



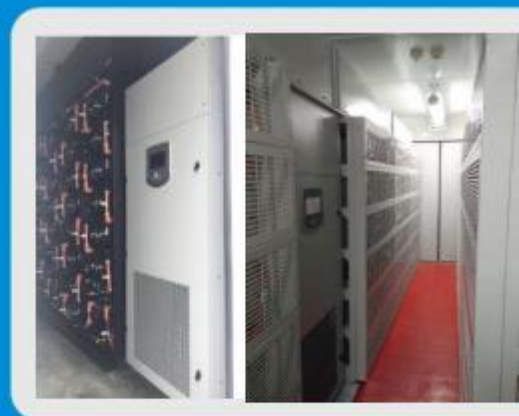
# Compression refrigerating integrated Air Conditioner Introduction

**MODEL:MC90HDNC1U**

**Shenzhen Envicool Technology Co., Ltd.**

**Professional · Value · Trust**

*Through constant accumulation and continuous efforts, Envicool is committed to becoming a world-class enterprise in the field of professional precision environmental control*



### Envicool MC Series Air Conditioner

Envicool is a professional thermal control solutions provider, committed to providing solutions for cloud computing data centers, communication networks, IoT infrastructure and various professional environmental control fields. The MC series energy storage air conditioner is an integrated frequency conversion air conditioner, which can be widely used in energy storage container, small data center, etc. The integrated design of indoor and outdoor units reduces installation costs for users. The indoor installation method allows users to directly support the output without installation at the application site, with good appearance and anti-theft function.

The system consists of six parts: internal circulation fan, external circulation fan, compressor, evaporator, condenser and control module.

Envicool also has many other series of products, which are widely used in Telecom, IoT, Smart Grid, Rail Transit, Finance, Medical Care, EV bus/car and other industries.

You can search for more information on our website: [www.envicool.net](http://www.envicool.net)



### MC90HDNC1U

MC90HDNC1U is a compact, high efficient AC powered air conditioner.

The design is optimized for applications with limited space available, but where functionality and performance still cannot be compromised.

- AC power input: 220V 50/60Hz
- 10.2kW cooling capacity @L35/L35 50Hz, 3kW heating capacity as standard
- Door mounted - easy integration in energy storage applications
- Wide working temperature range: -30°C to +55 °C

### BENEFITS

- Using inverter compressor technology, high efficiency and energy saving
- Professional humidity design, control relative humidity
- Fan speed regulation function as standard, saving energy and low noise
  - Self-start when power restart and provide varieties of alarm reports and protection
- Lifetime >10 years - minimum maintenance
- Environmentally friendly - R134a and RoHS compliant
- Dedicated design by delay start
- RS485 for remote control

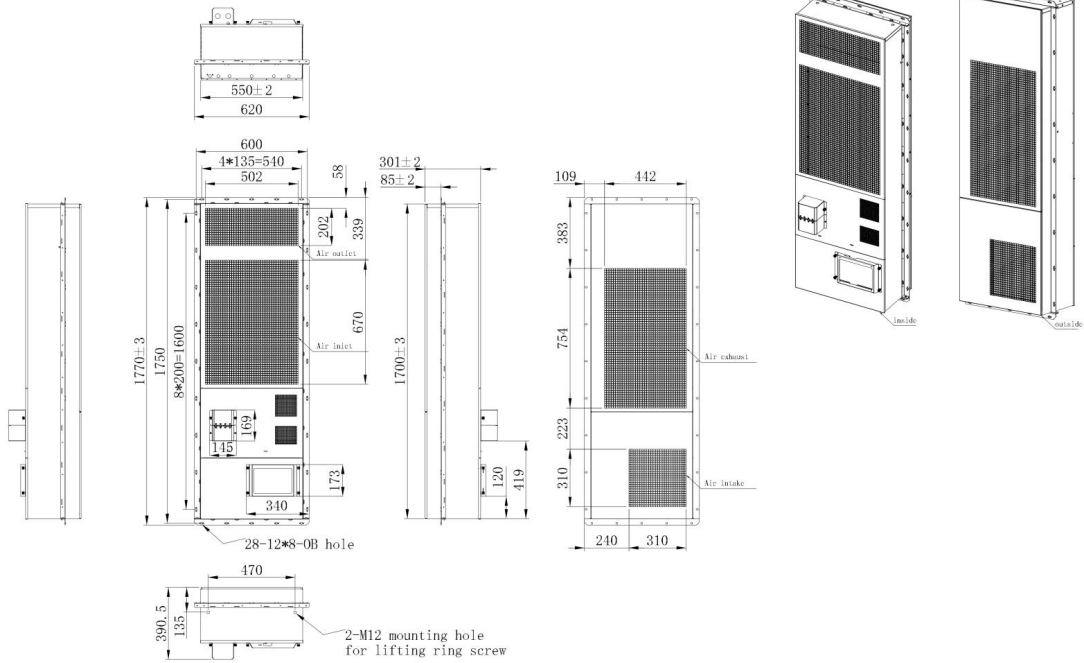
### APPLICATION

- Energy Storage Container
- Power Station
- Small Data Center
- Power prefabricated cabinet

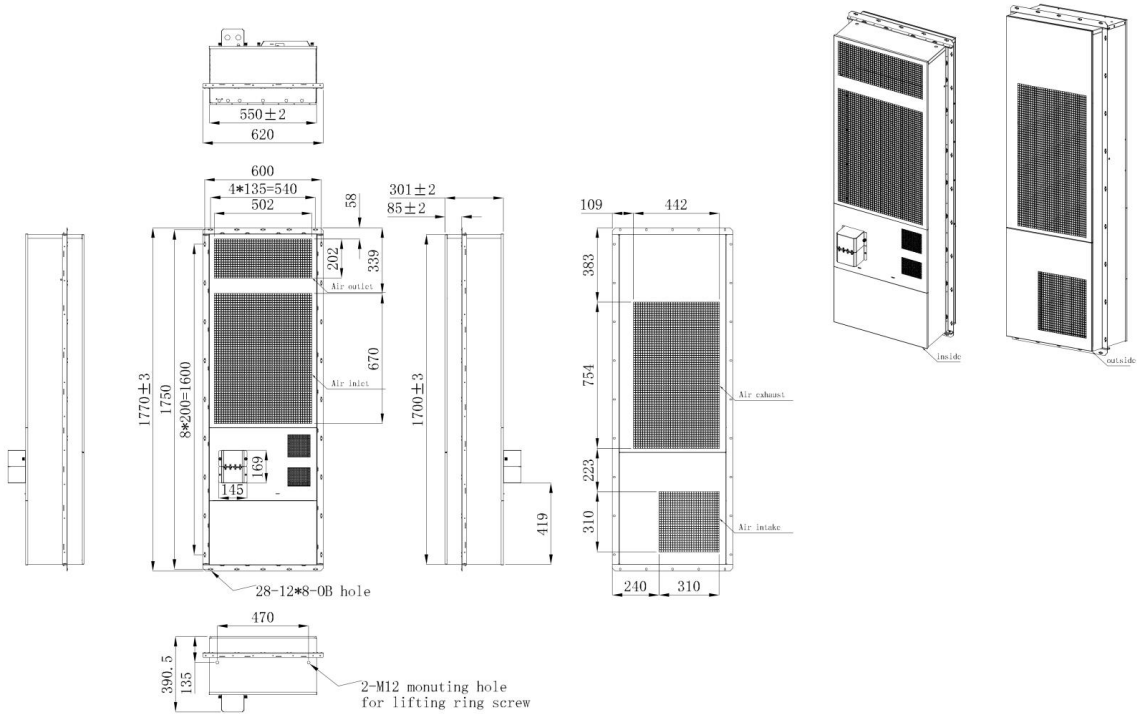
## Data Sheet

Parameter	Model	MC90HDNC1U
<b>Dimensions, Weight &amp; Mount</b>		
External Dimensions (H x W x D) With Flange	mm	1770×620×300
Weight	kg	125
Mounting Method		Door Mounted
Application		Outdoor
<b>Environmental Protection &amp; Performance</b>		
Working Ambient Temperature Range	°C	-30 ~ +55
IP Protection		IP55
Noise Level (ISO 3744)	dB(A)	77
Refrigerant		R134a
RoHS Compliant		Yes
CE&UL		Yes
Color		RAL7035
Display screen		YES(Optional)
<b>Cooling/Heating Capacity</b>		
Total Cooling Capacity@L35/L35 50Hz	W	10200
Heating Capacity	W	3000
Internal Circulation Air Volume	m <sup>3</sup> /h	2900
<b>Power Consumption</b>		
Consumption Power@L35/L35	W	4100
Heating Power (PTC)	W	4000
Current@L35/L35	A	19.5
<b>Power Supply</b>		
Power Supply Range	V, Hz	220±15%,50/60
Max. Current	A	35

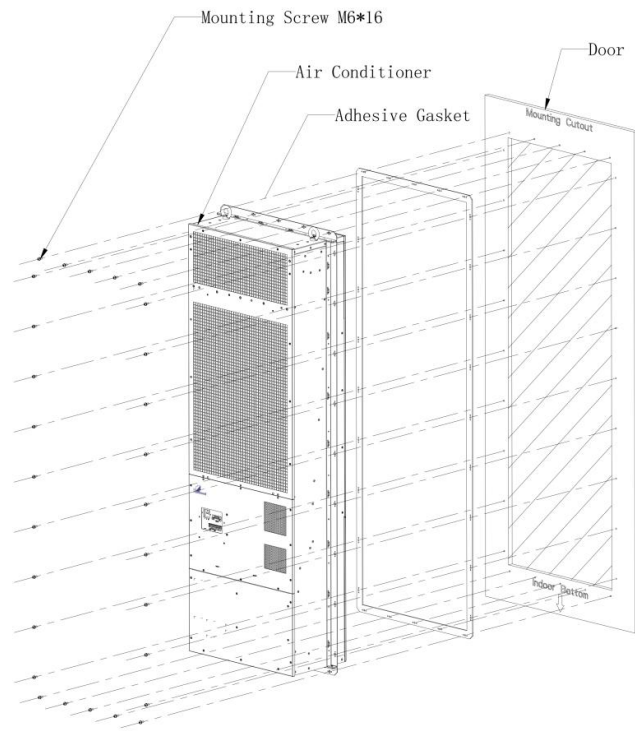
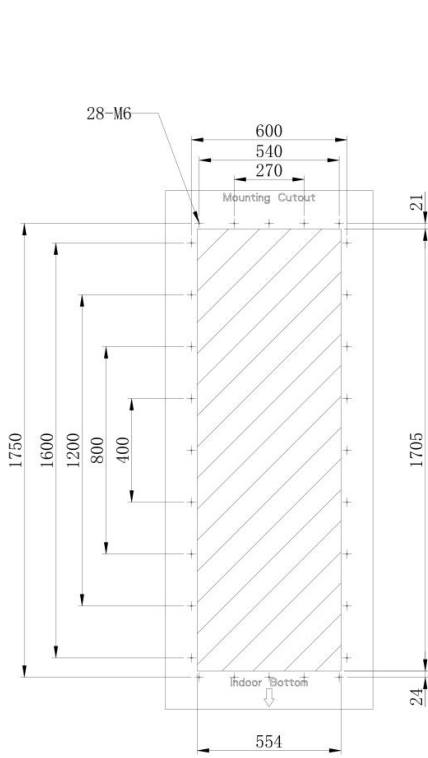
Dimension (monitor) :



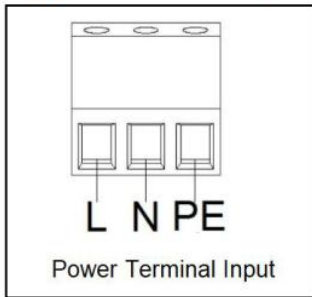
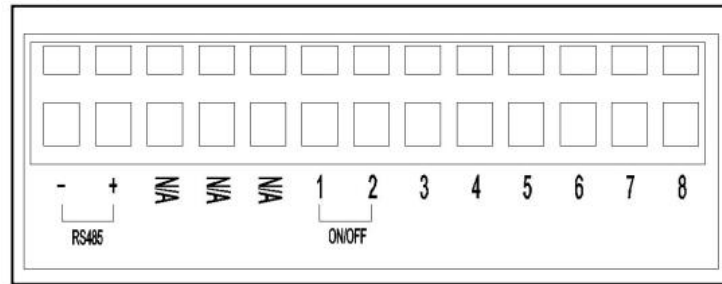
Dimension (without a monitor) :



## Installation Dimension



## Elementary diagram

**Figure 3-4 Power cord interfaces**

**Figure 3-5 Communication interfaces**


## Terminal definition

Type	Terminal	Definition	Description
Power supply	L	Single-phase power supply L (L1)	The recommended power cord specification is 3×10AWG ,and only copper cables can be used.
	N	Single-phase power supply L (L2)	
	PE	Grounding protection PE	
communication	RS485-	RS485 -	Host computer monitoring interfaces,recommended to use 2×0.5mm <sup>2</sup> twisted-pair shielded network cables.
	RS485+	RS485 +	
	N/A	-	-
	N/A	-	
	N/A	-	
	1	Remote control switch pin -	Recommended to use 2×0.5mm <sup>2</sup> twisted-pair shielded network cables.
	2	Remote control switch pin +	
	3	-	-
	4	-	
	5	-	
	6	-	
7	-		
8	-		

Note:

1. Envicool reserves the right to change specification content due to product upgrades without prior notice. For details, please consult Envicool sales staff.
2. Variations in appearance, color, labeling, and model numbering among certain components of this product provided by different suppliers do not affect product performance, reliability, and warranty coverage.