

## Product Introduction

### Product Design Feature

- ▶ This series of products can be widely used in enclosed area for climate control, such as wireless communication cabinet, battery cabinet, industry control cabinet etc;

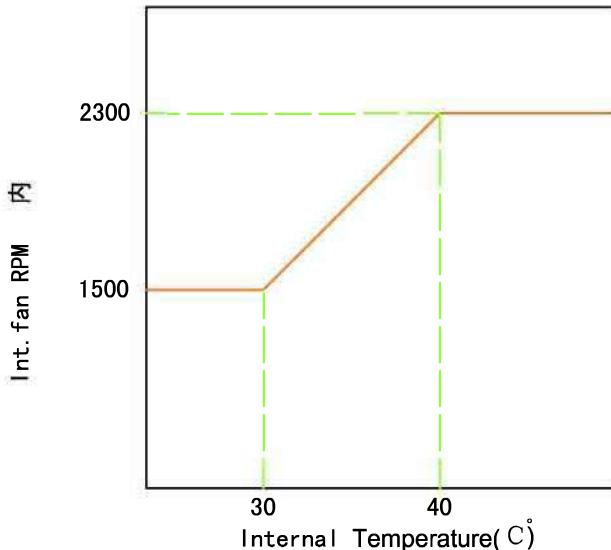
### Product Design Feature

- ▶ Remote measure, remote communication, remote control, which can realize multiple automatic protection and comprehensive self-testing function;
- ▶ Strict process control and international brand parts deployed to ensure high quality and reliable of this product;
- ▶ Multiple self protection design & Interchangeable monitoring software interface RS485 communication(MODBUS protocol);
- ▶ Circulation fans stepless speed regulation function;
- ▶ LED Display, all the settings can changed at the field;
- ▶ The heating function is optional
- ▶ Dry contact alarm output, NO/NC optional;

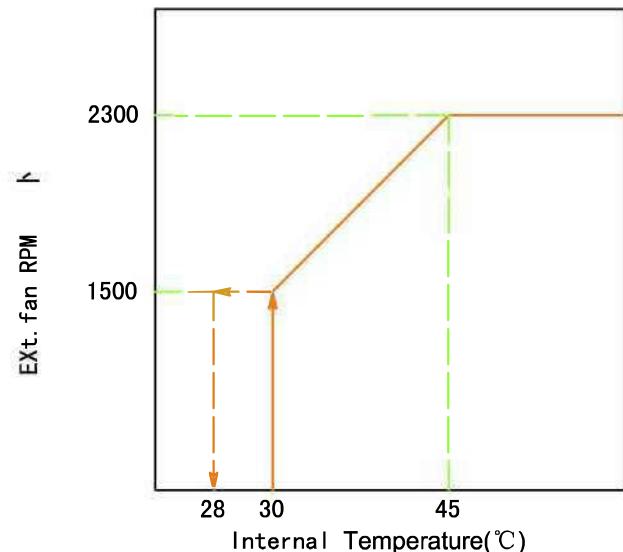
## Technical Parameters

	Name	DC Cabinet Heat-Exchanger	
	Code	1168F	
	Model	HRUC E 180/N/E/D	HRUC E 180/N/E/D/H100
	Mounting Method	Semi-embedded Mounting	
	Power Supply DC	-48V±20%	
	Rated current DC	4.4A	
	Start-up current DC	5.3A	
	Cooling Capacity	180W/K	
	Fans Power Consumption	190W	
	Fans	2* R1G225	
	Internal airflow	950m <sup>3</sup> /h	
	Rated voltage AC	NA	220VAC±20%
	Frequency AC	NA	50~60±3Hz
	Rated current AC	NA	4.5A
	Heater Power	NA	1000W
	Working Temperature Range	-40°C~+65°C	
	Noise Level	55dB~60dB(A)	
	IP Grade	IP55	
	Net Weight	50kg	
	Dimensions	1250*522*240 (mm,HxWxD)	
	CE&RoHS Compliant	YES	
	Surface Treatment	Outdoor type powder coating standard color: RAL7035	

Int.Fan Speed vs. Cabinet inside temperature Curve



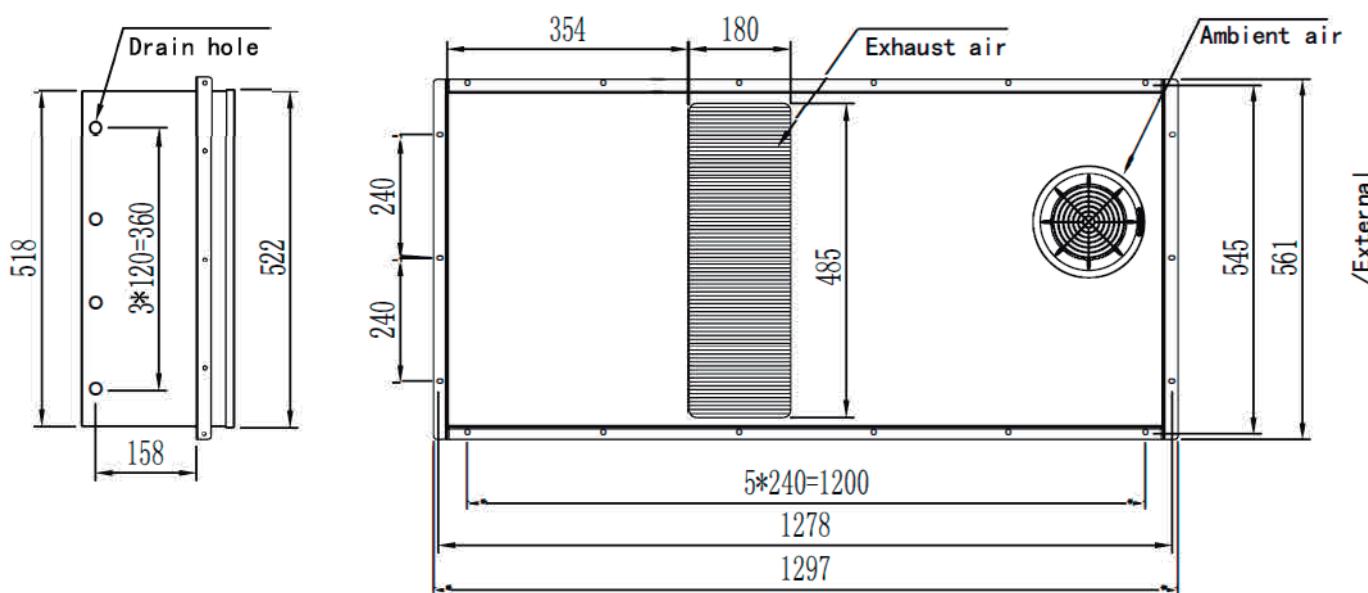
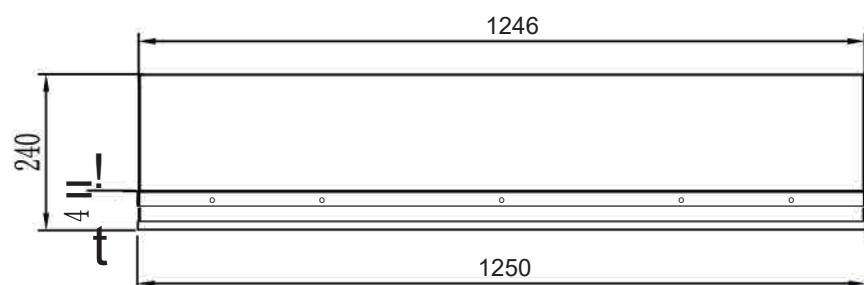
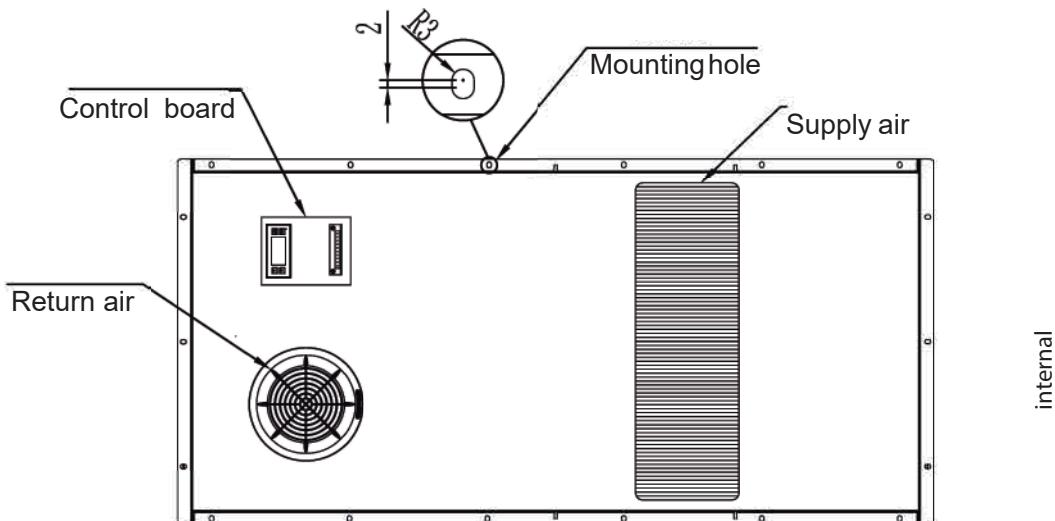
Ext.Fan Speed vs. Cabinet inside temperature Curve



## Product Dimensions

Code	Model	
1168F	HRUC E 180/N /E/D	Semi-embedded Mounting
	HRUC E 180/N/E/D/H100	

### Product Dimensions



## Installation Dimensions

Code	Model	
1168F	HRUC E 180/N /E/D	Semi-embedded Mounting
	HRUC E 180/N/E/D/H100	

### Cabinet's Door Cutting Dimensions

Figure 1-Cabinet Door Cutting Dimension

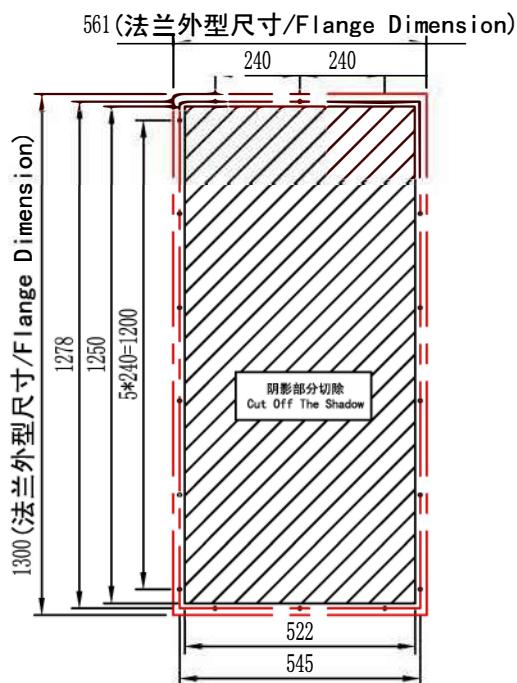


Figure 2-Air open design of cowling

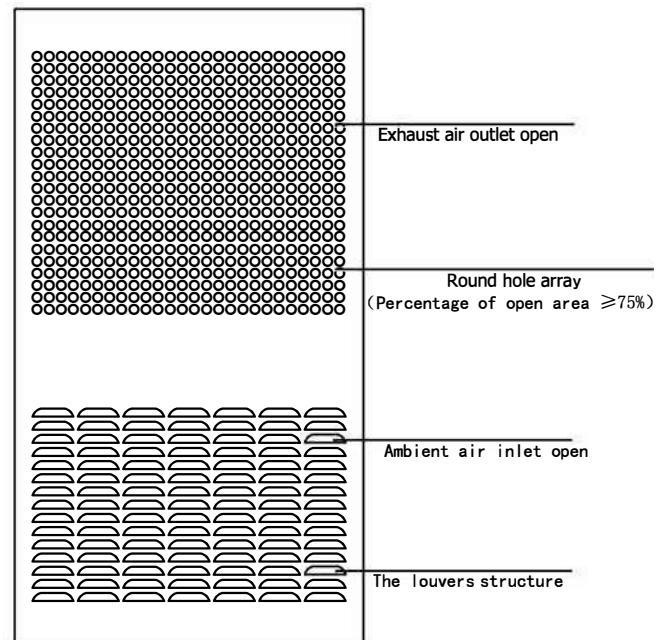
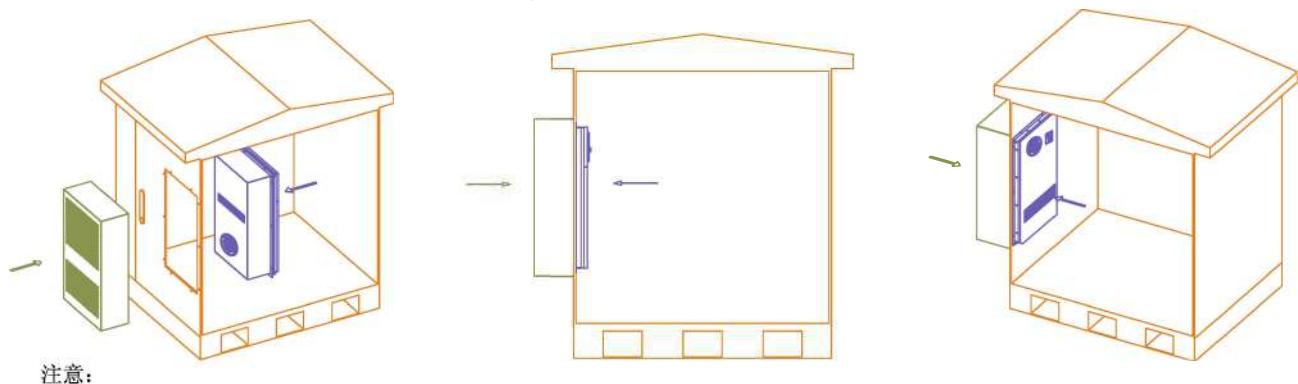


Figure 3-Installation Instruction

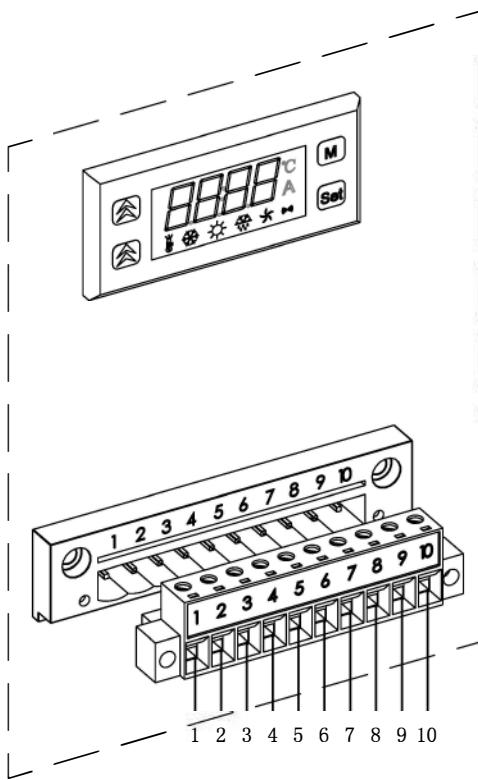


#### Attention:

This series Heat exchanger does not need a cowling, if customer does want to put a cowling outside unit, please follow below rules:

- 1.The cowling can be made by customer self, the design of cowling please refer to figure 2
2. The inlet and outlet open for ambient air in and exhaust air out should be big enough to ensure enough air volume circulation.  
This is very important to the Heat exchanger capacity and less service.
3. When you make a cowling design/installation, make sure the inlet air and outlet air not been short cut, this is also critical to keep unit have best cooling performance.

## Terminal instructions



:  
:  
:  
:  
:

### Instructions of display panel:

The display panel shows cabinet temperature under normal circumstance.  
and shows alarm code when there is a malfunction.

In the bottom is the status bar, different lamp represents different status.

-  : Lamp on when setting mode; Flashing when self diagnosis .
-  : Lamp on when heating exchanger.
-  : Lamp on when heating; Flashing when heater alarm.
-  : Lamp on when external fan is running; Flashing when ext. fan.
-  : Flashing when alarm.

No.	Symbol	Definition	描述 / Description
1	0V	Positive electrode of DC power	/
2	-48V	Negative electrode of DC power	/
3	PE	Ground wire of power	/
4	N	Neutral line of AC power	Use with heater
5	L	Live line of AC power	Use with heater
6	NO	Dry contact alarm output-NO	/
7	COM	Dry contact alarm output-COM	/
8	NC	Dry contact alarm output-NC	/
9	RS485 +	Communication interface	/
10	RS485 -	Communication interface	

