

RADIATION HEAT DISSIPATION AND RADIATION HEAT COLLECTION- BASED COLD AND HOT CENTRAL AIR CONDITIONING SYSTEM

ABSTRACT

A radiation heat dissipation and radiation heat collection-based cold and hot central air conditioning system, comprising a compressor (3), a liquid storage device (4), an indoor unit (1) and an outdoor unit (2) connected in sequence, wherein the outdoor unit (2) comprises a radiation heat collector (20); the radiation heat collector (20) comprises a protective plate (200), a heat absorption plate (201), and a plate core (202); the heat absorption plate (201) is located between the plate core (202) and the protective plate (200); the plate core (202) comprises a heat exchange medium inlet end (204) and a heat exchange medium outlet end (205); and the heat absorption plate (201) is used for transferring absorbed heat to a heat exchange medium circulating in the plate core (202). The heat absorption plate (201) collects heat, and then transfers the heat to the heat exchange medium flowing in the plate core (202); and the heat exchange medium carrying the heat is compressed by the compressor (3), and then enters the indoor unit (1) for heat exchange. As long as the radiation heat collector (20) is equipped with light of the corresponding wavelength and a temperature difference, the radiation heat collector (20) can collect heat by means of optical radiation or temperature difference radiation.

[Fig. 1]