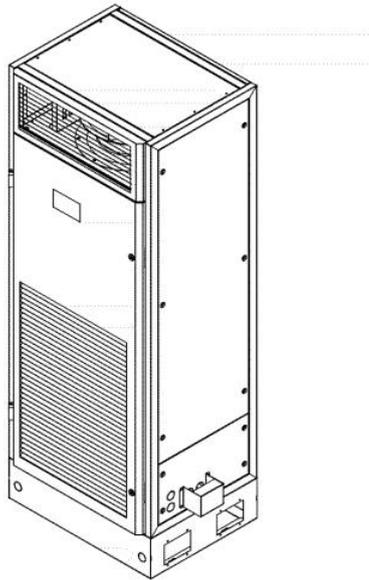




## 5.5RT data center air conditioner



|  |
|--|
| <b>Data center Air Conditioner</b>   |
| <b>CY-A08NA</b>  |
| <b>Changzhou Chen Tong Yuan Communication Equipment Co.,Ltd</b>  |
| <b>Please read the data sheet carefully before application, and contact us for further technical information</b> |
| <b>Email:info@cytech.org.cn</b>  |
|  |

## Introduction

In the dynamic landscape of modern technology, data centers serve as the beating heart of our interconnected world. These facilities house an extensive network of servers and electronic equipment, generating substantial heat as they process and store vast amounts of data. Managing this heat is critical to ensure the reliable and efficient operation of the equipment, and this is where data center air conditioners come into play.

## Refrigeration system

- ◆ system composition : The data center air conditioner consists of main components such as compressors, condensers, evaporators, electrical control systems, expansion valves, and fans.
- ◆ refrigeration principle:

The compressor sucks in gaseous refrigerant from the evaporator and compresses it into a high temperature and high pressure state before discharging it into the condenser. The refrigerant releases heat in the condenser and is cooled into a high-pressure liquid, which is throttled by the expansion valve to form a low-temperature and low-pressure refrigerant and enters the evaporator. The refrigerant absorbs heat in the evaporator and is converted into a gaseous state, which is then sucked in by the compressor. So repeated, the refrigeration cycle.

The condenser and evaporator are each equipped with circulating fans to enhance air convection and enhance heat transfer efficiency. Among them, the heat exchange between the condenser and the air is carried out outside the machine room, while the heat exchange between the evaporator and the air is circulated inside the enclosed machine room.

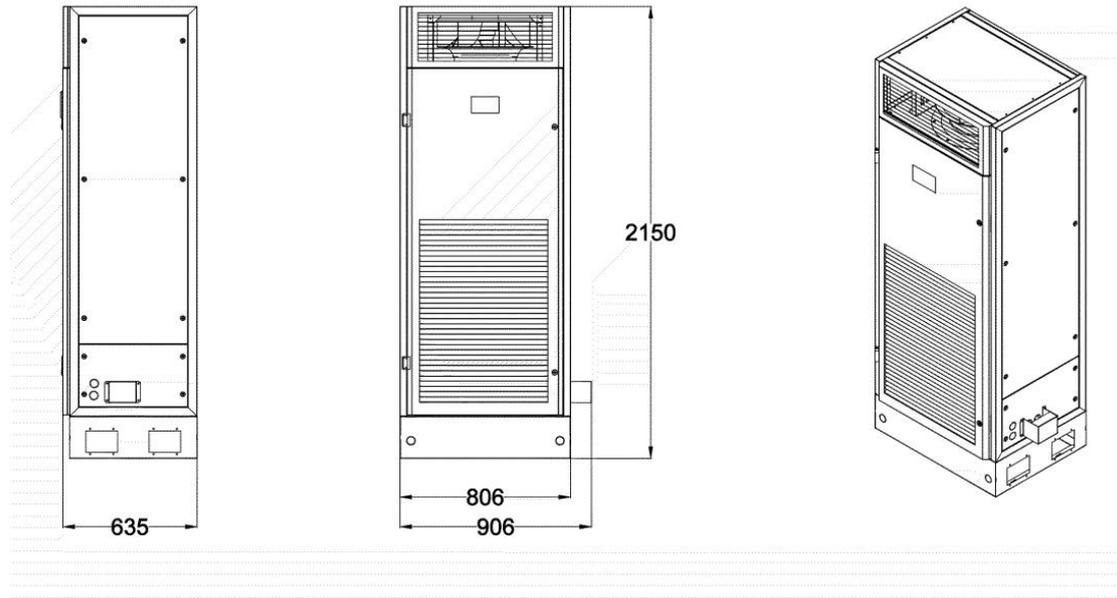
The electrical control system mainly monitors the temperature inside the cooled computer room and controls the cooling cycle through temperature setting requirements.

## Parameters of data center air conditioner

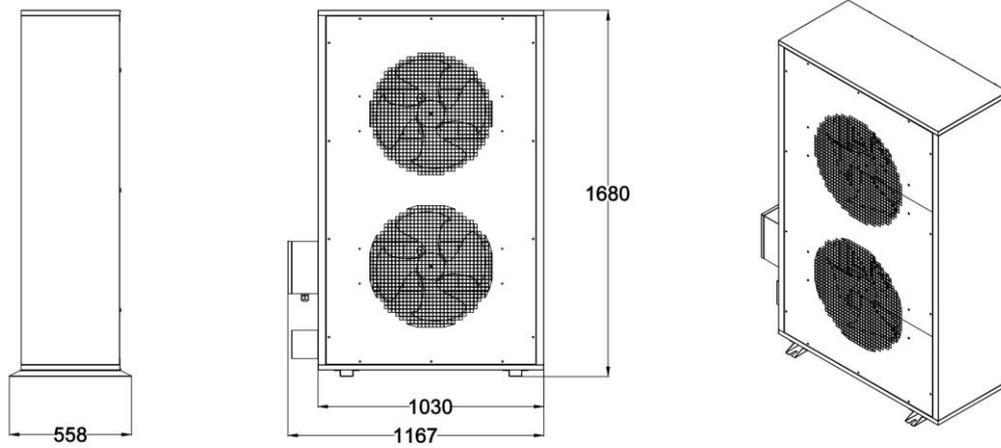
|                                 |                             |
|---------------------------------|-----------------------------|
| Product Name                    | Data center air conditioner |
| Model                           | CY-A08NA                    |
| Rated voltage                   | 3 Phase AC 380V±15%         |
| Rated Frequency                 | 50HZ ± 2%                   |
| Cooling capacity                | 20KW                        |
| Power consumption               | 6.5KW                       |
| Internal circulation air volume | 6200m <sup>3</sup> /h       |
| Refrigerant                     | R407C                       |

## Equipment Outline Drawing

Inner unit:



Outer unit:



# Electrical wiring diagram

