

## Power &

Escape215-R

QUICK INSTALLATION GUIDE

## Escape215-R

#### **Power ⊕**

#### 100kW/215kWh Battery Energy Storage System

The Escape215-R is an AC Coupled Battery Energy Storage System with a 100kW inverter and 215kWh battery.

- 100kW Inverter
- 215kWh Battery (LFP)
- Energy Management System
- Battery Management System
- Fire Suppression System



## Escape215-R

#### **Power ⊕**

#### 100kW/215kWh Battery Energy Storage System Parameters

System nominal capacity	215kWh		
Rated power	100kW		
Max. output power	110kW		
Rated grid voltage	400Vac		
Allowable voltage fluctuation range	-15% ~ 15%		
Cable entry	3 phase 4 wire		
Discharge Rate / Storage Duration	0.5C / 2 Hours		
Battery Voltage Range	648V ~ 864V		
Battery Cell	280Ah, Lithium iron phosphate battery cell		
Number of cycles	≥ 6000 ( 25°C, 0.5C, 90%DOD,80%EOL )		
Rated grid frequency	50Hz +/- 5%		
Operating temperature range	-20°C ~ 45°C		
Communications	CAN, RS485, TCP/IP		
Heat dissipation	Liquid cooled		
System protection level	IP54		
Noise	≤75dB		
Dimensions	1300mm L x 1362mm W x 2180mm D		
Weight	2200kg		
Warranty	5 + 5 Years		



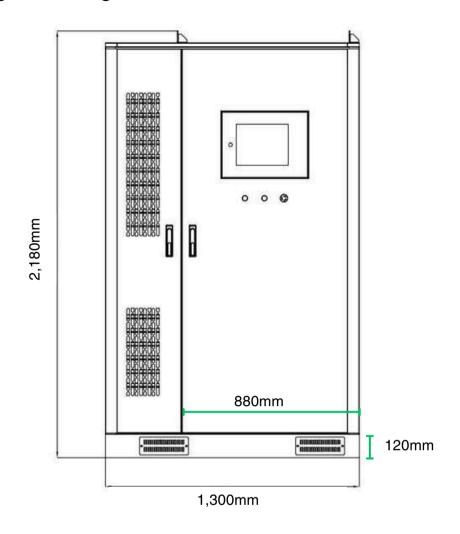
# Escape215-R Installation Information

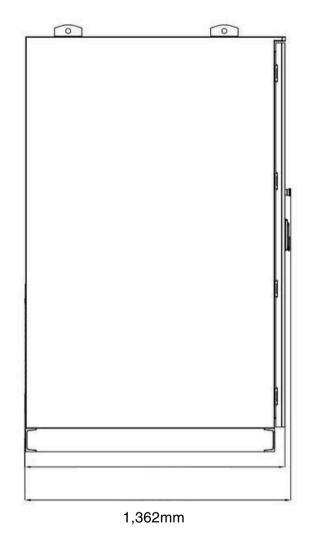
### **External Dimensions**

**Power ⊕** 

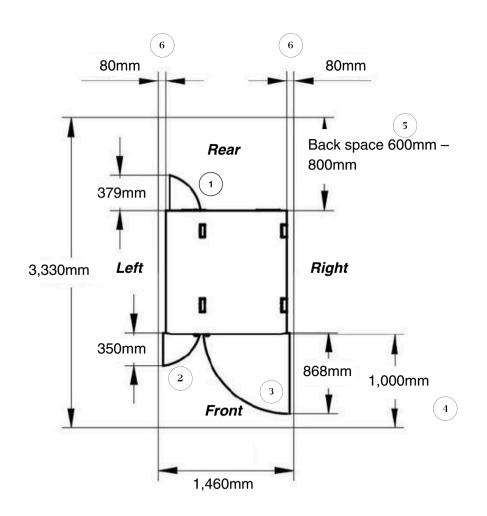
Dimensions: Length 1,300mm x Width 1,362mm x Height 2,180mm (including the lifting hooks)

Weight: 2,200kg





### **Door Dimensions**

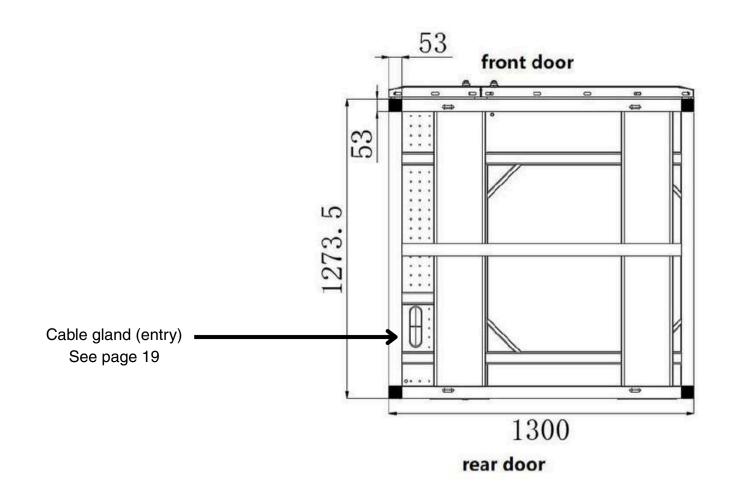


- 1) Small door at the rear (bottom) opening dimension 379mm
- 2) Left side of front door (electrical part) opening dimension 350mm
- 3) Right side of front door (battery part) opening dimension 868mm
- 4) 1 metre of space needs to be reserved from the front of the cabinet
- **5)** 600-800mm of space needs to be reserved from the rear of the cabinet
- **6)** 80mm of space needs to be reserved on the left and ride of the cabinet

## **Base Dimensions (Leg Position)**

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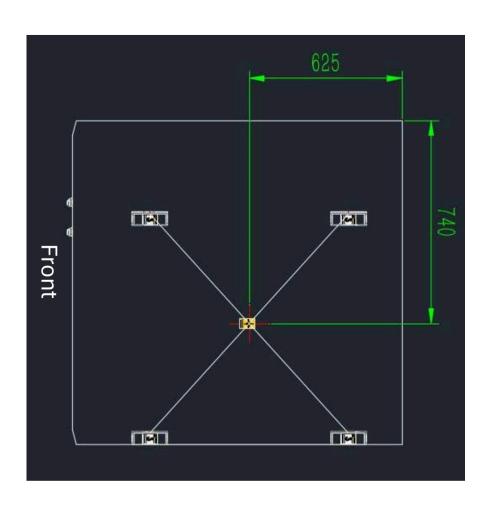
View from underneath



#### **Power ⊕**

## **Top Dimensions**

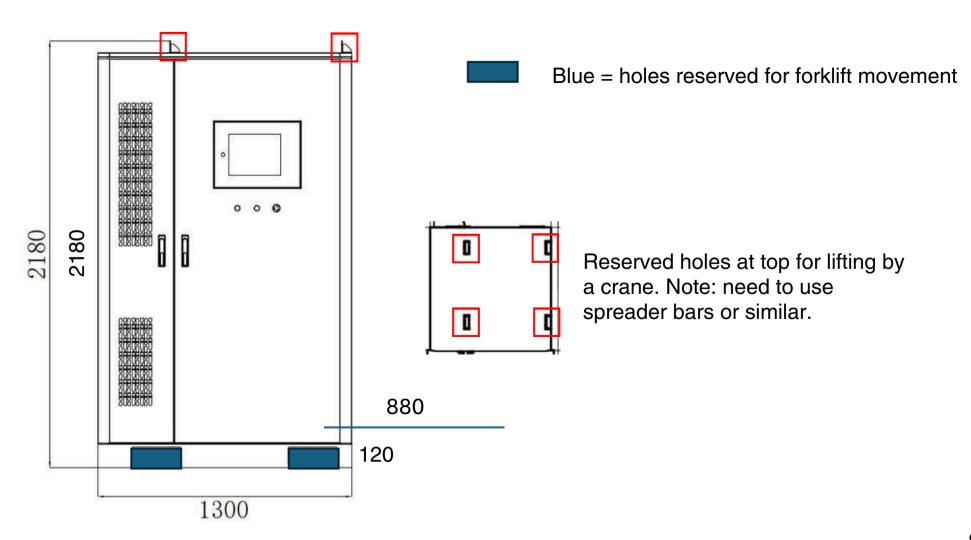
Product Movement: Top Anchor Position by Crane



### **Product Movement**

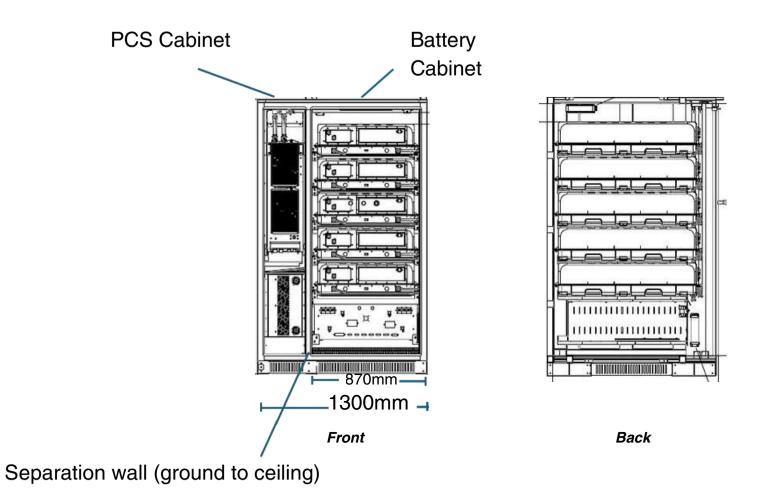
#### **Power ⊕**

Product handling by forklift or crane



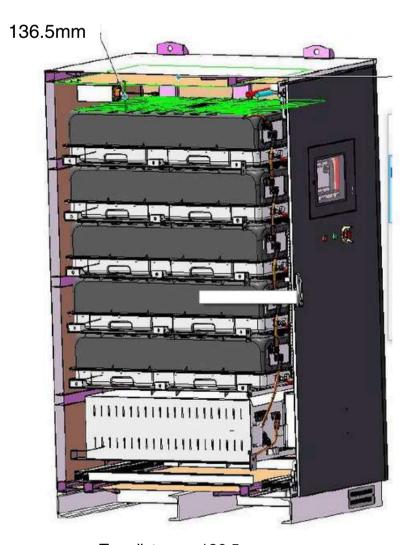
### **Internal Dimension**

#### **Power ⊕**

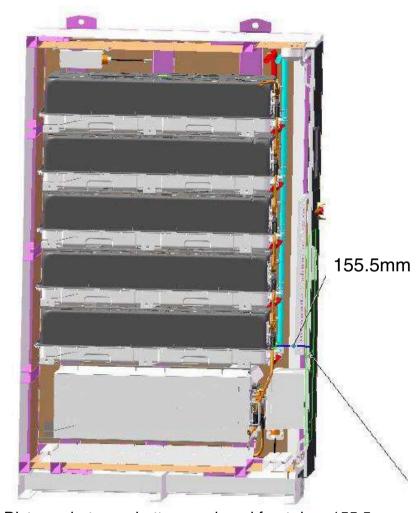


PCS  $W^*H^*D$  480mm × 260mm × 659mm HVAC  $W^*D^*H$  275mm ×1,150mm × 1,040mm Battery Pack  $L^*D^*H$  814mm × 1,100mm × 250mm

### **Internal Dimensions**



Top distance: 136.5mm

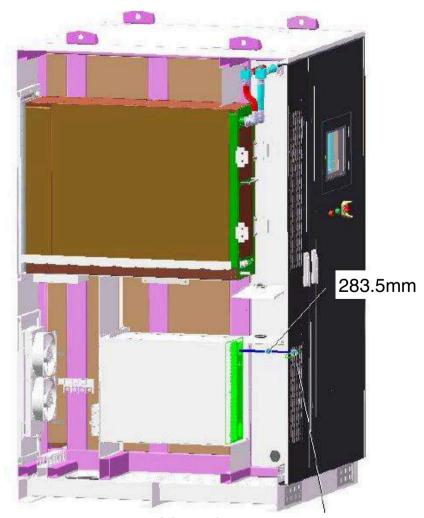


Distance between battery pack and front door:155.5mm

## **Internal Dimensions**



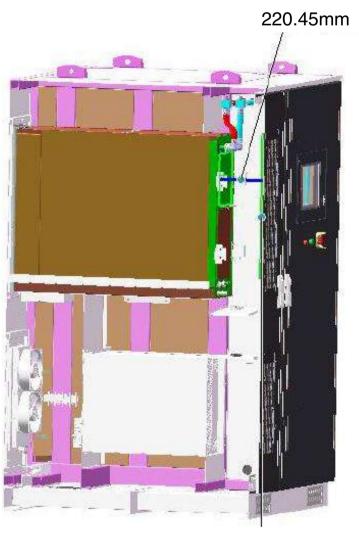
Distance between liquid cooling pipeline and front door: 135.7mm



Distance between PCS and front door: 283.5mm

### **Internal Dimensions**

#### **Power ⊕**

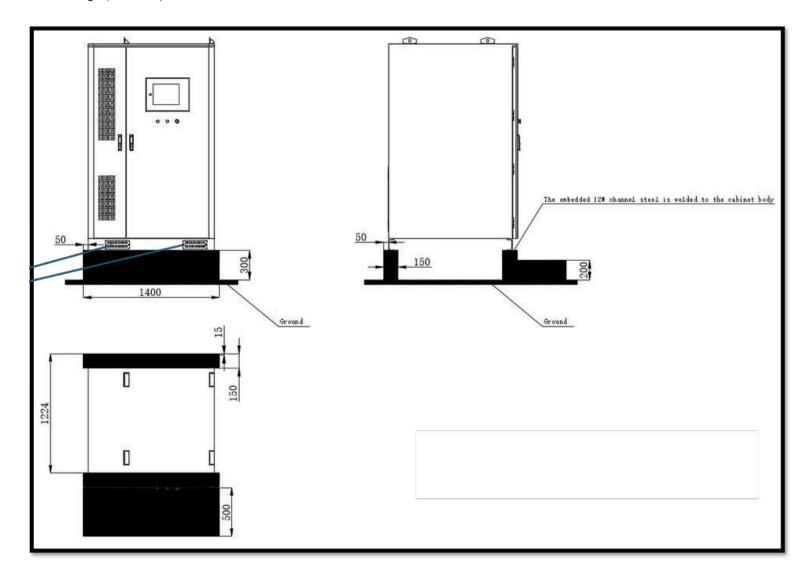


Distance between liquid cooling host and front door: 220.45mm

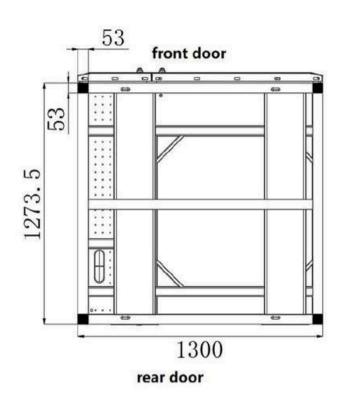
**Power** ⊕

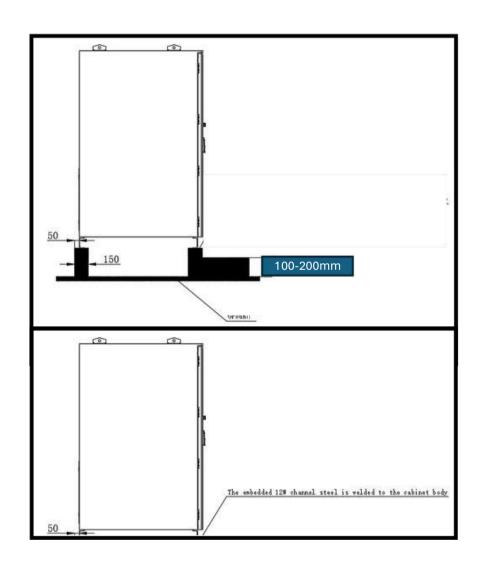
## **Footing**

Suggested concrete footing (25mPa)



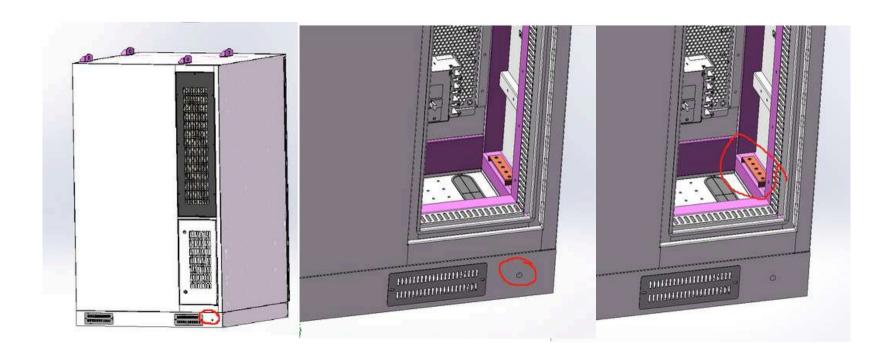
## **Slab and Leg Position**





**Earthing** Power ⊕

Option 1: Grounding through Earth Node

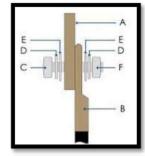


**Earthing** Power ⊕

Option 2: Grounding through Earth Bar



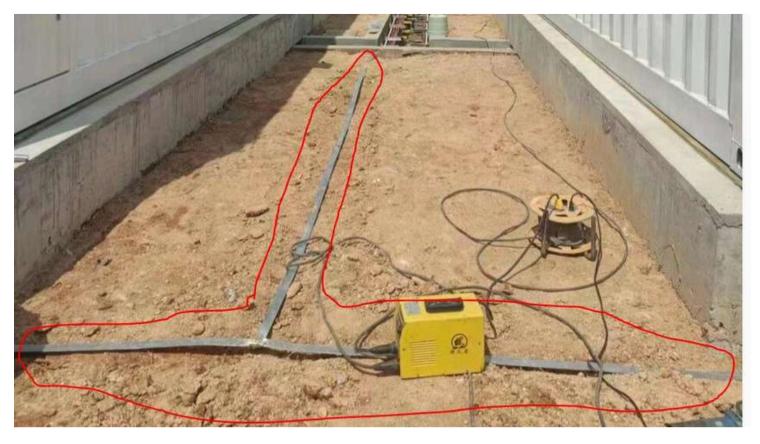




Component	S/No.	Component
Copper Row	D	Spring Pad
Copper Terminal Blocks	Е	Flat Pad
Bolt	F	Nut

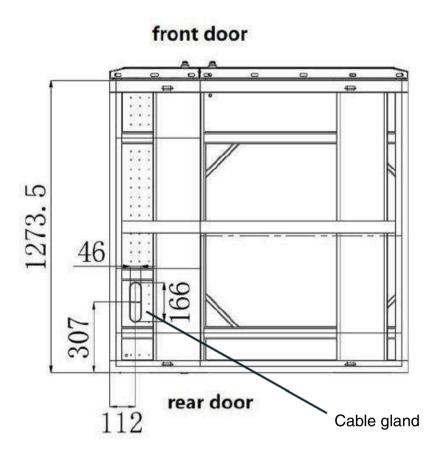
**Earthing** Power ⊕

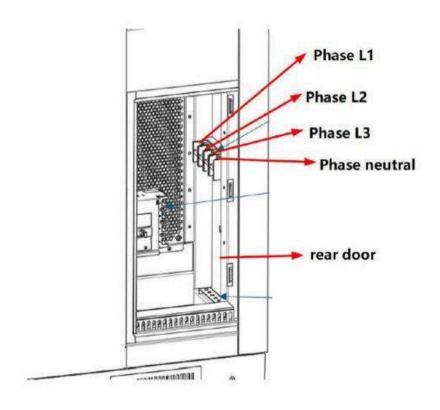
Option 2: Grounding through Earth Bar



Copper net underground if large scale earthing of battery farm

### **Cable Connection Position**





**Cable** Power ⊕

#### Check calculations from relevant Australian standards

- Phase L1: 50mm2
- Phase L2: 50mm2
- Phase L3: 50mm2
- N 25mm2
- PE 25mm2
- Cat 6 (shield) x 2 1 x LAN, 1 x RS485 (Both connect to the EMS (front)



Helping power possibilities.

One system at a time.

#### Renox

PowerPlus Technical Partner

#### Power ⊕

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