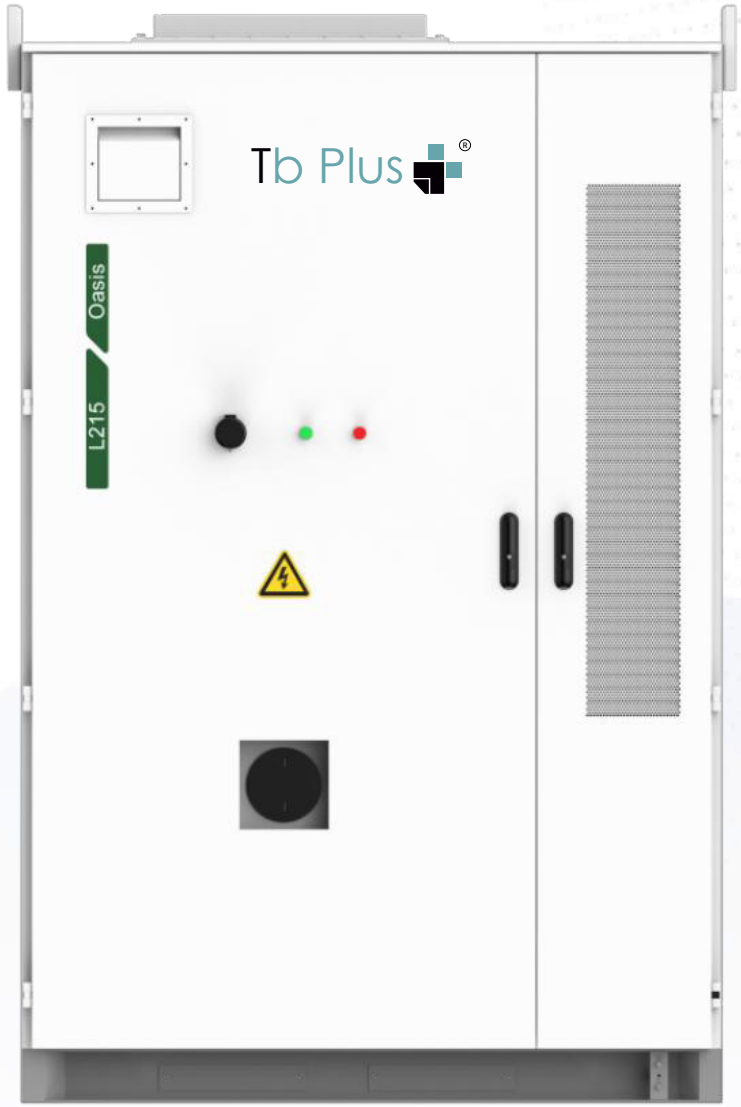
1.3 Monarca L215/344

1.3.1 Product Introduce

Monarca features:

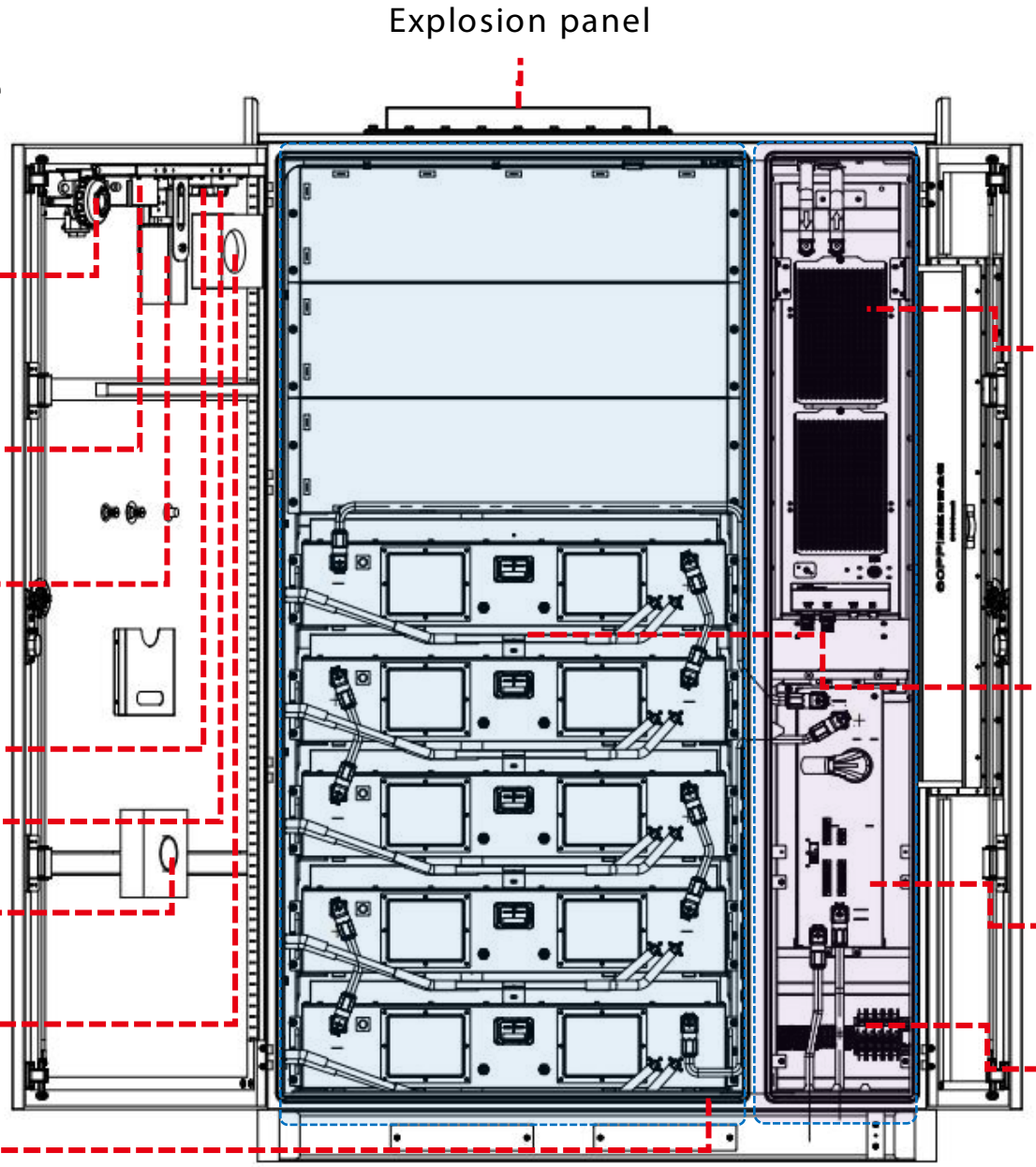
- Ø Cabinet integration, 5 / 8 battery modules , parallel with 2~6 cabinets via DC combiner cabinet , maximum capacity expanded to1.29MWh/2.06MWh
- Ø IP55, outdoor installation
- Ø Comprehensive protection, Equipped with liquid cooling temperature control, temperature and smoke sensors, aerosol fire suppression, pressure release devices with explosion-proof panels for abnormal fire scenarios.
- Ø Self-developed 280Ah cell,1CP,high power density , quickly respond to the high energy demand of the user side in a short time
- Ø Liquid cooling design and cell-friendly, effectively control the temperature difference of the cells during operation within the range of 3–5°C.



215/344kWh Cabinet

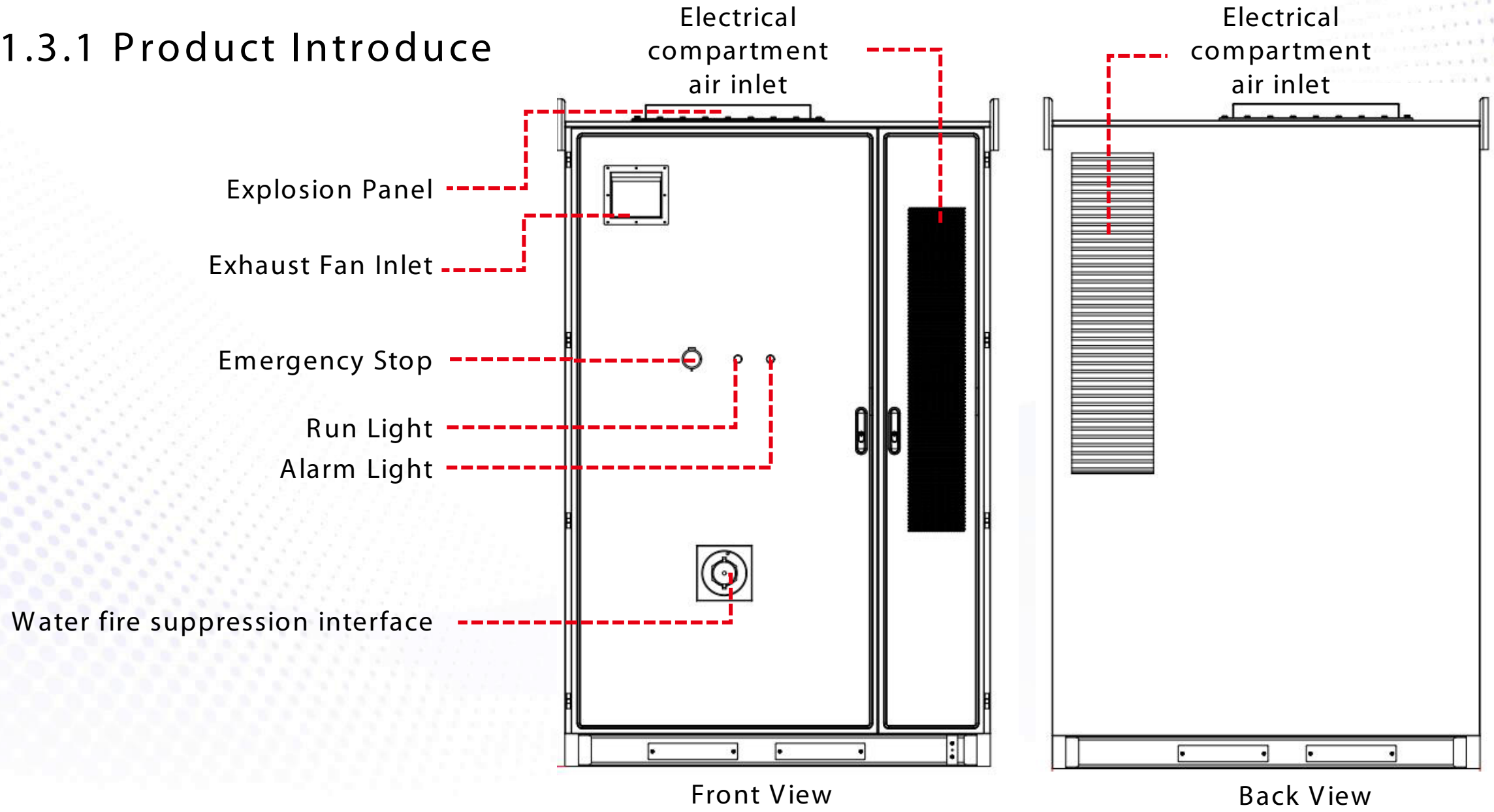
1.3 Monarca L215/344

1.3.1 Product Introduce



1.3 Monarca L215/344

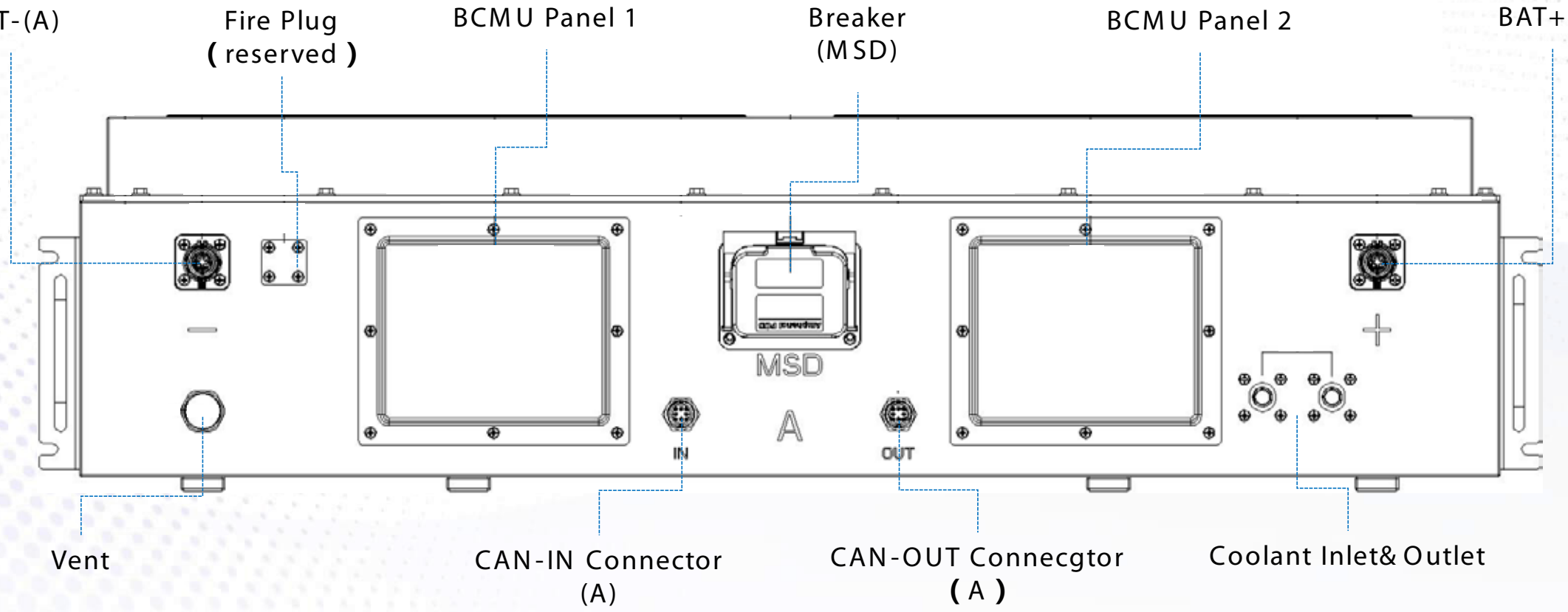
1.3.1 Product Introduce



1.3 Monarca L215/344

1.3.1 Product Introduce

Battery (PACK)

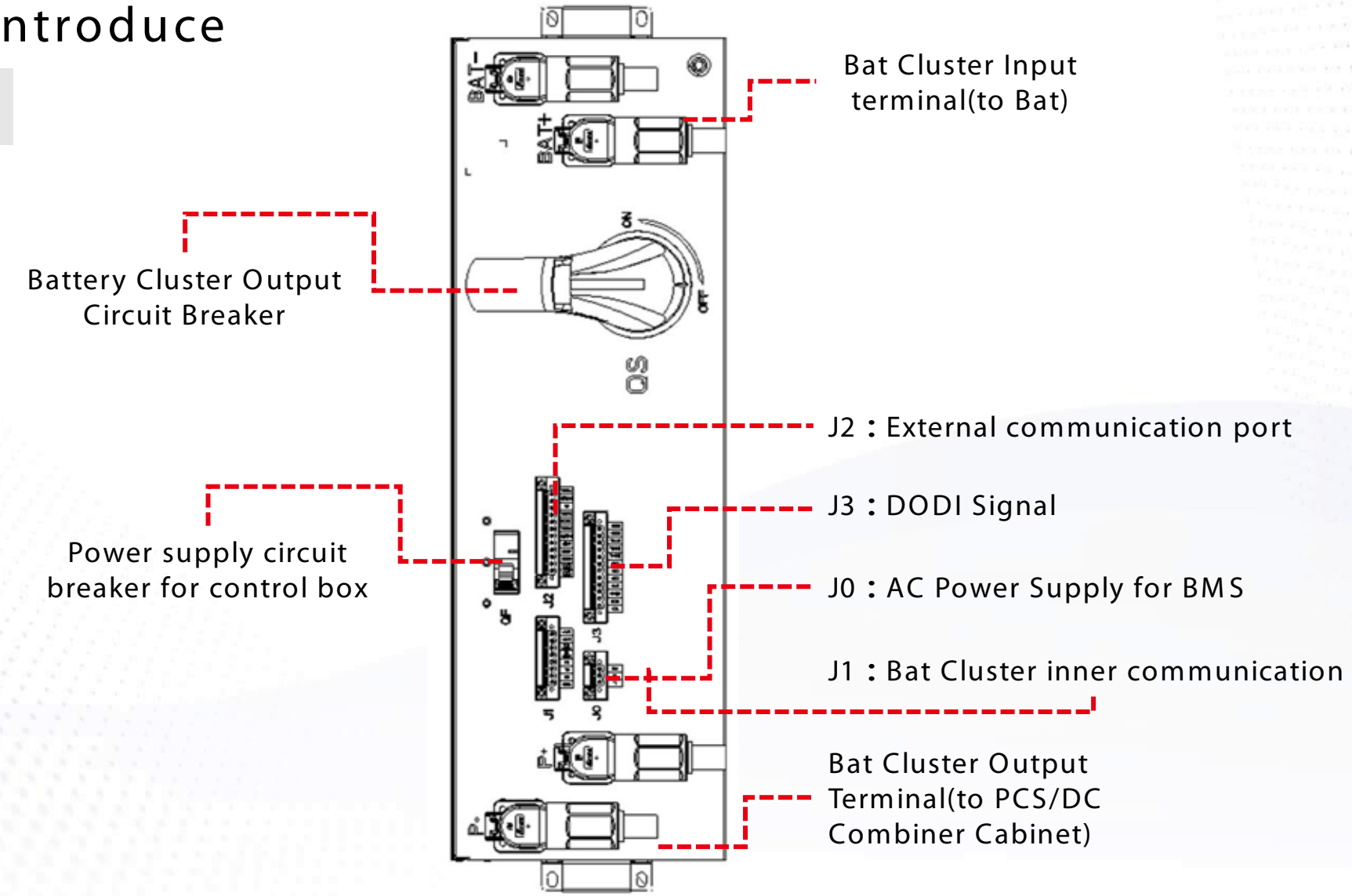


Note：If it's Battery Pack B， then BAT+/BAT-、CAN-IN/CAN-OUT conenctor exchange the position

1.3 Monarca L215/344

1.3.1 Product Introduce

Main Control Box



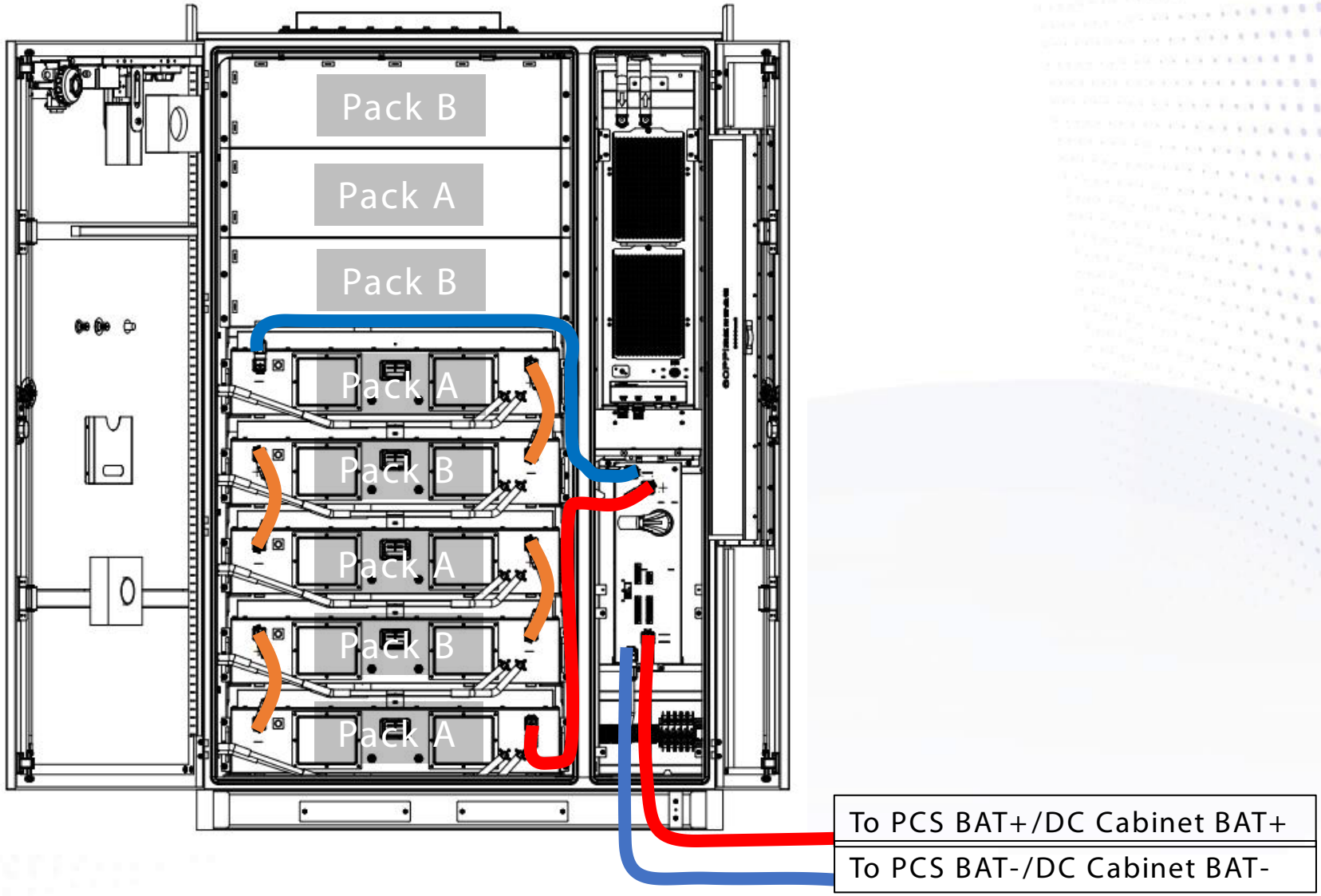
1.3 Monarca L215/344

1.3.2 Wiring

1.Main Circuit Wiring

Power Cable Wiring

- Ø Blue：Negative/Negative
- Ø Red：Positive/Positive
- Ø Orange：Negative/Positive
- Ø Wiring Start from the negative of the main control box



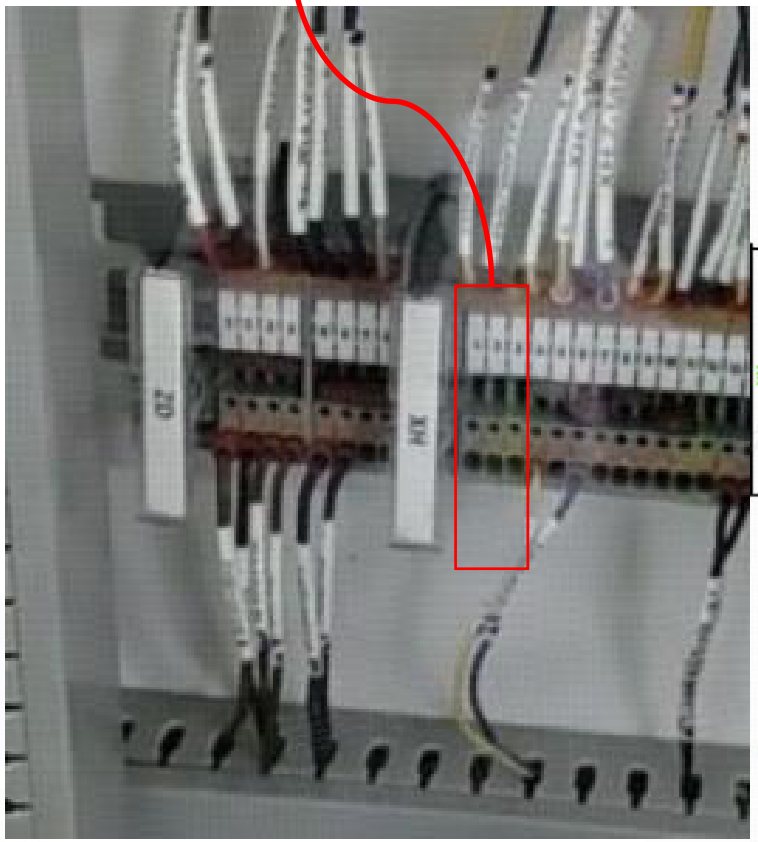
1.3 Monarca L215/344

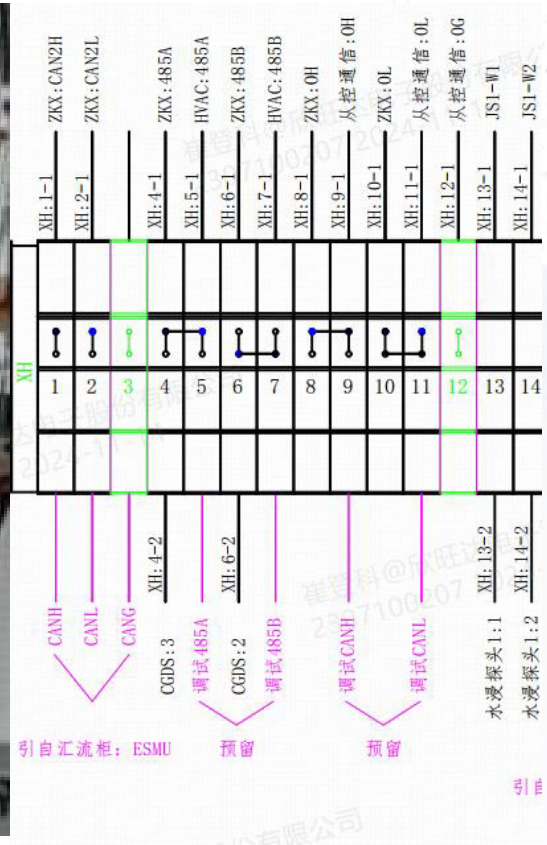
1.3.2 Wiring

1.Main Circuit Wiring

CAN Comm. Wiring

Connecting to PCS XT4 terminals or DC Cabinet XT5 terminals





1.3 Monarca L215/344

1.3.2 Wiring

1.Main Circuit Wiring

Install MSD Plugs

Remove the blue tapes before installation

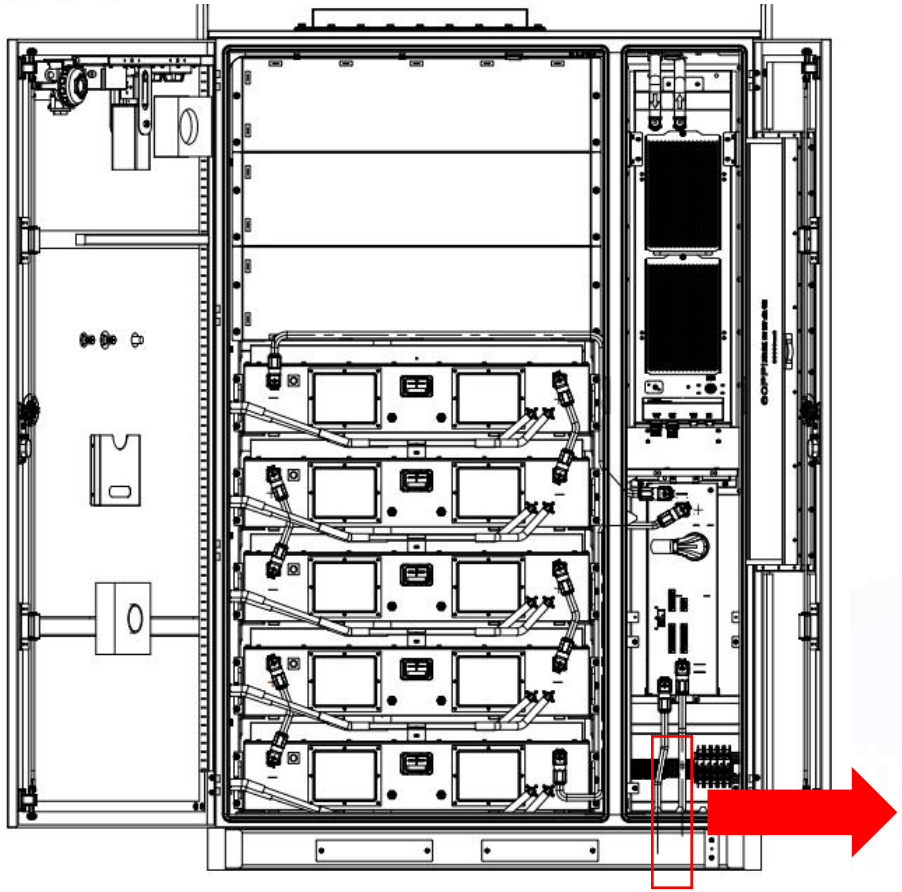
MSD finished the installation

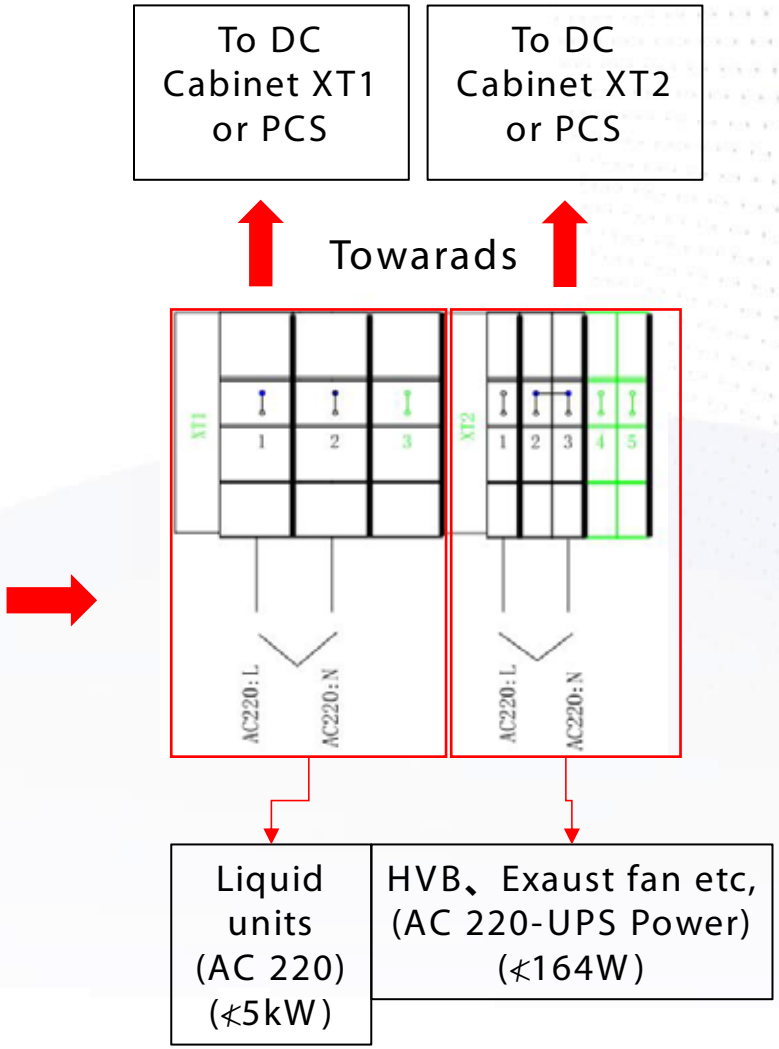
1.3 Monarca L215/344

1.3.2 Wiring

2. Auxiliary Circuit Wiring

Auxiliary Power Supply Wiring





1.3 Monarca L215/344

1.3.4 Certifications

Item	Description	Purpose
UN38.3	Bat cabinet test(Optional)：OC\SC\OD Bat pack test:Aititude\Tem\Vibration\shock \external SC\extrusion\Forced Discharge Cell test：Aititude\Tem\Vibration\shock \external SC\extrusion\Forced Charge& Discharge	UN3480 transport of dangerous goods
CE---IEC 62619	Bat pack test=system：Charge test\Drop test-0.1m\OV\Over Charge\OT Cell Test:External SC\Shock\Drop test-1m\heat\Over chagre\Forced Discharge\SC	EU market: Important safety certifications for secondary lithium batteries and storage batteries in industrial applications.
CE---EMC	CISPR 16-2-3 EN 55032, class B\IEC 61000-4-2 \IEC 61000-4-3\IEC 61000-4-8\RF	EU market:Electromagnetic compatibility certification for electronic and electrical products EN 300 328 V2.2.2:2019 \EN 62311:2008 \EN IEC 62311:2020 \EN 50665:2017 \EN 301 489-1 V2.2.3:2019 \EN 301 489-17 V3. \EN IEC 61000-6-3: \EN IEC 61000-6- \EN IEC 62619:2022
UL 1973	OC\High-Rate charging\SC\OL\OD\OT\imbalance charging\withstand voltage test\grouding resistance test\thermal and cold failure operation test\leakage current\electromagnetic immunity test\electromagnetic immunity test\shock test\drop test\bracket hook load capacity test\humidity resistance test\single cell fault tolerance	

Note:
①IEC 62477 on going，expected to be ready in the end of January；IP54
②Besides,finished UL 9540A-thermal runaway test、FCC-US electromagnatic compatibility、IEC63056-Safety certification requirements for applications such as telecommunication systems, photovoltaic systems, residential and large-scale energy storage systems,and GB 36276

1.3 Monarca L215/344

1.3.4 Certifications

Item	Description	Purpose
UN38.3	Bat cabinet test(Optional)：OC\SC\OD Bat pack test:Aititude\Tem\Vibration\shock \external SC\extrusion\Forced Discharge Cell test：Aititude\Tem\Vibration\shock \external SC\extrusion\Forced Charge& Discharge	UN3480 transport of dangerous goods
CE---IEC 62619	Bat pack test=system：Charge test\Drop test-0.1m\OV\Over Charge\OT Cell Test:External SC\Shock\Drop test-1m\heat\Over chagre\Forced Discharge\SC	EU market: Important safety certifications for secondary lithium batteries and storage batteries in industrial applications.
CE---EMC	CISPR 16-2-3 EN 55032, class B\IEC 61000-4-2 \IEC 61000-4-3\IEC 61000-4-8\RF	EU market:Electromagnetic compatibility certification for electronic and electrical products EN 300 328 V2.2.2:2019 \EN 62311:2008 \EN IEC 62311:2020 \EN 50665:2017 \EN 301 489-1 V2.2.3:2019 \EN 301 489-17 V3. \EN IEC 61000-6-3: \EN IEC 61000-6- \EN IEC 62619:2022
UL 1973	OC\High-Rate charging\SC\OL\OD\OT\imbalance charging\withstand voltage test\grouding resistance test\thermal and cold failure operation test\leakage current\electromagnetic immunity test\electromagnetic immunity test\shock test\drop test\bracket hook load capacity test\humidity resistance test\single cell fault tolerance	

Note:
①IEC 62477 on going，expected to be ready in the end of January；IP54
②Besides,finished UL 9540A-thermal runaway test、FCC-US electromagnatic compatibility、IEC63056-Safety certification requirements for applications such as telecommunication systems, photovoltaic systems, residential and large-scale energy storage systems,and GB 36276

Tb Plus®

www.**tplusenergy**.com