WHAT IS CLAIMED IS:

1. A compressor, comprising:

a shell, constructing a cavity;

a compression assembly, wherein one part of the compression assembly is fixedly connected with the shell and located in the cavity, and the cavity is divided into a first cavity and a second cavity by the compression assembly;

a motor, wherein one part of the motor is arranged in the first cavity, and the part of the shell located below a central axis of the motor is a first shell, wherein the motor comprises:

a crankshaft, wherein a first end of the crankshaft is located in the first cavity, and a second end of the crankshaft is connected with the compression assembly;

a rotor, sleeved on the first end of the crankshaft; and

a stator, sleeved on an outer-side wall of the rotor, wherein an interval is formed between at least a part of an outer-side wall of the stator and an inner-side wall of the shell;

an oil sump, being arranged in the second cavity; and

an oil return channel, being arranged in the compression assembly, and configured to communicate the first cavity and the second cavity,

wherein the oil return channel is provided with an oil inlet facing the first cavity, and the oil inlet has a dividing line parallel to a horizontal plane where the central axis of the motor is located,

a distance between the dividing line and an inner-side wall of the first shell is a first relative distance,

the first relative distance is greater than 0mm and less than or equal to 12% of an inner diameter of the shell,

the oil inlet comprises an oil through area which is located at one side of the dividing line departing from the central axis of the motor,

a sectional area of the interval on a cross section of the crankshaft is a first sectional area, a sectional area of the oil return channel on a cross section of the crankshaft is a second sectional area, and the second sectional area is less than or equal to 30% of the first sectional area.

2. The compressor according to claim 1, wherein,

an area of the oil through area is greater than or equal to 90% of an area of the oil inlet and less than or equal to the area of the oil inlet.

3. The compressor according to claim 1, wherein,

the first relative distance is greater than 0mm and less than or equal to 10mm.

4. The compressor according to claim 1, wherein,

the first relative distance is greater than 0mm and less than or equal to 7mm.

5. The compressor according to claim 1, wherein,

the oil inlet has an apex away from a horizontal plane where the central axis of the motor is located, a distance between the apex and the inner-side wall of the first shell is a second relative distance, and the second relative distance is greater than or equal to 0mm and less than or equal to 3mm.

6. The compressor according to claim 5, wherein,

a part of the compression assembly is concaved towards a direction close to the central axis of the motor, so as to form the oil return channel.

7. The compressor according to claim 1, wherein,

the number of the intervals is at least two, and the first sectional area is a sum of the sectional areas of the at least two intervals,

the number of the oil return channels is at least two, and the second sectional area is a sum of the sectional areas of the at least two oil return channels.

8. The compressor according to any one of claims 1 to 7, wherein,

the compression assembly comprises:

an air cylinder; and

a main bearing, provided at a side of the air cylinder facing the motor, wherein a part of the motor penetrates the main bearing and connects the air cylinder,

wherein one of the main bearing and the air cylinder, which is fixedly connected with the shell, is a fastener, and the oil return channel is provided on the fastener.

9. The compressor according to any one of claims 1 to 8, wherein,

the compressor further comprises:

an exhaust pipe, provided on the shell corresponding to the compression assembly; and

an airflow channel, provided on the compression assembly, wherein the airflow channel, the first cavity and the exhaust pipe are communicated with each other.

10. The compressor according to any one of claims 1 to 9, wherein,

the compressor further comprises:

a base; and

a mounting rack, connected to a side of the base facing the shell, wherein the mounting rack is adapted and connected with the shell.

11. A refrigeration device, comprising:

a housing, comprising a mounting cavity; and

a compressor according to any one of claims 1 to 10, wherein the compressor is connected with the housing and located in the mounting cavity.