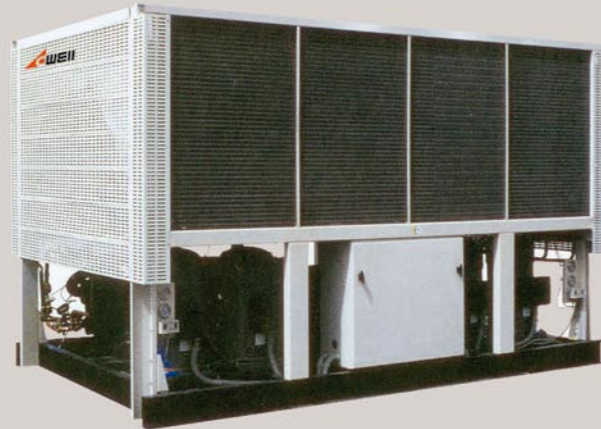


## PARALLEL CONNECTED SCROLL CHILLER

BWP-C BWP-H 60~380



### PARALLEL CONNECTED SCROLL CHILLER

Outdoor installation

Cooling capacity from 62.8 to 386.2 kW

Heating capacity from 70.7 to 428.1 kW

#### Characteristics

Multi-system connected in parallel

System can achieve higher performance when partially un-loading

Inserting compressors in a closed sound-proofed compartment

#### Available configurations

BWP 60 C S A 2

(1) (2) (3) (4)

(1) Version1:

- C Cooling type
- H Heat pump type

(2) Version2:

- S Standard
- R Heat recovery type
- T Specially made by customer request

(3) Refrigerants:

- A R22
- B R407C
- C R134a
- D R410A
- E Other refrigerants

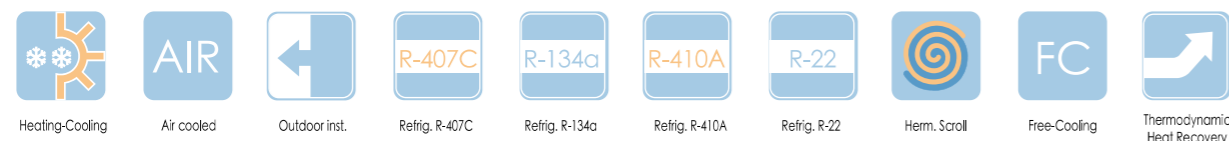
(6) Power Supply:

- 2 380/3/50
- 4 460/3/60
- 6 Other power supply

#### Applications



#### Functions and features



Optional

Partial recovery

Free-Cooling

Copper fins

Plate type heat exchanger

Split structure with remote condenser

#### Technical data

| Model                  | BWP-H               | Size              | 60           | 80        | 90           | 100    | 125        | 140        | 160        | 180        | 190    | 220      | 260            | 280    | 320    | 350    | 380    |  |
|------------------------|---------------------|-------------------|--------------|-----------|--------------|--------|------------|------------|------------|------------|--------|----------|----------------|--------|--------|--------|--------|--|
| General                | Cooling capacity    | KW                | 62.8         | 77.2      | 94.2         | 108.7  | 125.7      | 140.8      | 159.9      | 179.3      | 190.7  | 219.8    | 259.1          | 282.8  | 316.3  | 346.7  | 386.2  |  |
|                        | Power input         | KW                | 21.3         | 24.6      | 31.5         | 35.8   | 42.1       | 47.2       | 52.4       | 56.8       | 63.7   | 73.1     | 84.9           | 94.8   | 105.1  | 115.6  | 126.6  |  |
|                        | Heating capacity    | KW                | 70.7         | 87.1      | 105.1        | 122.3  | 141.5      | 156.2      | 178.6      | 198.2      | 210.5  | 240.1    | 280.3          | 312.2  | 350.3  | 379.9  | 428.1  |  |
|                        | Power input         | KW                | 21.5         | 25.1      | 32.2         | 38.4   | 43         | 48.5       | 53.9       | 59.3       | 64.5   | 75.6     | 86             | 96.6   | 107.5  | 118.1  | 129    |  |
| Power regulation stage |                     |                   | 50-100       | 33-66-100 | 25-50-75-100 | 20+20n | 16.7+16.7n | 14.3+14.3n | 12.5+12.5n | 11.1+11.1n | 10+10n | 9.1+9.1n | 8.3+8.3n       |        |        |        |        |  |
|                        | Nr.                 |                   | 2            | 3         | 3            | 4      | 4          | 5          | 5          | 6          | 6      | 7        | 8              | 9      | 10     | 11     | 12     |  |
| Compressor             | Type                |                   | Scroll       |           |              |        |            |            |            |            |        |          |                |        |        |        |        |  |
|                        | Oil                 |                   | P.O.E.       |           |              |        |            |            |            |            |        |          |                |        |        |        |        |  |
| Oil volume             | L                   |                   | 8            | 10.5      | 12           | 14.5   | 16         | 18.5       | 20         | 22.5       | 24     | 28       | 32             | 36     | 40     | 44     | 48     |  |
|                        | Type                |                   | Axial        |           |              |        |            |            |            |            |        |          |                |        |        |        |        |  |
| Fan                    | Nr.                 |                   | 2            | 2         | 3            | 3      | 3          | 3          | 4          | 4          | 4      | 4        | 6              | 6      | 6      | 6      |        |  |
|                        | Power input         | kW                | 1.5          | 1.5       | 3.3          | 3.3    | 3.3        | 4.1        | 4.1        | 3.9        | 3.9    | 5.1      | 5.8            | 5.8    | 6.7    | 6.7    | 6.7    |  |
|                        | Air flow            | m <sup>3</sup> /h | 25200        | 25200     | 27200        | 27200  | 32700      | 40600      | 40600      | 49200      | 49200  | 71500    | 68700          | 130000 | 130000 | 145000 | 157000 |  |
| Coil                   | Type                |                   | Fin coil     |           |              |        |            |            |            |            |        |          |                |        |        |        |        |  |
|                        | Material            |                   | Al/Cu        |           |              |        |            |            |            |            |        |          |                |        |        |        |        |  |
| Evaporator             | Type                |                   | Tube in tube |           |              |        |            |            |            |            |        |          | Shell and tube |        |        |        |        |  |
|                        | Water flow          | m <sup>3</sup> /h | 10.8         | 13.3      | 16.2         | 18.5   | 21.6       | 24.2       | 27.5       | 30.8       | 32.8   | 37.8     | 44.5           | 48.6   | 54.5   | 59.6   | 66.4   |  |
|                        | Inlet/outlet nozzle | DN                | 50           | 50        | 50           | 65     | 65         | 65         | 65         | 100        | 100    | 100      | 100            | 100    | 100    | 125    | 125    |  |
|                        | Resistance          | kPa               | 18.8         | 55.2      | 63.5         | 56.1   | 77.1       | 48         | 54.4       | 49.7       | 39.2   | 49.1     | 55.3           | 46.2   | 43.8   | 47.9   | 58.2   |  |
| Refrigerant            | Nr. of circuits     |                   | 1            | 2         | 2            | 2      | 2          | 3          | 3          | 3          | 3      | 4        | 4              | 5      | 5      | 6      | 6      |  |
|                        | Type                |                   | R407C        |           |              |        |            |            |            |            |        |          |                |        |        |        |        |  |
|                        | Weight              | kg                | 16           | 20        | 24           | 28     | 32         | 36         | 40         | 46         | 50     | 56       | 66             | 72     | 81     | 90     | 98     |  |
| Power supply           |                     |                   | 380V/3P/50Hz |           |              |        |            |            |            |            |        |          |                |        |        |        |        |  |
|                        | Noise               | dB(A)             | 61           | 62.8      | 65.8         | 65.8   | 64.5       | 67.5       | 67.5       | 68.7       | 68.7   | 72.1     | 71.9           | 73.9   | 73.5   | 74.1   | 74.6   |  |
| Weight                 | kg                  | 970               | 1050         | 1256      | 1367         | 1516   | 1544       | 1654       | 1980       | 2010       | 2216   | 2418     | 2860           | 3210   | 3490   | 3850   |        |  |

Note:

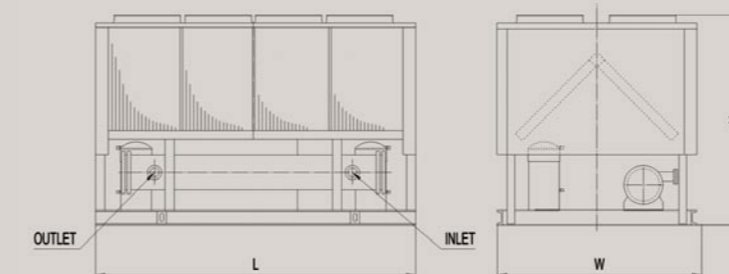
n=increase step.

Cooling rated condition: evaporator water inlet/outlet temperature 12°C/7°C, ambient temperature 35°C.

Heating rated condition: evaporator water inlet/outlet temperature 40°C/45°C, ambient temperature 7°C(DB)/6°C(WB).

Noise measured at 1m in open field.

#### Dimensions



| Size | 60   | 80   | 90   | 100  | 125  | 140  | 160  | 180  |
|------|------|------|------|------|------|------|------|------|
| L    | 2200 | 2200 | 2200 | 2600 | 2600 | 3900 | 3900 | 3900 |
| W    | 1040 | 1040 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 |
| H    | 1890 | 1890 | 1890 | 2010 | 2010 | 2010 | 2010 | 2010 |

| Size | 190  | 220  | 260  | 280  | 320  | 350  | 380  |
|------|------|------|------|------|------|------|------|
| L    | 3900 | 4500 | 4500 | 4500 | 5170 | 5170 | 5170 |
| W    | 1100 | 2150 | 2150 | 2150 | 2150 | 2150 | 2150 |
| H    | 2010 | 2165 | 2165 | 2165 | 2165 | 2165 | 2165 |