Claims

1. An air compression device comprising:

a compressor unit,

a housing housing the compressor unit, and having an inflow port for allowing air to flow into an inside of the housing; and

a fan device unit having a side surface, an impeller arranged inside the side surface, an inlet port being formed with an opening at one end on the side surface, and an outlet port being formed with an opening at the other end on the side surface, wherein the inlet port sucks air flowing into the housing through the inflow port and sends out the air sucked through the inlet port toward the compressor unit through the outlet port which faces the compressor unit, and

an inflow guide portion arranged between the inflow port and the inlet port, and forming a passage between the side surface of the fan device unit and the inflow guide portion, the air flowing into the passage flows in the opposite direction to the air flow from the inlet port to the outlet port of the fan device unit.

2. The air compression device according to claim 1, wherein the inflow guide portion is arranged to face the side surface of the fan device unit so as to cause air to be sucked into the inlet port from the side surface.

3. The air compression device according to claim 2, wherein the inflow guide portion has a side portion which faces the side surface of the fan device unit and a facing portion which faces the inlet port of the fan device unit.

4. The air compression device according to any one of claims 1 to 3, further comprising a panel member provided so as to be able to open or close an opening formed in the housing, the opening being for maintenance of the inside of the housing,

wherein the inflow guide portion is configured integrally with the panel member.

5. The air compression device according to claim 4, wherein the fan device unit is attached to the panel member.

6. The air compression device according to any one of claims 1 to 5, wherein the inflow port and the fan device unit are arranged such that the inflow port is in a position spaced from the fan device unit in a vertical direction.

7. The air compression device according to claim 1, wherein the inlet port of the fan device unit is at an outer than a front portion of the housing which is formed with the inflow port.

8. The air compression device according to any one of claims 2 to 7, further comprising a sound-absorbing member attached to the inflow guide portion.

9. The air compression device according to claim 8, wherein the sound-absorbing member is provided at least between an upper portion of the housing and the fan device unit.

10. The air compression device according to any one of claims 1 to 9, further comprising an adaptor unit having a through hole which leads air sent through an outlet port of the fan device unit to the compressor unit,

wherein the through hole of the adaptor unit has a shape corresponding to a shape of the outlet port on the fan device unit side and has a shape corresponding to an outer shape of the compressor unit on the compressor unit side.

11. The air compression device according to any one of claims 1 to 10, further comprising a motor unit having a motor main body and a motor fan, the motor main body being for driving the compressor unit, the motor fan being attached on the same axis as that of the motor main body and generating an air flow according to drive of the motor main body.

12. The air compression device according to any one of claims 1 to 11, wherein the housing has an outflow port which allows air in the housing to flow out, the air compression device further comprising:

an outflow guide portion provided so as to bend, toward the outflow port, a direction of a flow of air flowing on the side opposite to the fan device unit with respect to the compressor unit.