**WHAT IS CLAIMED IS:**

1. A valve set integrated module, comprising a base (60) and a valve set arranged on the base (60), the valve set comprising a first switch valve (11), a second switch valve (12), and a first expansion valve (21);

an indoor condenser outlet interface (67), an outdoor heat exchanger outlet interface (64) and a battery pack heat exchanger inlet interface (68) being formed on the base (60), the indoor condenser outlet interface (67) being configured to be connected with an outlet of an indoor condenser (92) outside the base (60), the outdoor heat exchanger outlet interface (64) being configured to be connected with an outlet of an outdoor heat exchanger (93) outside the base (60), and the battery pack heat exchanger inlet interface (68) being configured to be connected with a refrigerant inlet of a battery pack heat exchanger (96) outside the base (60) ;

a first flow channel (101) being formed in the base (60); an inlet of the first switch valve (11) being in communication with the indoor condenser outlet interface (67); an outlet of the first switch valve (11) being in communication with the first flow channel (101); an inlet of the first expansion valve (21) being in communication with the first flow channel (101); an outlet of the first expansion valve (21) being in communication with the battery pack heat exchanger inlet interface (68); the outdoor heat exchanger outlet interface (64) being in communication with an inlet of the second switch valve (12); and an outlet of the second switch valve (12) being in communication with the first flow channel (101).

2. The valve set integrated module according to claim 1, wherein the valve set further comprises a second expansion valve (22); an indoor evaporator inlet interface (65) configured to be connected with an inlet of an indoor evaporator (94) outside the base (60) being formed on the base (60); an

inlet of the second expansion valve (22) being in communication with the first flow channel (101); and an outlet of the second expansion valve (22) being in communication with the indoor evaporator inlet interface (65).

3. The valve set integrated module according to claim 1 or 2, wherein the valve set further comprises a third switch valve (13); an outdoor heat exchanger inlet interface (66) connected with an inlet of the outdoor heat exchanger (93) is further formed on the base (60); a second flow channel (102) is further formed in the base (60); the indoor condenser outlet interface (67) being in communication with the second flow channel (102); the inlet of the first switch valve (11) being in communication with the second flow channel (102); an inlet of the third switch valve (13) being in communication with the second flow channel (102); and an outlet of the third switch valve (13) being in communication with the outdoor heat exchanger inlet interface (66).

4. The valve set integrated module according to claim 3, wherein through turn-on or turn-off of the first switch valve (11) and turn-on or turn-off of the third switch valve (13), a refrigerant flowing into the second flow channel (102) through the indoor condenser outlet interface (67) is caused to flow into the first flow channel (101) through the first switch valve (11), or flow out from the outdoor heat exchanger inlet interface (66) through the third switch valve (13).

5. The valve set integrated module according to claim 3 or 4, wherein the valve set further comprises a third expansion valve (23); a third flow channel (103) is further formed in the base (60); the outdoor heat exchanger inlet interface (66) being in communication with the third flow channel (103); the outlet of the third switch valve (13) being in communication with the third flow

channel (103); an inlet of the third expansion valve (23) being in communication with the second flow channel (102); and an outlet of the third expansion valve (23) being in communication with the third flow channel (103).

6. The valve set integrated module according to claim 5, wherein through turn-on or turn-off of the third switch valve (13) and throttling or turn-off of the third expansion valve (23), a refrigerant flowing into the second flow channel (102) through the indoor condenser outlet interface (67) is caused to flow into the third flow channel (103) through the third switch valve (13), or flow into the third flow channel (103) through the third expansion valve (23).

7. The valve set integrated module according to claim 5 or 6, wherein the base (60) comprises a first portion (40) and a second portion (50); the first portion (40) comprises a first connecting surface (401); the second portion (50) comprises a second connecting surface (501); the first connecting surface (401) is hermetically connected with the second connecting surface (501); the first connecting surface (401) is inwardly recessed to form a first groove (701), a second groove (702), and a third groove (703); the second connecting surface (501) and the first groove (701) jointly define the first flow channel (101); the second connecting surface (501) and the second groove (702) jointly define the second flow channel (102); the second connecting surface (501) and the third groove (703) jointly define the third flow channel (103); and

the first switch valve (11), the second switch valve (12), the third switch valve (13), the first expansion valve (21), and the third expansion valve (23) are all arranged on the first portion (40); or the first switch valve (11), the second switch valve (12), the third switch valve (13), the first expansion valve (21), and the third expansion valve (23) are all arranged on the second portion

(50).

8. The valve set integrated module according to claim 7, wherein at least one of the first groove (701), the second groove (702), and the third groove (703) is a curved groove.

9. The valve set integrated module according to any one of claims 1 to 6, wherein the valve set further comprises a fourth switch valve (14); a reflux inlet interface (62) configured to be connected with an inlet of a compressor (91) outside the base (60) or an inlet of a gas-liquid separator (95) connected with the compressor (91) is formed on the base (60); a fourth flow channel (104) is further formed in the base (60); the outdoor heat exchanger outlet interface (64) is in communication with the fourth flow channel (104); the inlet of the second switch valve (12) is in communication with the fourth flow channel (104); an inlet of the fourth switch valve (14) is in communication with the fourth flow channel (104); and an outlet of the fourth switch valve (14) is in communication with the reflux inlet interface (62).

10. The valve set integrated module according to claim 9, wherein a fifth flow channel (105) is further formed in the base (60); the outlet of the fourth switch valve (14) is in communication with the fifth flow channel (105); the reflux inlet interface (62) is in communication with the fifth flow channel (105); a battery pack heat exchanger outlet interface (61) configured to be connected with a refrigerant outlet of the battery pack heat exchanger (96) is further formed on the base (60); and the battery pack heat exchanger outlet interface (61) is in communication with the fifth flow channel (105).

11. The valve set integrated module according to claim 9, wherein a fifth flow channel (105) is further formed in the base (60); the outlet of the fourth switch valve (14) is in communication with the fifth flow channel (105); the reflux inlet interface (62) is in communication with the fifth flow channel (105); an indoor evaporator outlet interface (63) configured to be connected with an outlet of the indoor evaporator (94) is further formed on the base (60); and the indoor evaporator outlet interface (63) is in communication with the fifth flow channel (105).

12. The valve set integrated module according to claim 11, further comprising a temperature sensor (30), wherein a first through hole (813), a second through hole (814), and a third through hole (815) are formed on the fifth flow channel (105); the second through hole (814) is located between the first through hole (813) and the third through hole (815); the first through hole (813) is in communication with the indoor evaporator outlet interface (63); the third through hole (815) is in communication with the reflux inlet interface (62); the temperature sensor (30) is arranged on the base (60); and a detection terminal of the temperature sensor (30) passes through the second through hole (814) and is located in the fifth flow channel (105).

13. The valve set integrated module according to any one of claims 10 to 12, wherein the base (60) comprises a first portion (40) and a second portion (50); the first portion (40) comprises a first connecting surface (401); the second portion (50) comprises a second connecting surface (501); the first connecting surface (401) is hermetically connected with the second connecting surface (501); the first connecting surface (401) is inwardly recessed to form a fourth groove (704) and a fifth groove (705); the second connecting surface (501) and the fourth groove (704) jointly define the fourth flow channel (104); the second connecting surface (501) and the fifth groove (705)

jointly define the fifth flow channel (105); and

the fourth switch valve (14) is arranged on the first portion (40) or the second portion (50).

14. The valve set integrated module according to claim 13, wherein at least one of the fourth groove (704) and the fifth groove (705) is a curved groove.

15. A vehicle thermal management system, comprising the valve set integrated module according to any one of claims 1 to 14.

16. A vehicle, comprising the vehicle thermal management system according to claim 15.