CLAIMS

1. An air-conditioning system comprising:

a temperature control unit (11) configured to control an indoor temperature;

a humidity control unit (12) configured to control an indoor humidity; and

a control unit (13) configured to control the temperature control unit and the humidity control unit so that the indoor temperature approaches a target temperature and the indoor humidity approaches a target humidity,

the control unit (13) being configured to perform an operation in a first mode where the target humidity is increased while keeping the target temperature, and a second operation where the target temperature is increased, and the target humidity is decreased, in this order at least once each.

2. The air-conditioning system of claim 1, wherein

the control unit (13) performs the first operation where the target humidity is stepwise increased once or multiple times.

3. The air-conditioning system of claim 1 or 2, wherein

a target humidity at start of the operation in the first mode is set in a predetermined range determined so that a skin moisture content of the person (40) in the target room is in a suitable range.

4. The air-conditioning system of any one of claims 1 to 3, wherein

a target humidity at start of the operation in the first mode is set to be equal to or lower than a predetermined upper limit at which growth of mold is avoided.

5. The air-conditioning system of any one of claims 1 to 4, wherein

the control unit (13) includes an estimator (31) configured to estimate a comfortable indoor temperature at which the person (40) in the target room feels comfortable, and

the target temperature is the comfortable indoor temperature estimated by the estimator (31).

6. The air-conditioning system of claim 5, further comprising:

an outdoor air temperature detector (26) configured to detect an outdoor air temperature; and

a storage (32) storing relationship information (33) indicating a relationship between the comfortable temperature and the outdoor air temperature, wherein

the control unit (13) estimates the comfortable temperature based on the outdoor air temperature detected using the outdoor air temperature detector (26) by using the relationship information (33) stored in the storage (32).

7. The air-conditioning system of claim 5, wherein

the estimator (31) estimates the comfortable temperature from a learned model trained on a parameter for environment information including at least one of an indoor temperature, an indoor humidity, an indoor illuminance, an outdoor temperature, or an outdoor humidity, and a parameter for thermal sensation of the person in the target room.

8. The air-conditioning system of any one of claims 1 to 7, further comprising:

a ventilation unit (14) configured to ventilate indoor air; and

a carbon dioxide level detector (23) configured to detect a carbon dioxide level in the target room, wherein

the control unit (13) operates the ventilation unit (14) when the carbon dioxide level detected using the carbon dioxide level detector (23) is equal to or higher than a predetermined level.

9. The air-conditioning system of any one of claims 1 to 8, further comprising:

a controller (15) having a function to start the operation in the first mode.

10. The air-conditioning system of any one of claims 1 to 9, further comprising:

an activity detector (24) configured to detect an activity amount of the person (40) in the target room, wherein

when the activity amount of the person (40) in the target room detected using the activity detector (24) is equal to or lower than a predetermined level, the control unit (13) starts the operation in the first mode.

11. The air-conditioning system of any one of claims 1 to 9, further comprising:

an activity detector (24) configured to detect an activity amount of the person (40) in the target room, wherein

when the activity amount of the person (40) in the target room detected using the activity detector (24) is equal to or higher than a predetermined level during the operation in the first mode, the control unit (13) stops the operation in the first mode.