

**ABSTRACT****HUMIDITY CONTROLLER APPARATUS**

A humidity controller apparatus (10) includes a refrigerant circuit provided with first and second heat exchangers (61, 62). An adsorbent is supported on the surface of each of the first and second heat exchangers (61, 62). The refrigerant circuit is configured to allow for switching of the circulation direction of a refrigerant by operation of a four-way selector valve. In addition, in the humidity controller apparatus (10), a switching mechanism (50) switches the distribution routes of air streams. The humidity controller apparatus (10) operates the four-way selector valve and the switching mechanism (50), whereby a first air stream is dehumidified in the heat exchanger (61) or (62), whichever is acting as an evaporator while, on the other hand, a second air stream is humidified in the heat exchanger (61) or (62), whichever is acting as a condenser. In the humidity controller apparatus (10), the operation of the refrigerant circuit and the switching time interval of the air stream distribution routes are set depending on the load of humidity control. As the humidity control load increases, the switching time interval is set smaller.