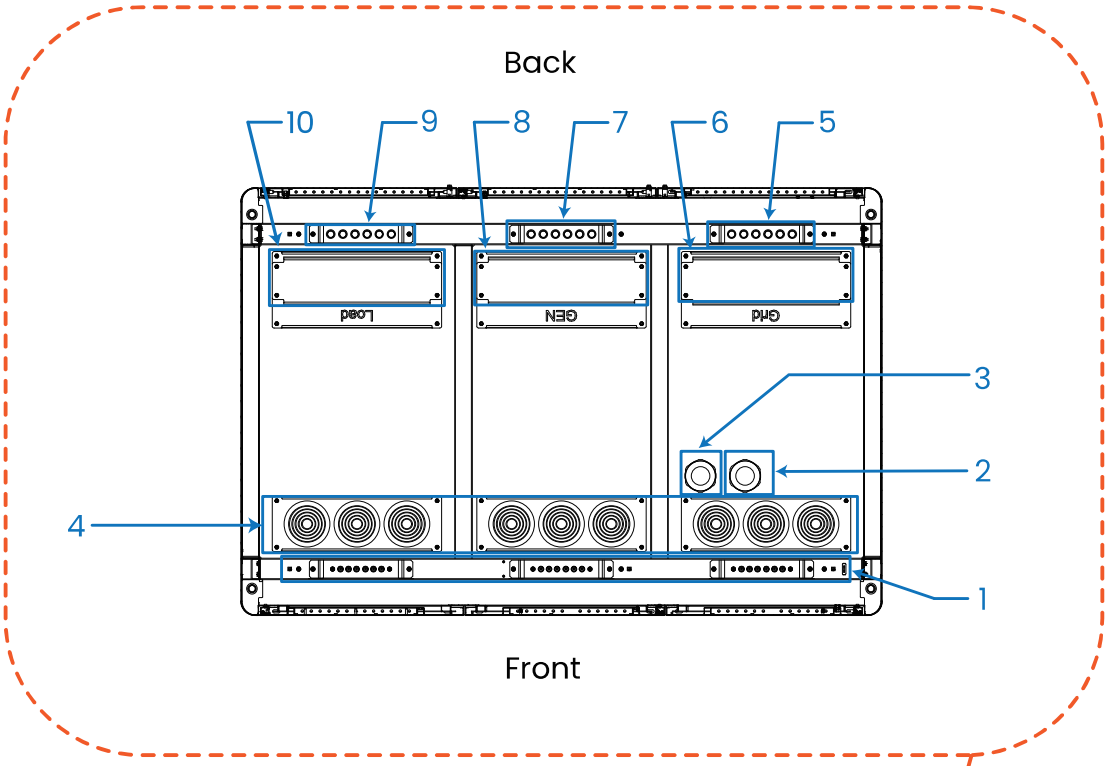
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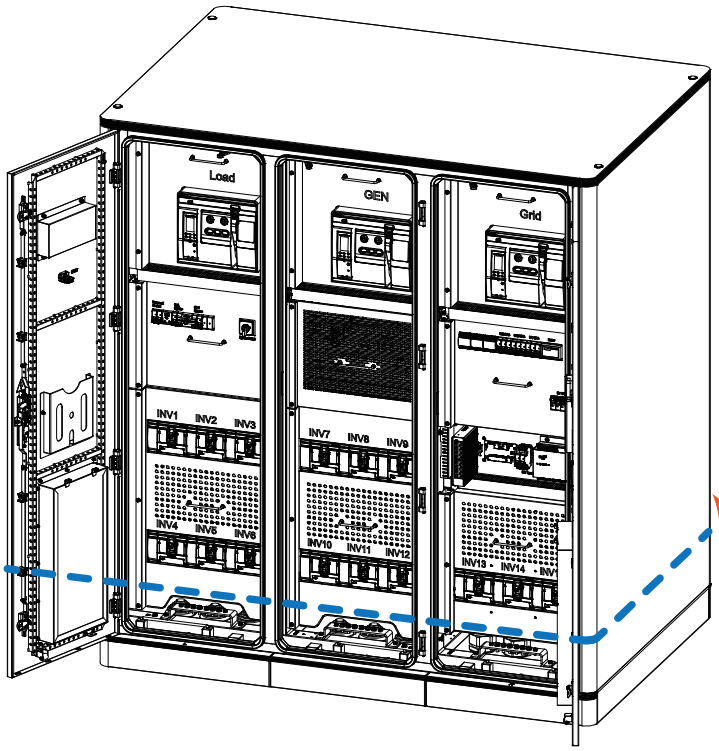


Unit: mm

1.2 Port Description

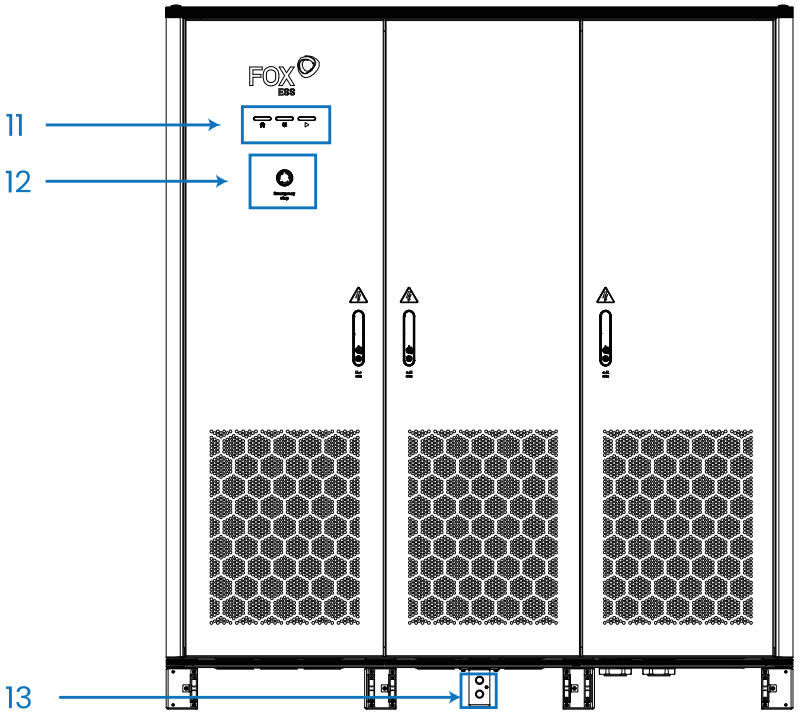
Top View (Cross-Sectional View)





Top View of the Mega Link at This Section

Front View

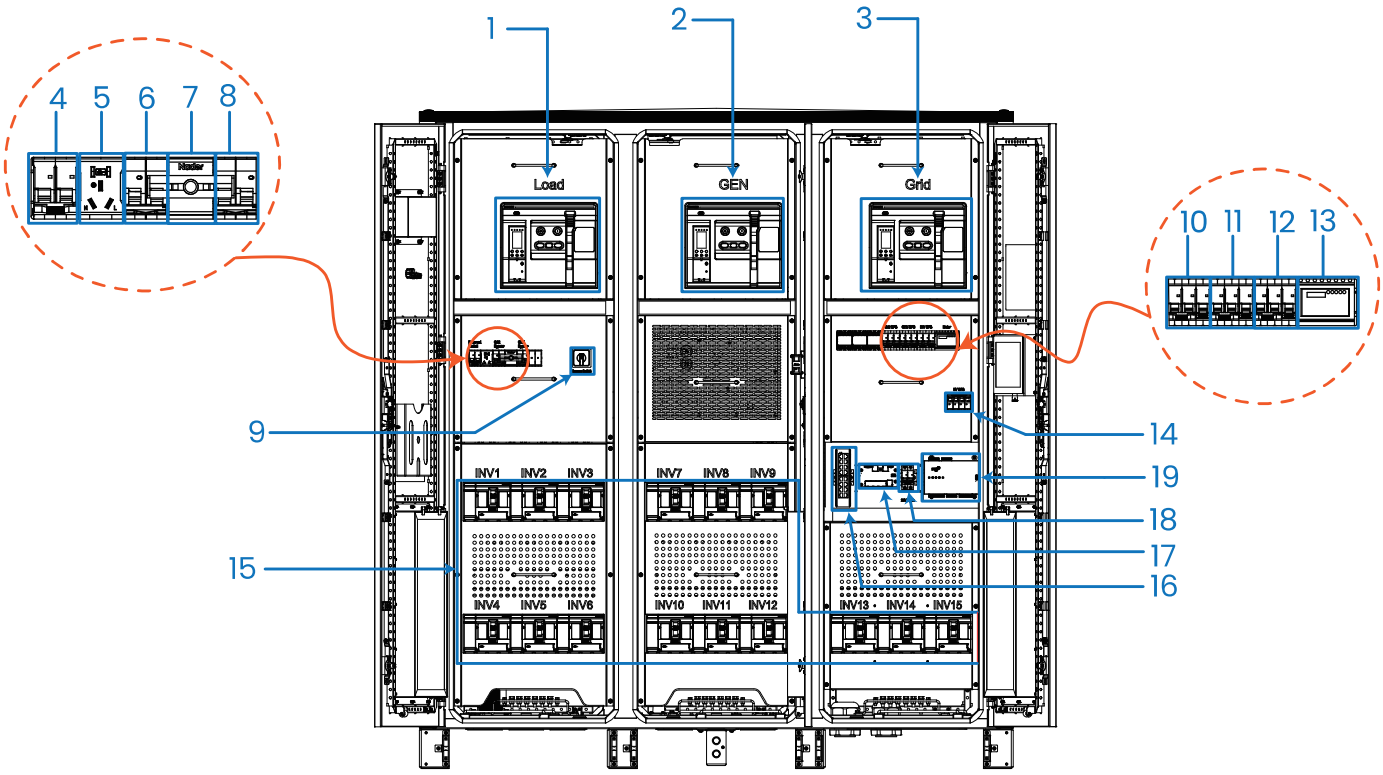


Please refer to table 1.

Table 1

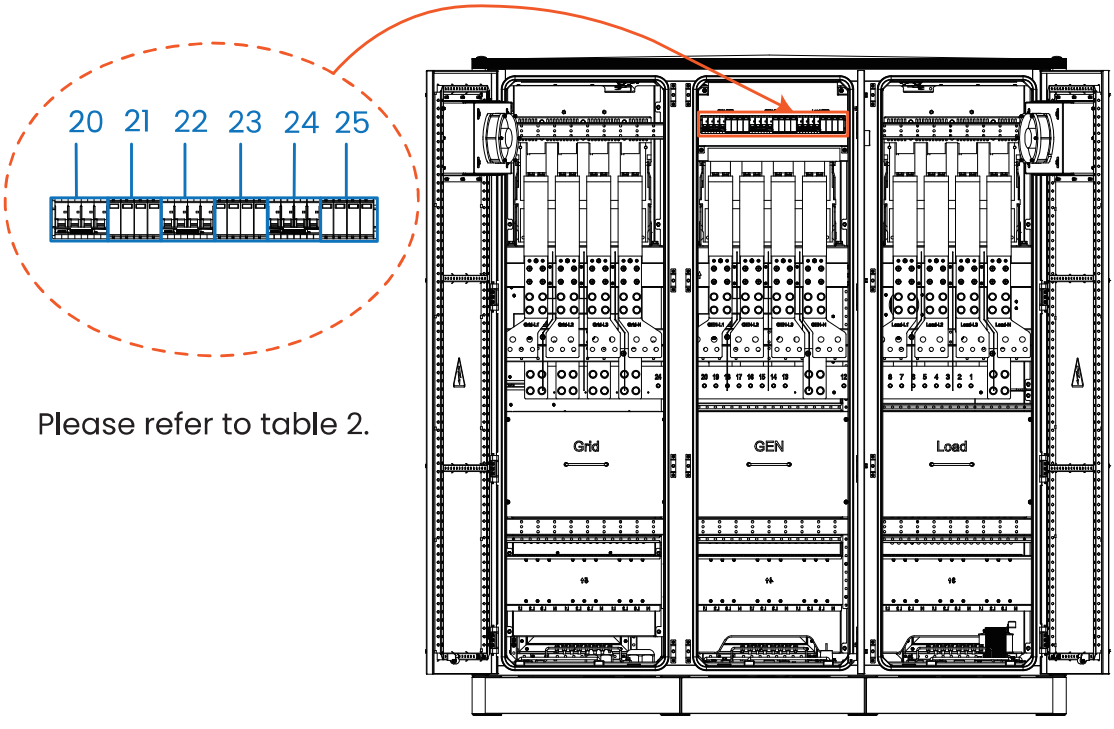
Serial No.	Description	Serial No.	Description
1	Inverter Grounding Bar	2	Reserved Outlet for Signal and Communication Cables
3	Outlet for Signal and Communication Cables	4	Inverter Cable Inlet
5	Grid-Side Grounding Bar	6	Grid Cable Inlet
7	Generator-Side Grounding Bar	8	Generator Cable Inlet
9	Load-Side Grounding Bar	10	Load Cable Inlet
11	Indicator	12	Emergency Stop Button
13	Cabinet Bottom Grounding Bar		

Front View (Cabinet Door Open)



Please refer to table 2.

Rear View (Cabinet Door Open)

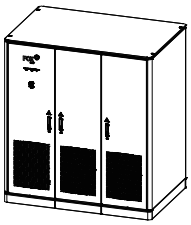


Please refer to table 2.

Table 2

Serial No.	Label	Description	Serial No.	Label	Description
1	ACB3	Air-Circuit Breaker (Load Connection)	2	ACB2	Air-circuit Breaker (Generator Connection)
3	ACB1	Air-Circuit Breaker (Grid Connection)	4	QF6	Maintenance Socket Circuit Breaker
5	Socket	Maintenance Socket	6	QF1	Grid Bypass Circuit Breaker
7	SL	Physical Interlock Switch (between Grid Bypass Switch and Generator Bypass Switch)	8	QF2	Generator Bypass Circuit Breaker
9	SW1	Bypass Transfer Switch	10	QF7	Grid Auxiliary Power Circuit Breaker
11	QF8	Generator Auxiliary Power Circuit Breaker	12	QF9	Inverter Auxiliary Power Circuit Breaker
13	METER	AC Meter	14	QF10	DC Auxiliary Power Circuit Breaker
15	QF12~ QF26	AC Circuit Breakers (Inverter Connection)	16	Switch	Switch
17	Con-verter Board	Reserved Communica-tion Interface (Parallel Communication, DRM Control, Reserved External Meter Interface and Diesel Generator Control	18	QF11	Reserved 24V Power Supply Circuit Breaker
19	AI LINK PRO	Energy Management System	20	QF3	Grid-Side SPD Circuit Breaker
21	SPD1	Grid-Side Surge Protective Device	22	QF4	Generator-Side SPD Circuit Breaker
23	SPD2	Generator-Side Surge Protective Device	24	QF5	Load-Side SPD Circuit Breaker
25	SPD3	Load-Side Surge Protective Device			

1.3 Packing List



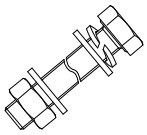
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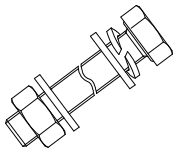
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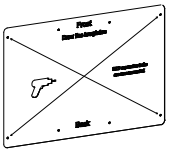
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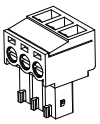
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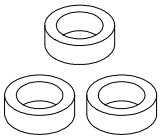
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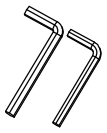
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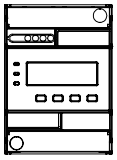
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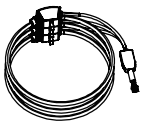
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K



L



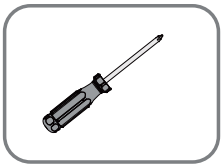
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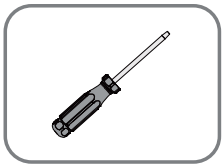


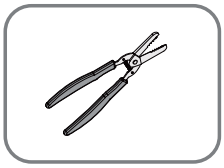
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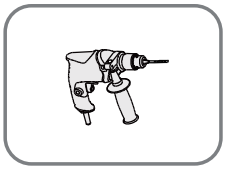
OBJ	QTY	DESC	OBJ	QTY	DESC
A	1	Mega Link	B	4	Eyebolt
C	8	Sealing Clay	D	36	M12 × 50 Bolt Assembly
E	24	M16 × 60 Bolt Assembly	F	1	Quick Installation Guide
G	1	Drilling Template	H	1	Connector
I	3	Small Magnetic Ring	J	2	4 mm & 6 mm Internal Hexagon Wrench
K	1	Meter	L	1	Rogowski Coil
M	1	USB Flash Disk	N	2	DC Terminal

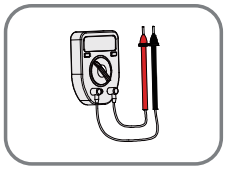
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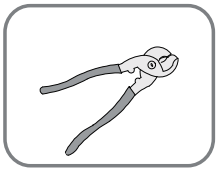

Phillips-Head Screwdriver

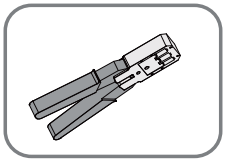

Flat-Head Screwdriver

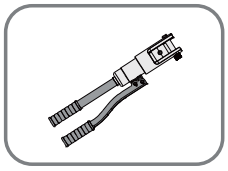

Wire Stripper

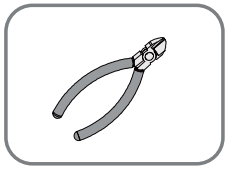

Impact Drill (Bit: Φ 16mm)

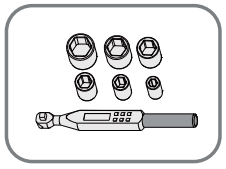

Multimeter (≥1500 V dc)

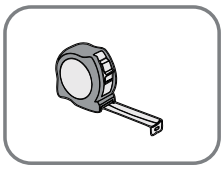

Wire Snips

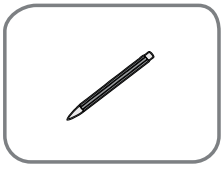

RJ45 Crimping Pliers

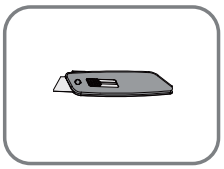

Hydraulic Clamp

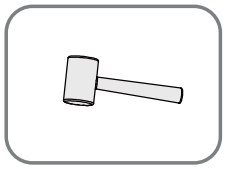

Tweezers

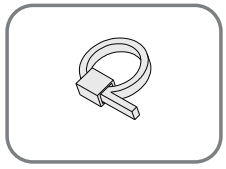

Socket Spanner (M4–M12)

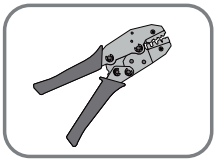

Tape


Marker

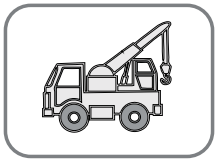

Utility Knife

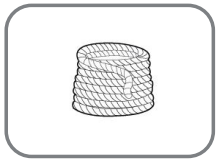

Rubber Mallet

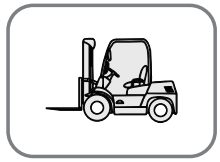

Cable Ties

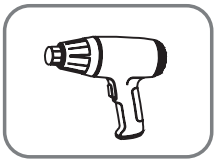

Wire Crimper


Insulated Ladder


Crane


Sling (Length>2000 mm×4)


Electric Forklift


Heat Gun

Danger!

Special care must be taken to protect personal safety.

PPE must be worn during transfer and installation.

Warning!

Please use proper protective measures, such as foam or protective cloth, keep the unit well protected from hard objects that may damage their exterior appearance or body during handling and installation.

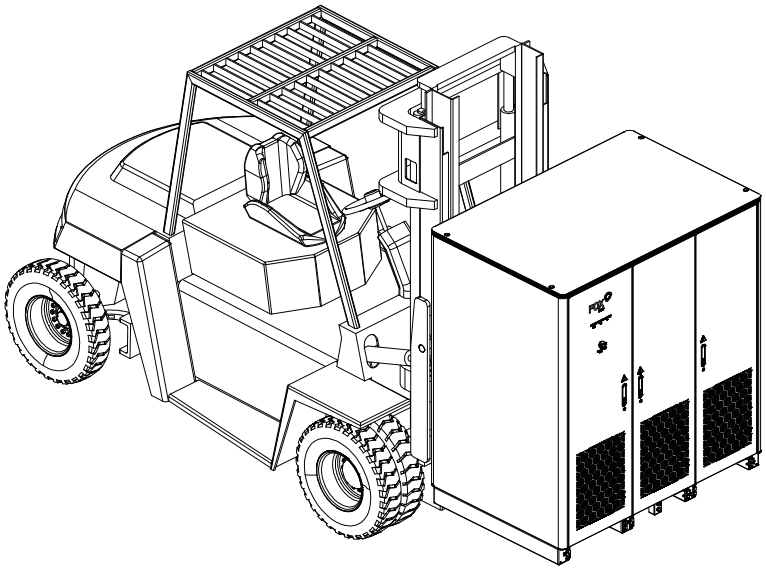
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3 Handling

3.1 Forklift Handling

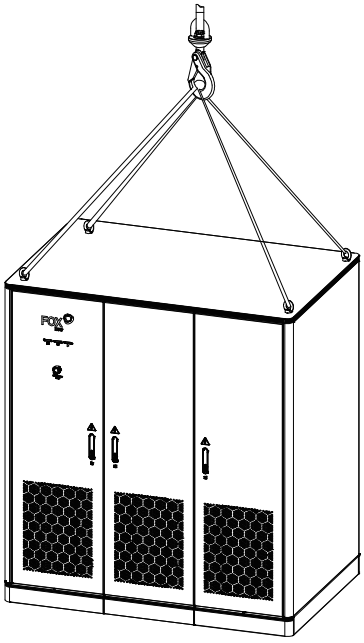
Forklift Handling Capacity: ≥2 t

Adjust the forklift tine width so that the load's center of gravity is centered between the tines.



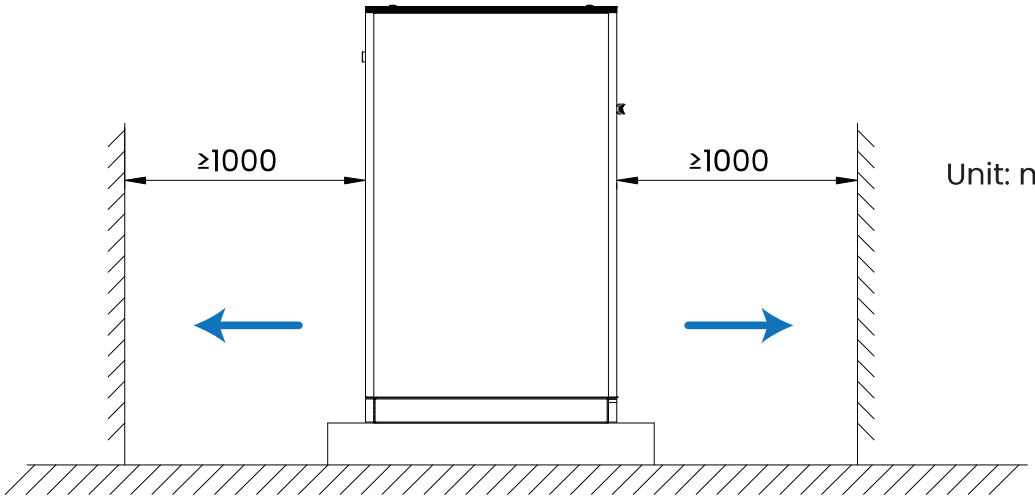
3.2 Crane Handling

Use slings (min. 3t capacity each). Secure the cabinet, with hook ≥1 m from the cabinet top and tilt maintained under 10°.



4 Installation

4.1 Space Requirement



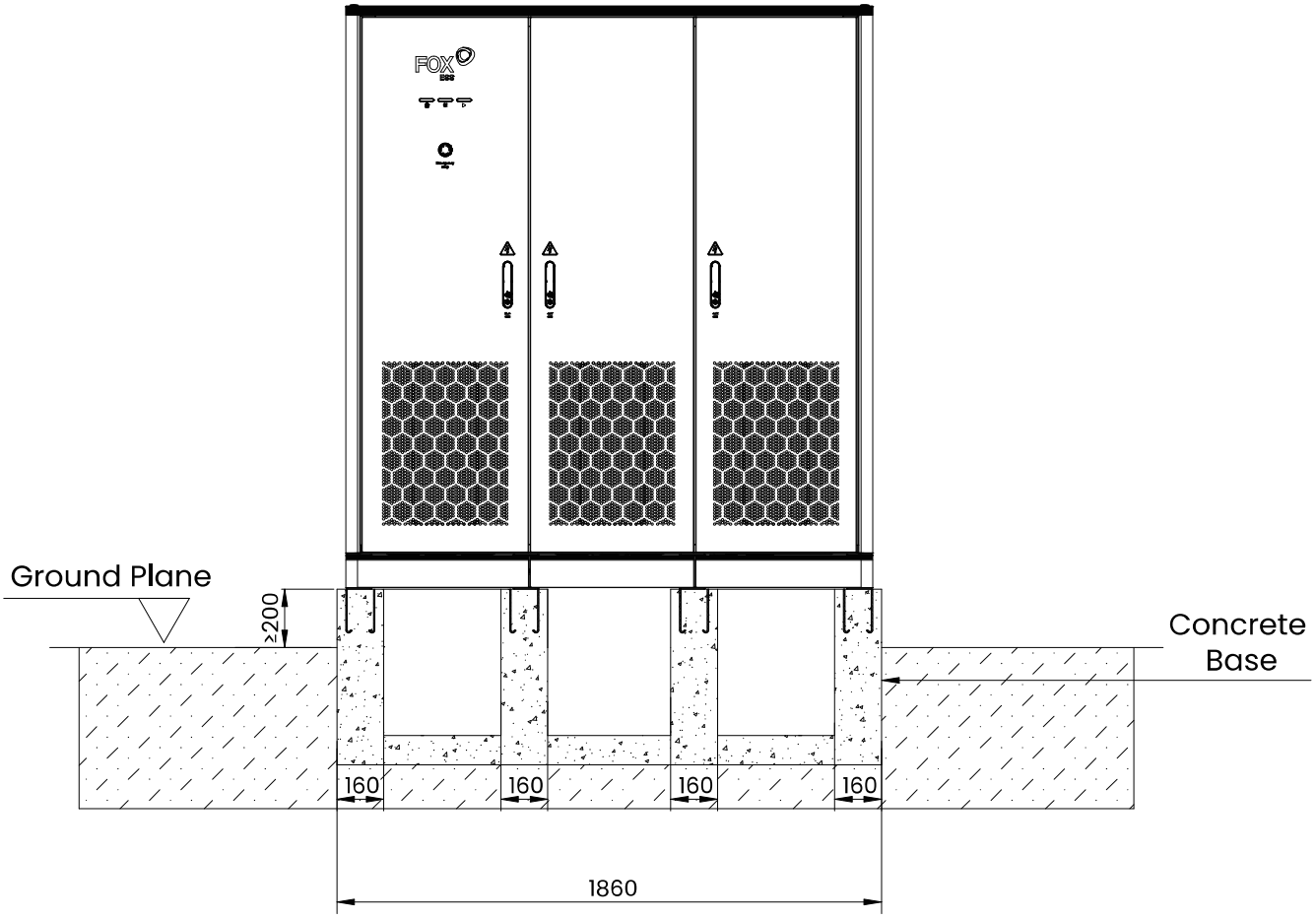
Note!

For indoor installation, compliance with local regulations is required. Ensure the ambient temperature is ≤45°C with adequate ventilation.

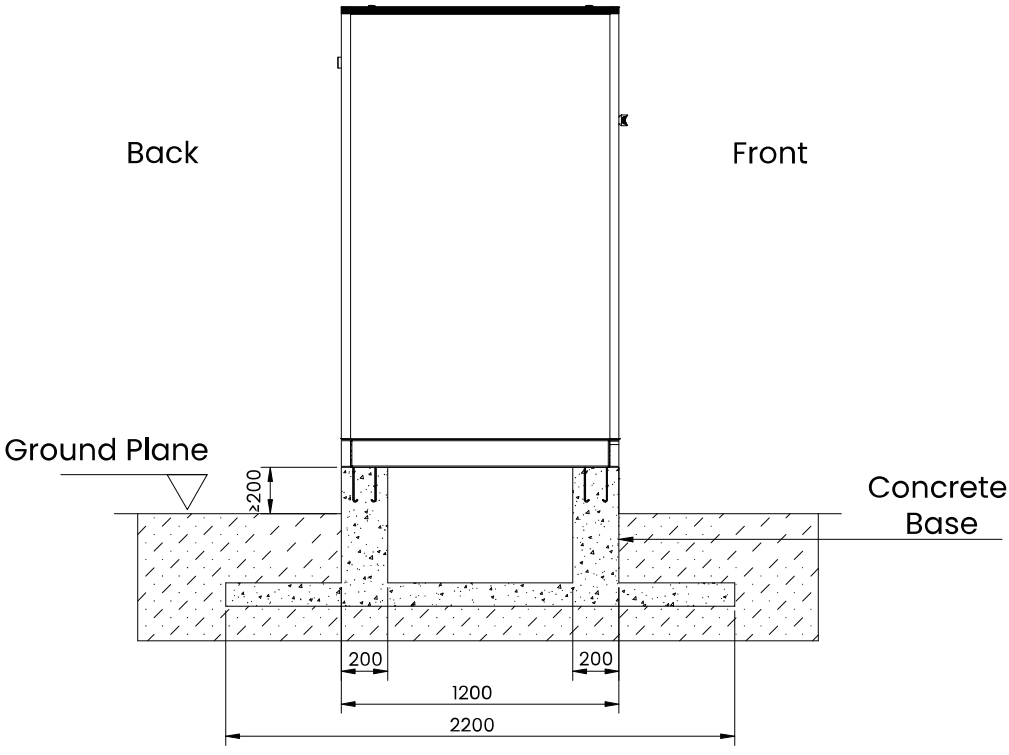
4.2 Fundation Requirement

Items	Requirements
Base Surface	Be concrete or non-combustible, level, firm, and load-bearing.
Load Capacity	Designed for total equipment weight; if the weight exceeds 2 t, reassess and reinforce the foundation accordingly.
Connections	Adjusted based on site conditions. On hard surfaces, secure using welding or bolting.
Water Protection	Keep base above highest historical water level.

The following foundation drawings are for reference only.

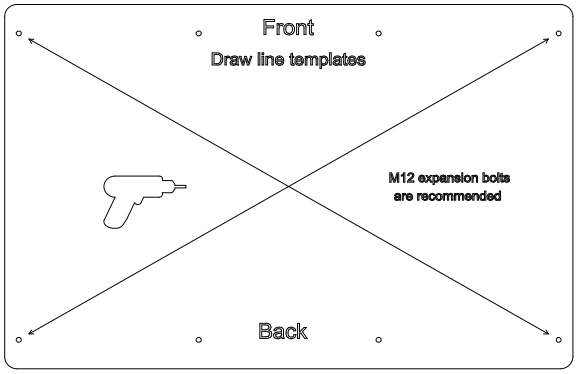


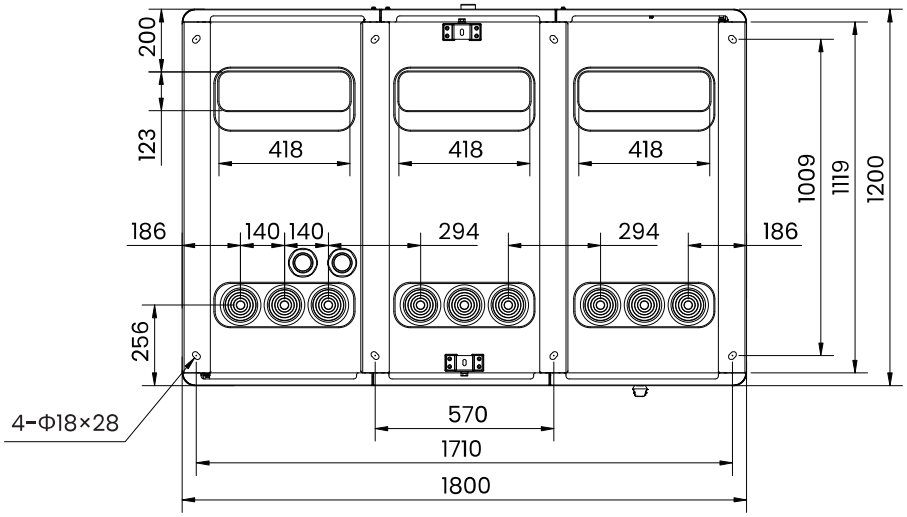
Mounting Base Section (Front View) (Unit: mm)



Mounting Base Section (Side View) (Unit: mm)

Drilling Template





Bottom View
Unit: mm

5 System Wiring

	**Caution!** Connect cables according to the labels. Wrong connections can lead to personal injury or equipment damage.
	**Note!** Route inverter AC cables from inside to outside and from far to near.

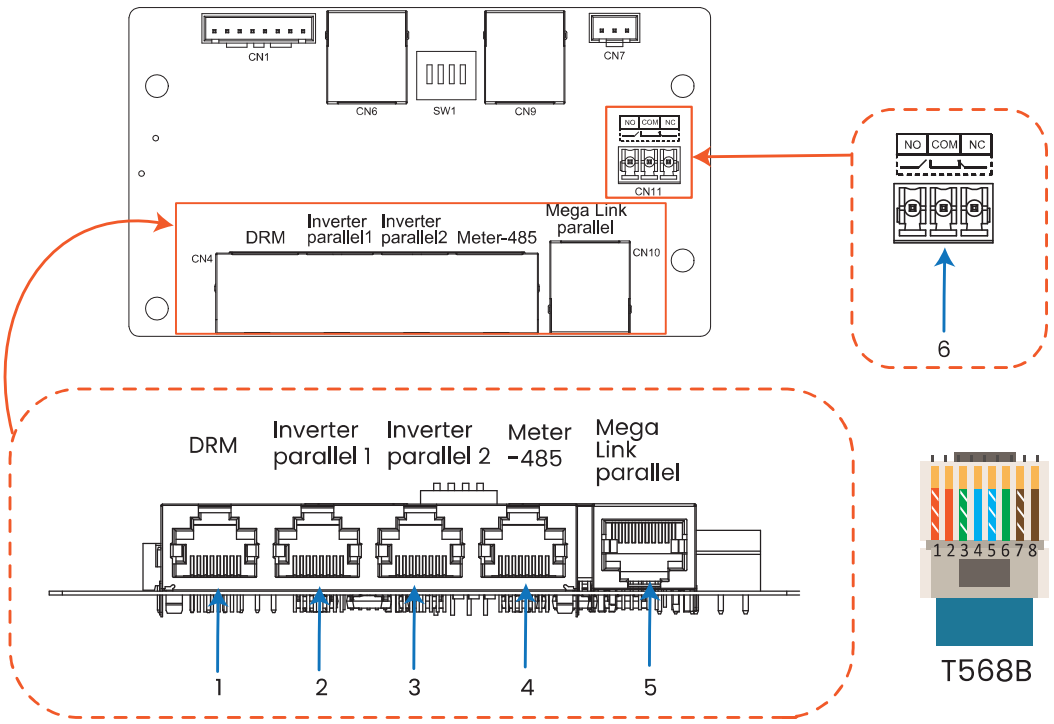
5.1 Cable Specification

Serial No.	Cable Category	Cable Name	Recommended Specification
1	AC Cable	Grid AC Power Supply (L1\L2\L3\N)	Copper Cable Cross-Sectional Area: 400 mm²×4
		Generator AC Power Supply (L1\L2\L3\N)	Copper Cable Cross-Sectional Area: 400 mm²×4
		Load-Side Output Cable (L1\L2\L3\N)	Copper Cable Cross-Sectional Area: 400 mm²×4
		Inverter AC Power Supply (L1\L2\L3\N)	Copper Cable Cross-Sectional Area: 70 mm²; Aluminum Cable Cross-Sectional Area: 95 mm²; (Max. Power of Single Inverter: 137 kW, Max. Current: 200 A)
2	DC Cable	Reserved 24 V Power Supply	UL1015; Copper Cable Cross-Sectional Area: 1 mm²
		DC Power Supply	UL10269; Copper Cable Cross-Sectional Area: 25 mm²; Withstand voltage greater than DC 1000 V
3	Grounding Cable	Cabinet Base Grounding Cable	Cross-Sectional Area: 800 mm²
		Inverter Grounding Cable	Cross-Sectional Area: 35 mm²
		Grid / Generator / Load Grounding Cable	Cross-Sectional Area: 180 mm²×6
4	Communication Cable	Parallel-Connection Communication Cable	UL Cat5E FTP 24AWG; Or 8-core shielded twisted-pair cable for outdoor application (Single-core cross-sectional area: 0.2 mm²)
5	Signal Cable	Generator DO Cable	UL1569 22AWG; Or outdoor shielded 3-core cable (single-core cross-sectional area: 0.32 mm²)

Note!

- Select cables of different specifications based on the actual on-site load and power demand. Ensure that the cable cross-sectional area meets the actual current-carrying capacity requirements.
- The recommended cross-sectional areas for AC cables and ground wires in the table above are values for system full-load operation (2279 A). Customers may adjust them according to actual operating conditions.

5.2 Communucation Port Introduction

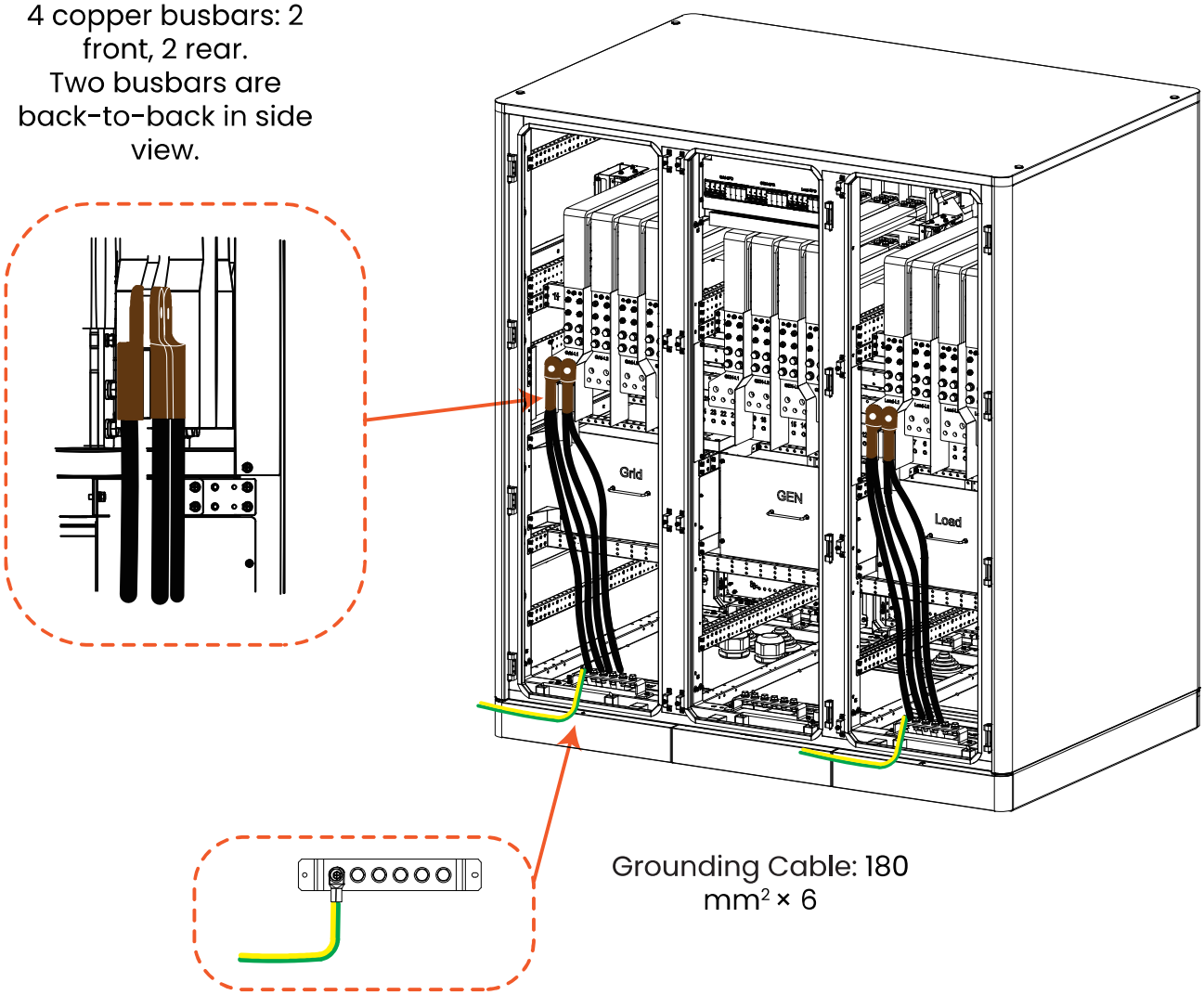


Object	Label	Description
1	DRM	Logic Terminal for AS/NZS 4777.2:2020
2	Inverter parallel 1	Parallel Communication Terminal
3	Inverter parallel 2	Parallel Communication Terminal
4	Meter-485	RS485 Communication Terminal
5	Mega Link parallel	Parallel Communication Terminal with mega link.
6	NO COM NC	Digital Output (ON/OFF Switching Signal)

Pin	1	2	3	4	5	6	7	8
DRM	DRM1/5	DRM2/6	DRM3/7	DRM4/8	REF GEN/0	COM LOAD/0	DI_GND	DI_GND
Meter-485	RS485_1_A	RS485_1_B	RS485_2_A			RS485_2_B		
DO	DO-NO	DO-COM	DO-NC					

5.3 Grid, Generator & Load Cable

4 copper busbars: 2 front, 2 rear. Two busbars are back-to-back in side view.



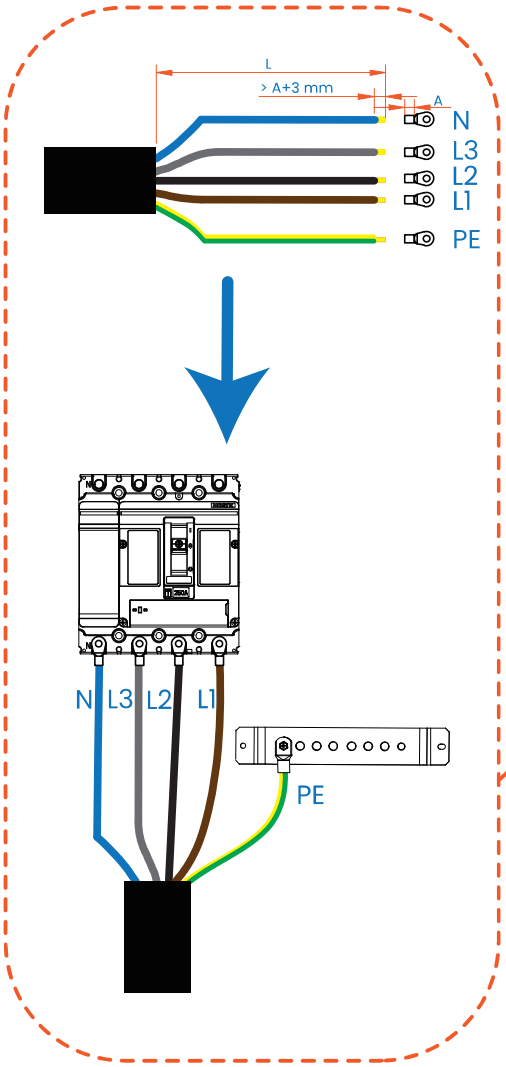
Grounding Cable: 180 mm^2 × 6

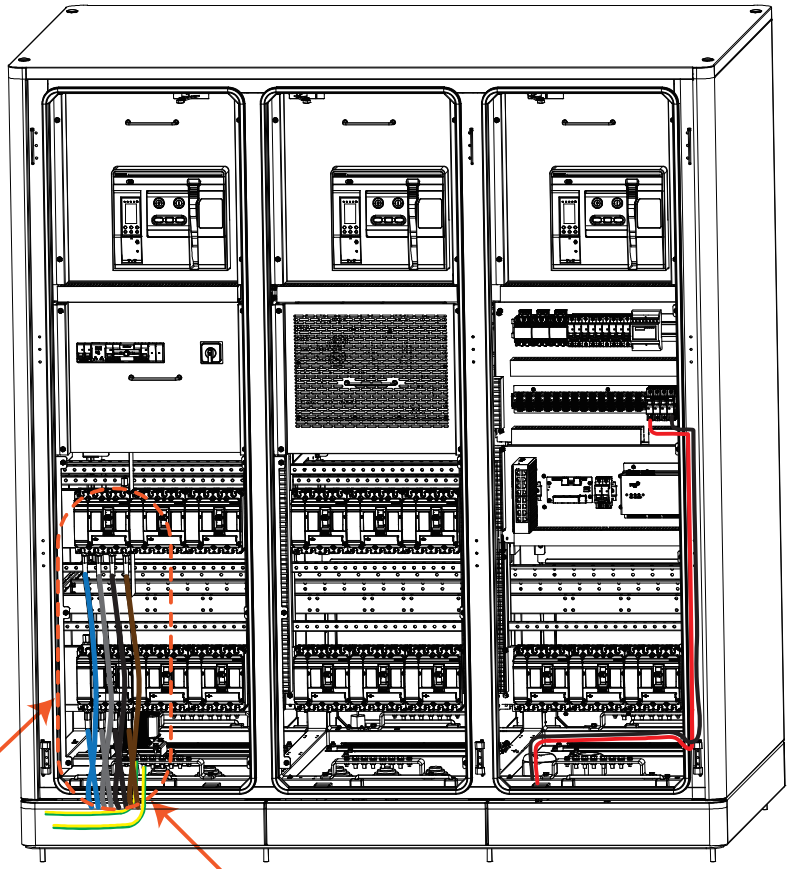
	Note! The diagram above shows the wiring condition for copper busbars and grounding busbars. It only illustrates part of the cables under full-load operation of the system. The remaining copper busbar wiring is consistent with the diagram. The number of connections and wire gauge can be adjusted according to the customer's actual application conditions.

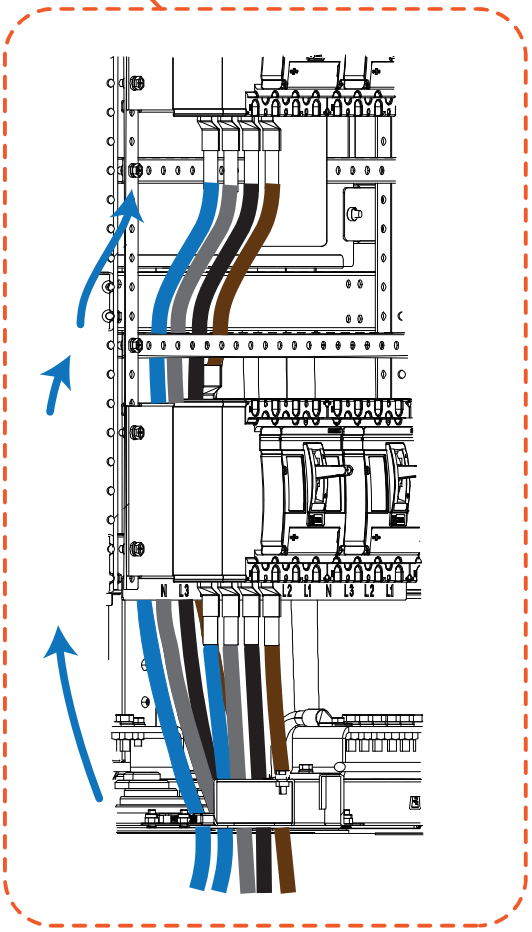
5.4 Inverter AC Cable Connection

Before routing AC cables, please make sure that the reserved length of the inverter AC cables within the cabinet meets the specifications in the table below.

Circuit Breaker	L1	L2	L3	N	PE
QF12~QF14, QF18~QF20	800 mm	800 mm	800 mm	800 mm	200 mm
QF15~QF17, QF21~QF26	400 mm	400 mm	400 mm	400 mm	200 mm

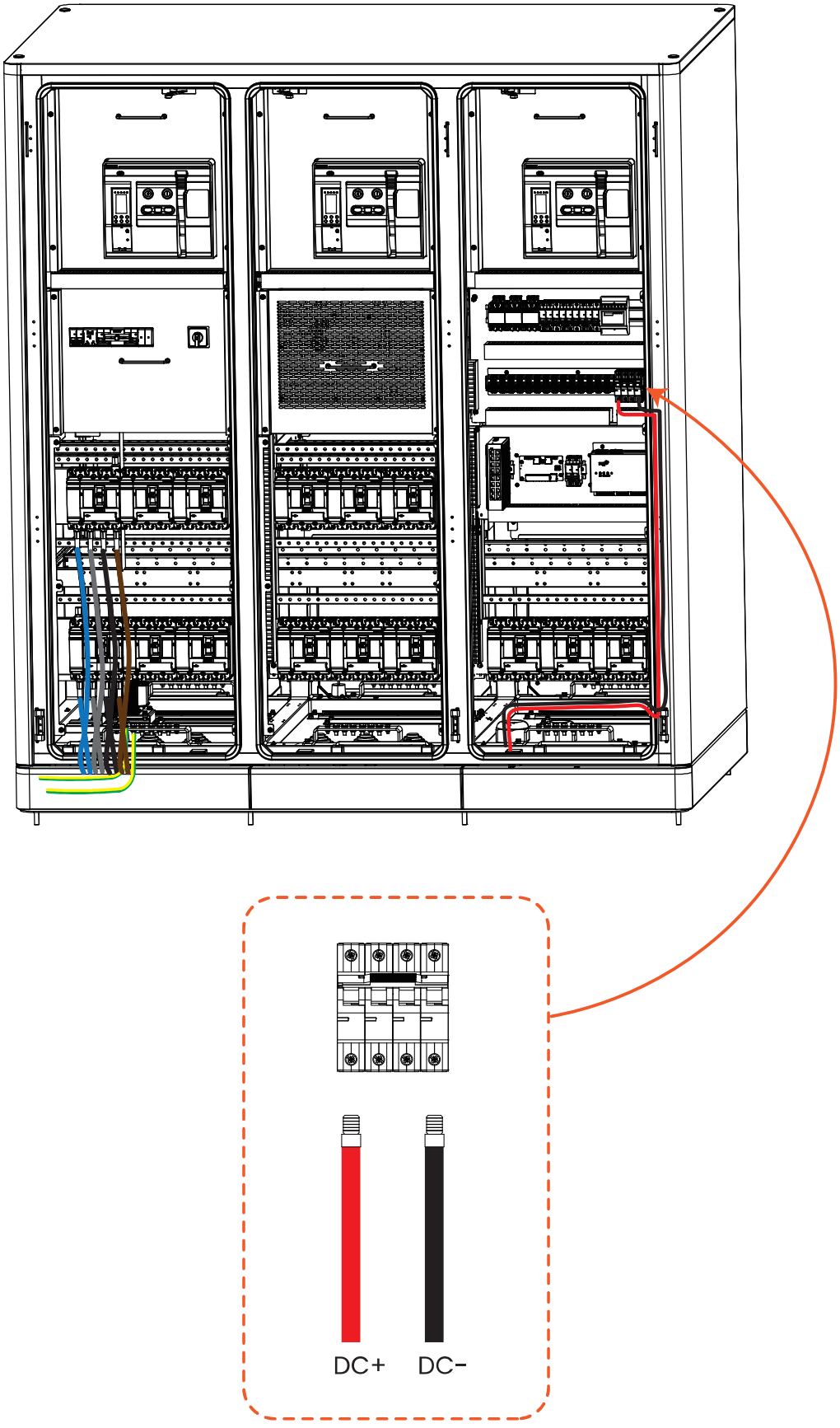




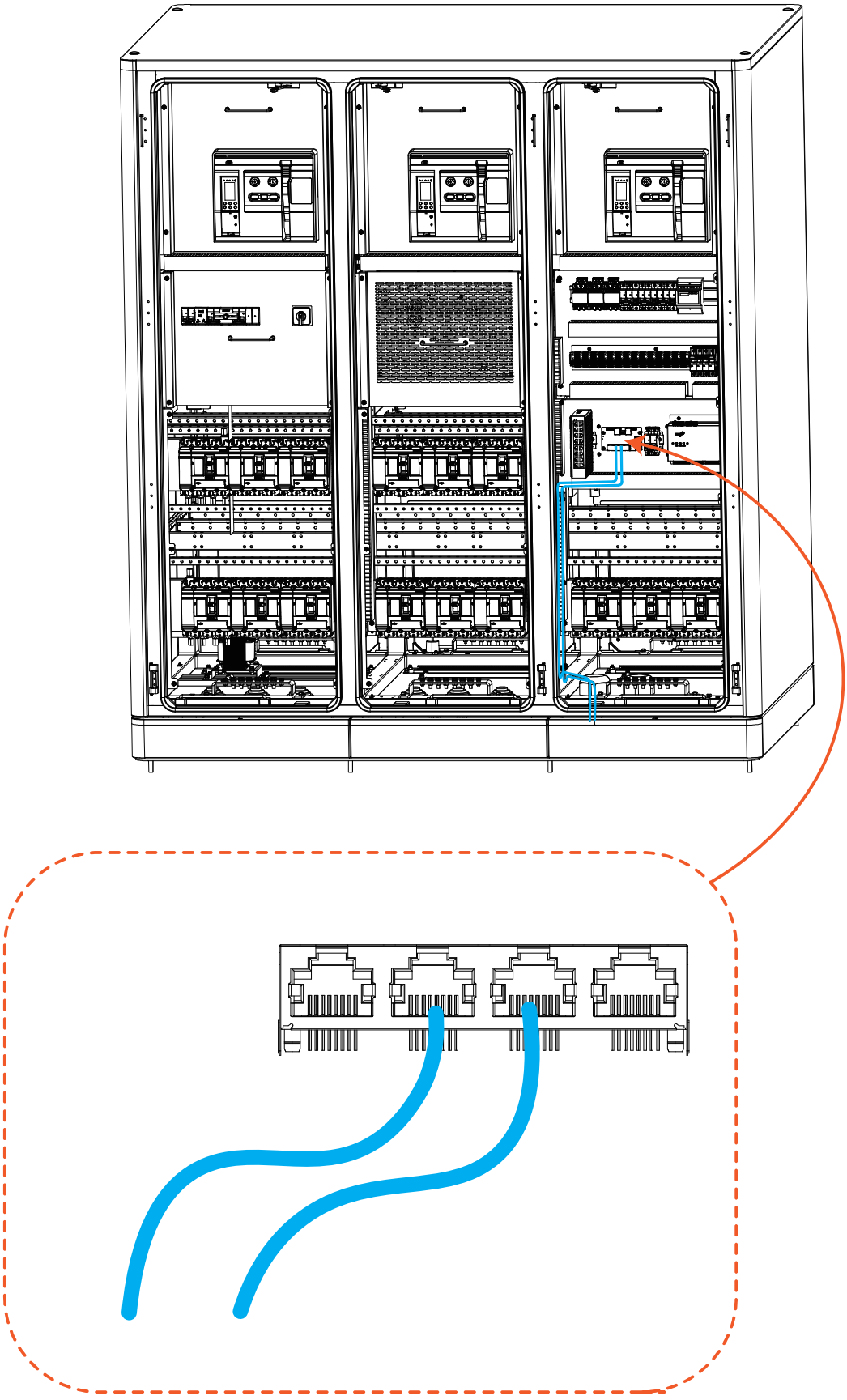


Cables for the upper circuit breaker shall be routed from the back of the lower circuit breaker to the upper breaker.

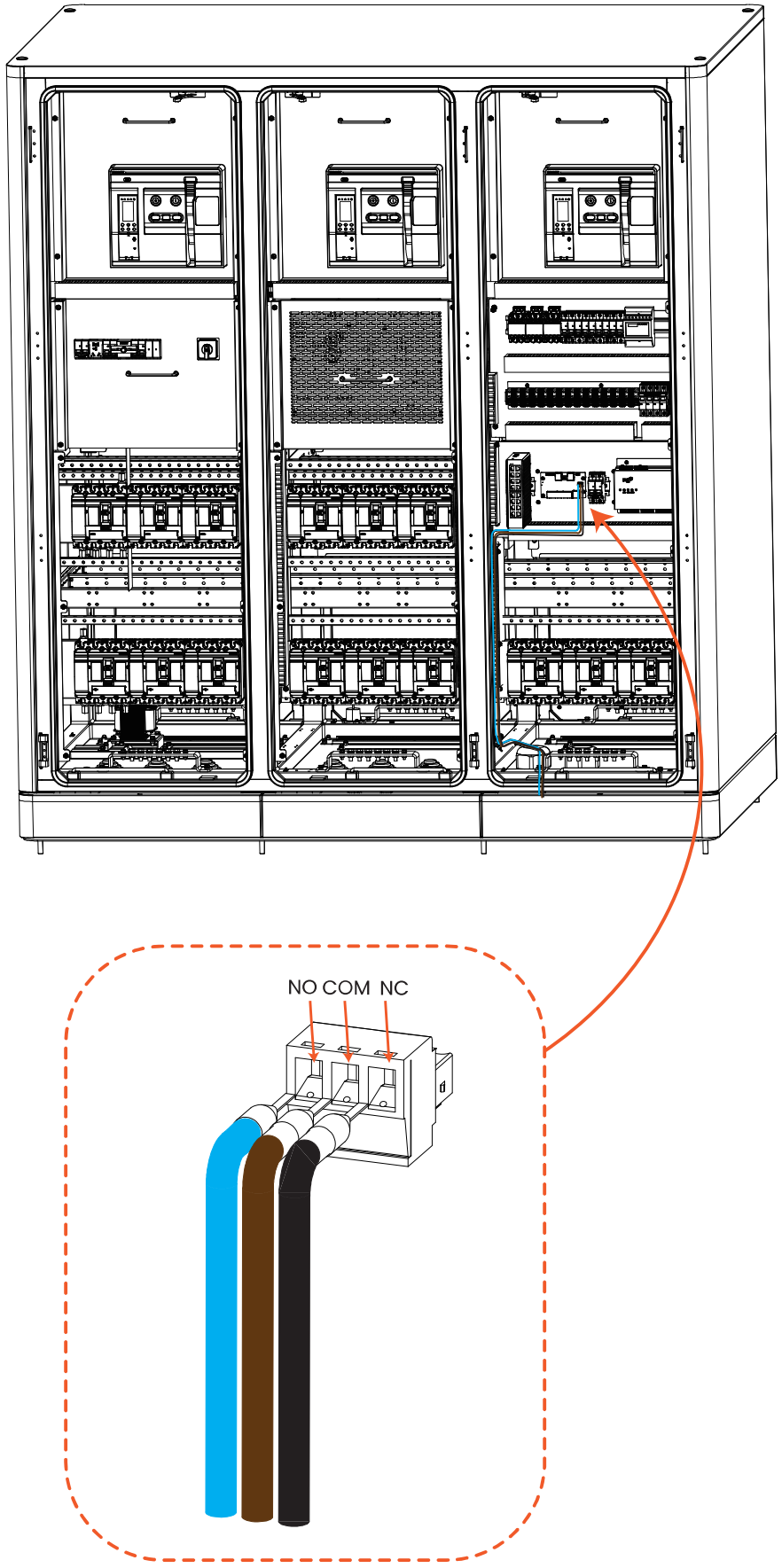
5.5 DC Cable Connection



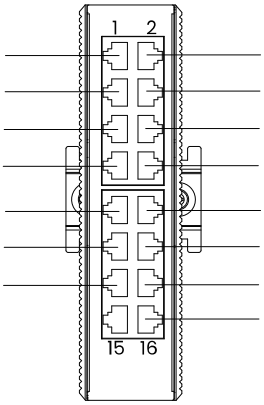
5.6 Parallel Network Cable Connection



5.7 Generator DO Cable Connection



5.8 Switch Connection

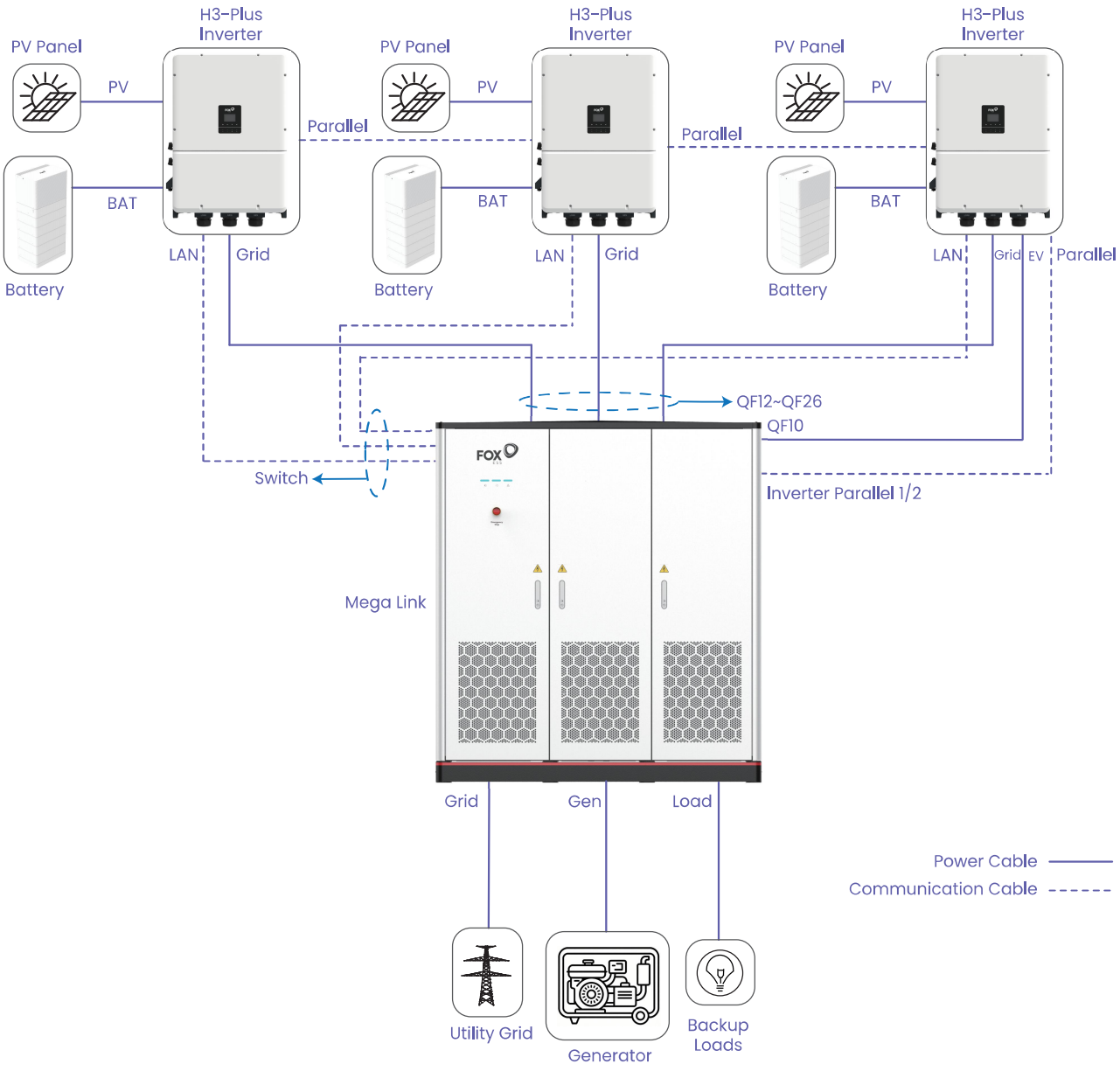


Connect to the LAN port of H3-Plus or the switch port of G-Max Plus in sequence.

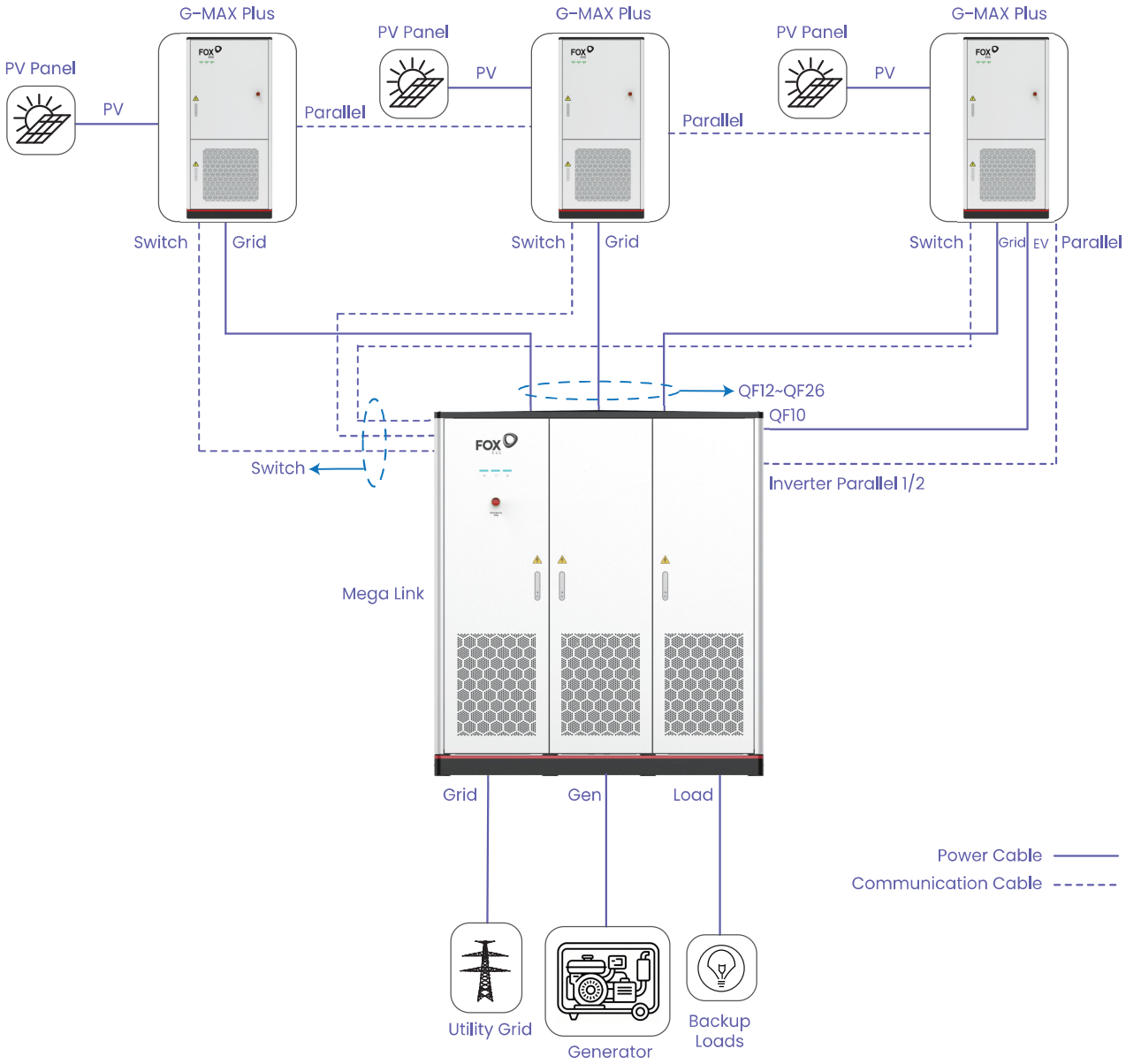
5.9 Backup Power System Diagram

5.9.1 Whole-home Backup

Scenario 1: With H3-Plus

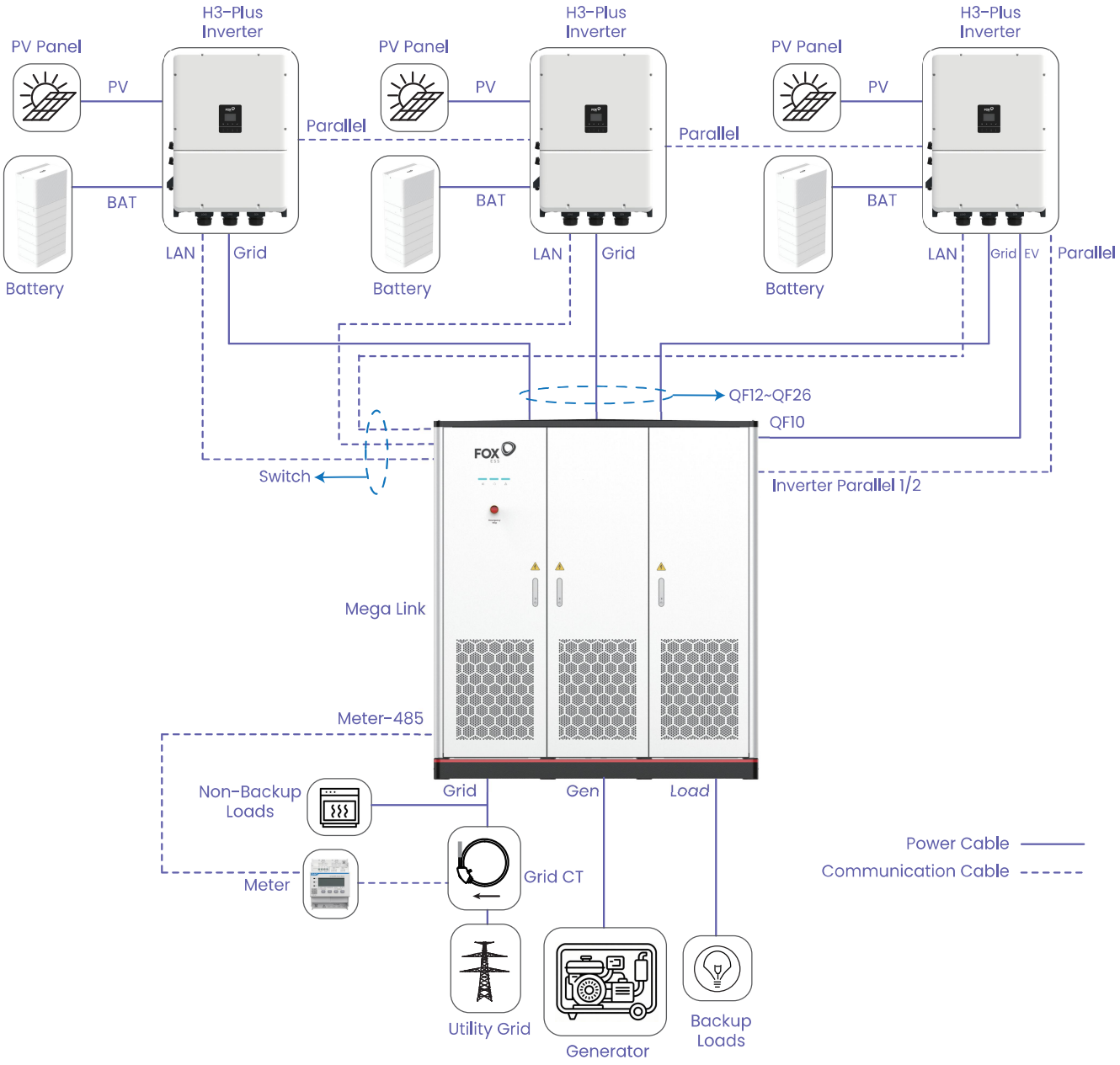


Scenario 2: With G-MAX Plus

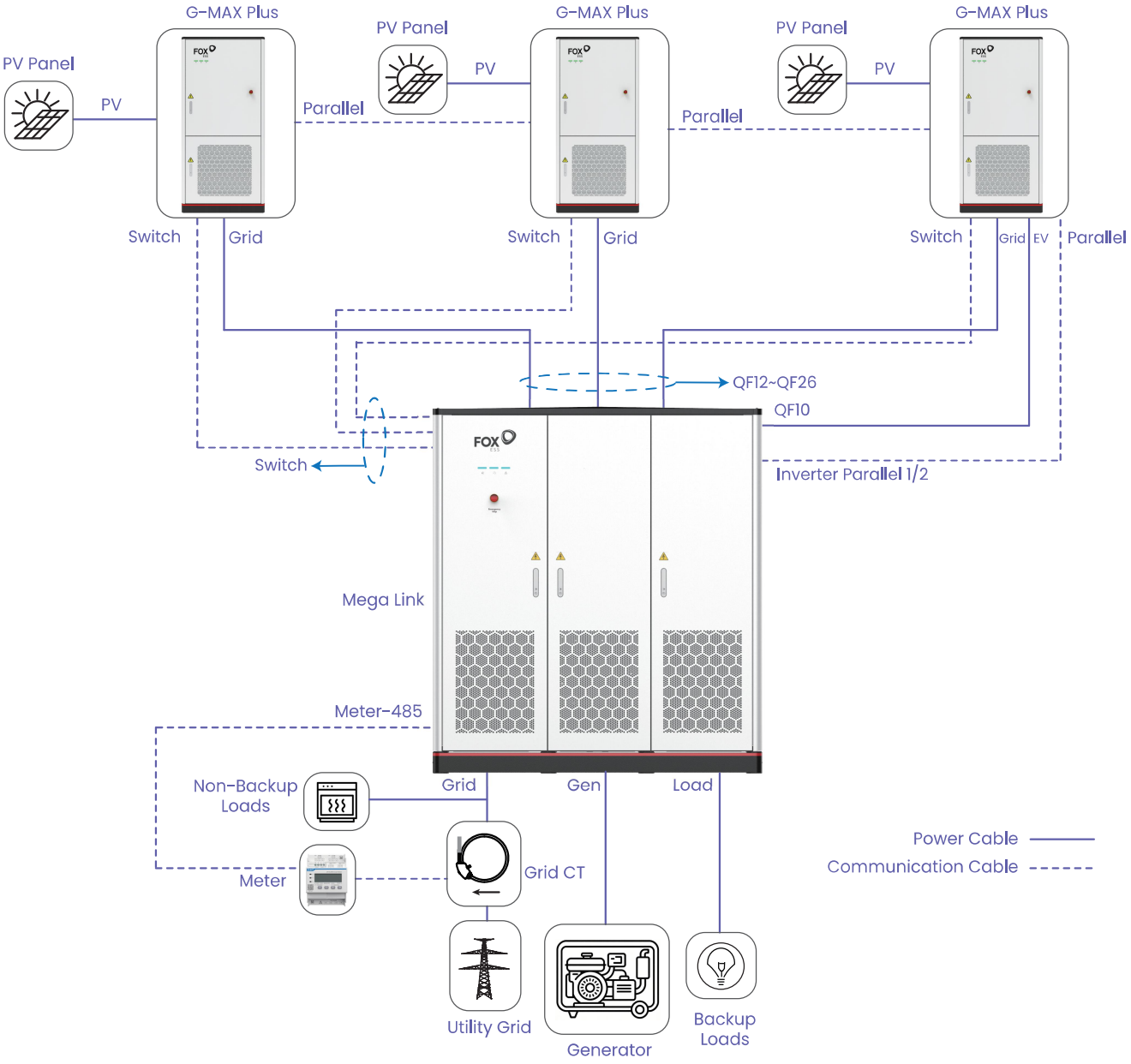


5.9.2 Partial Backup

Scenario 1: With H3-Plus



Scenario 2: With G-MAX Plus



5.10 ACB Trip Unit Settings

ACB	Label	Parameter Value
ACB1 Grid Breaker 2500 A	Ir	1
	Isd	8
	Ii	12
	Ig	off
	Tr	1
	Tsd	0.4
	Tg	off
ACB2 Generator Breaker 2500 A	Ir	1
	Isd	8
	Ii	12
	Ig	off
	Tr	1
	Tsd	0.4
	Tg	off
ACB3 Load Breaker 2500 A	Ir	1
	Isd	8
	Ii	12
	Ig	off
	Tr	1
	Tsd	0.4
	Tg	off
QF12~QF26 Inverter Breaker 250 A	Ir	1
	Ii	10



Note!

The parameters in the table above are set for full-load operation (main circuit: 2279 A, inverter circuit: 200 A). You may adjust the relevant parameters according to actual operating conditions. To prevent accidents, please consult Fox ESS technicians before modifying the ACB parameter values.

6 Inspections After Installation

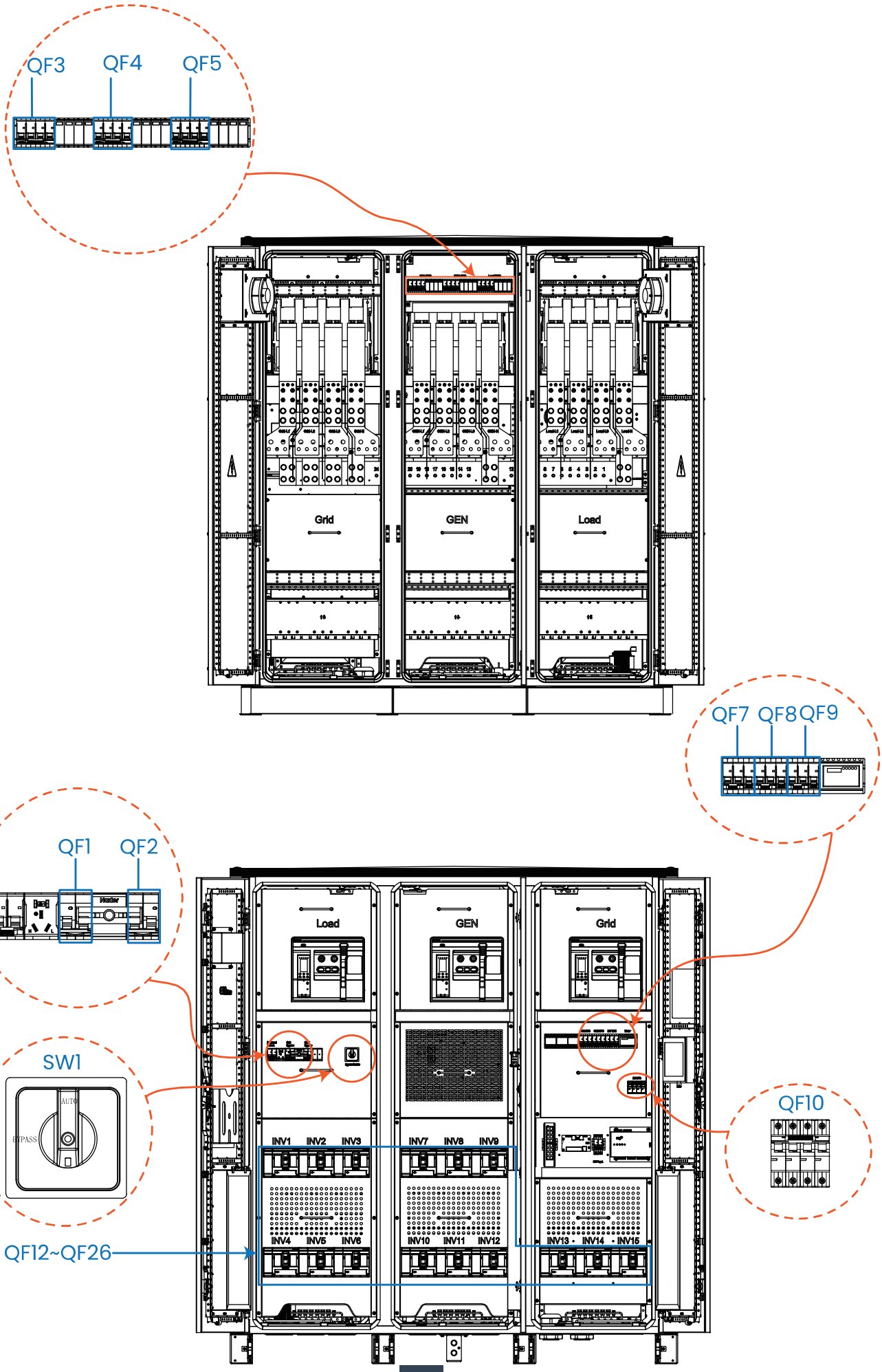
1. Please make sure that the equipment is securely installed.
2. Please make sure that grounding cables, AC cables, DC cables, and signal cables are properly connected with no omissions.
3. Please make sure that lock screws and connectors are fitted in place without any looseness.
4. Please make sure that cutouts of cable ties are free of burrs or sharp edges.
5. Please make sure that unused ports are protected with waterproof covers or plugs.
6. Please make sure that there are no construction residues inside and outside the equipment.

7 Startup Procedure

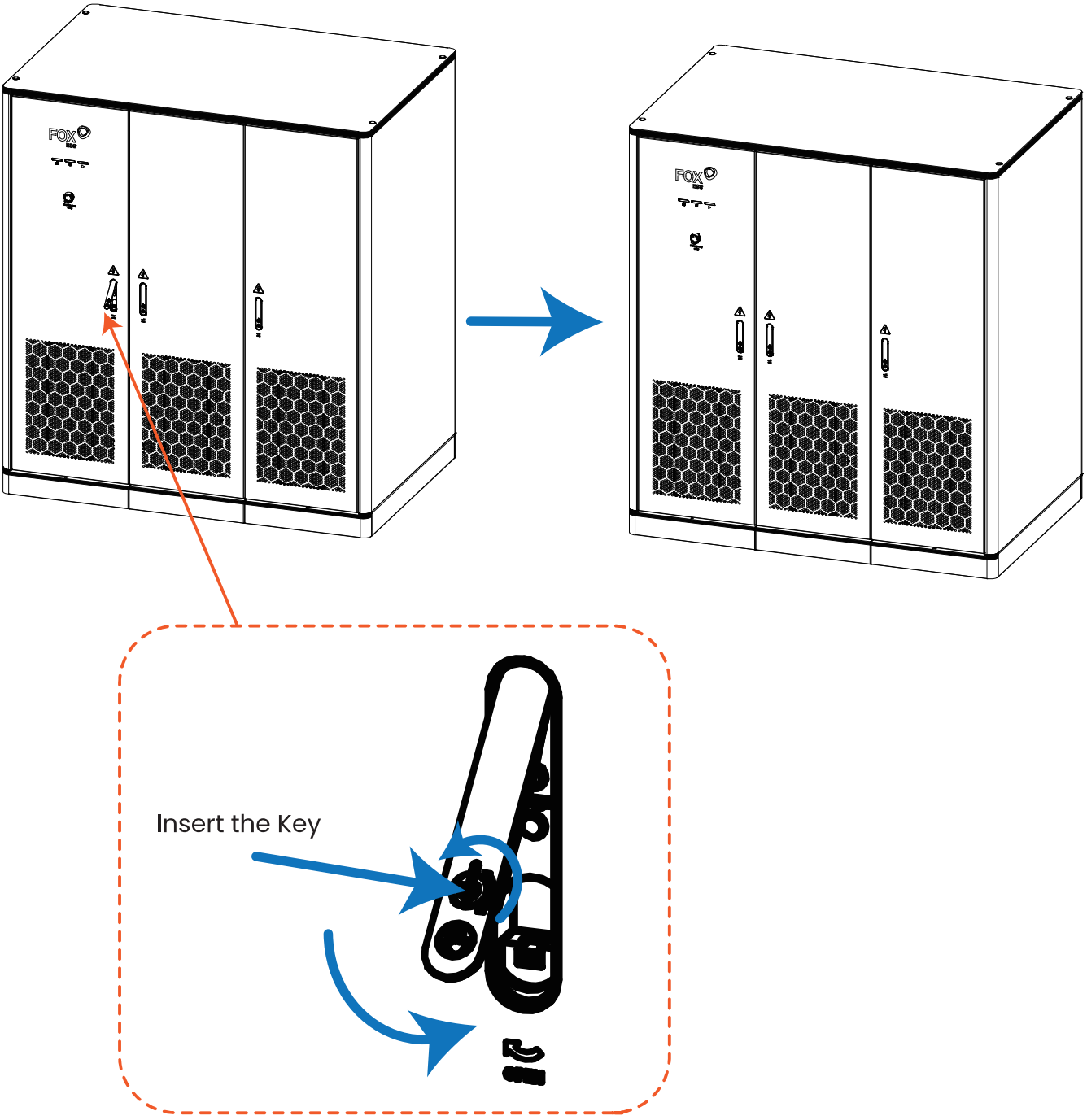
7.1 Power On

1. Close the surge protector circuit breakers QF3, QF4 and QF5.
2. Close the rear cabinet door.
3. Ensure the bypass transfer switch SW1 is in the "AUTO" position, and the bypass circuit breakers QF1, QF2 are in the open state.
4. Close the inverter circuit breakers QF12~QF26 (only close the corresponding circuit breakers according to the on-site actual wiring).
5. Close the circuit breakers QF7, QF8, QF9 and QF10.
6. Close the front cabinet door.

	**Caution!** • Ensure the cable routing sequence from the inverter side to the inverter circuit breakers (QF12~QF26) is correct. • Ensure the routing sequence of grid-side and generator-side input cables is correct. • Ensure the input voltage of AC power supply circuit breakers QF7, QF8, QF9 (select circuit breakers according to the customer's on-site power supply scenario) is ≥180 V.
	**Note!** • Switch on the upstream AC power supply. • Electric shock hazard exists if the product is not earthed. • If the surge protector circuit breakers are not closed, a fault of the surge protector may cause damage to the load and the product.


QF3
QF4
QF5
Grid
GEN
Load
QF7
QF8
QF9
QF1
QF2
Load
GEN
Grid
SW1
BYPASS
AUTO
INV1
INV2
INV3
INV7
INV8
INV9
INV4
INV5
INV6
INV10
INV11
INV12
INV13
INV14
INV15
QF10
QF12~QF26

7.2 Cabinet Door Closing



Step 1: Turn the handle counterclockwise to return it to its original position.
Step 2: Insert the key into the lock.
Step 3: Turn the key counterclockwise to lock the cabinet door.

7.3 Indicator Description

Indicator Status			Description
Grid	Communication	Run/Fault	
Green	Steady ON (Normal Communication); Otherwise OFF	Green	Grid-Tied Operation
Green Blinking		Green Blinking	Grid Present, Standby or Startup
OFF		Green	Off-Grid Operation
OFF		Green Blinking	Off-Grid Standby or Startup
N/A		Red	Fault Occurred