

WHAT IS CLAIMED IS:

1. A refrigerant circulation apparatus comprising:
 - an evaporator configured to evaporate a refrigerant;
 - a blowing device configured to blow air to the evaporator;
 - a condenser configured to condense the refrigerant evaporated by the evaporator;
 - a refrigerant liquid pipe and a refrigerant gas pipe which connect the evaporator and the condenser;
 - a blower failure detecting device configured to detect failure of the blowing device;
 - a heat medium flow rate control valve configured to control a flow rate of a heat medium supplied to the condenser, the heat medium for cooling the refrigerant;
 - a condenser refrigerant liquid temperature sensor configured to detect a temperature of the refrigerant which is supplied to the evaporator from the condenser; and
 - a condenser side refrigerant temperature control device configured to lower a setting temperature of a condenser side externally inputted temperature and control the heat medium flow rate control valve so that a measured value measured by the condenser refrigerant liquid temperature sensor becomes equal to the lowered setting temperature, when receiving a failure signal from the blower failure detecting device; and.
2. ~~The refrigerant circulation apparatus according to claim 1, further comprising~~
 - a condenser side control temperature calculating device configured to calculate a necessary condenser side control temperature based on a number of failed blowers and a cooling performance table which is set in advance when the failure signal is outputted from the blower failure detecting device, wherein:
 - the blowing device includes a plurality of blowers; and
 - the condenser side refrigerant temperature control device lowers the setting temperature of the condenser side externally inputted temperature to the calculated necessary condenser side control temperature and controls the heat medium flow rate control valve so that the measured value measured by the condenser refrigerant temperature sensor becomes equal to the lowered setting temperature.

32. The refrigerant circulation apparatus according to claim 12, further comprising an evaporator internal pressure sensor configured to measure an internal pressure in the evaporator, wherein:

when the failure signal is outputted from the blower failure detecting device, the condenser side control temperature calculating device calculates a necessary condenser side control temperature based on the number of failed blowers, the measured value of the evaporator internal pressure sensor and the cooling performance table which is set in advance; and

the condenser side refrigerant temperature control device lowers the setting temperature of the condenser side externally inputted temperature to the calculated necessary condenser side control temperature and controls the heat medium flow rate control valve so that the measured value measured by the condenser refrigerant liquid temperature sensor becomes equal to the lowered setting temperature.

43. The refrigerant circulation apparatus according to claim 12 or 23, further comprising an indoor dew-point temperature sensor configured to detect an indoor dew-point temperature, wherein:

when the failure signal is outputted from the blower failure detecting device, the condenser side control temperature calculating device calculates a necessary condenser side control temperature based on the number of failed blowers and the cooling performance table which is set in advance; and

the condenser side refrigerant temperature control device updates the setting temperature of the condenser side externally inputted temperature to the calculated necessary condenser side control temperature when the calculated necessary condenser side control temperature is not less than an indoor dew-point temperature, or

the condenser side refrigerant temperature control device lowers the setting temperature to the indoor dew-point temperature and controls the heat medium flow rate control valve so that measured value measured by the condenser refrigerant liquid temperature sensor becomes equal to the lowered setting temperature when the calculated necessary condenser side control temperature is not more than the indoor dew-point temperature.