

ABSTRACT

Radiant Air Conditioning System for Heat-Producing Device

The present invention provides a radiant air conditioning system for a heat-producing device
5 (1), comprising a compressor (4), a condenser (5), an expansion valve (6), and at least one radiant
panel evaporator (2) which are connected through a connecting pipe to form a recycling refrigerant
loop, wherein each of the radiant panel evaporators comprises a refrigerant pipe (22) and a radiant
panel (21) which exchanges heat with the refrigerant pipe (22). The radiant air conditioning system
further comprises at least one heat transfer plate (3), configured to perform radiant heat transfer
10 with the heat-producing device (1) and transmit an amount of absorbed heat to the radiant panel
(21). The present invention improves heat transfer effect between the radiant panel (21) and the
heat-producing device (1), and is particularly suitable for cooling a plurality of densely distributed
heat-producing devices (1).