

# Hot Water Heat Pump

## Split System



### Premium DC technology

For superior performance.

### R290

Delivers a high certificate yield when installed commercially.

- Low Global Warming Potential (GWP) of 3.

### Quick connection

No vacuum process required.

### Boost mode

Speed up the heating process of your hot water tank when you need it quickly.

### Silent mode

For quieter operation.

### Wide operating range

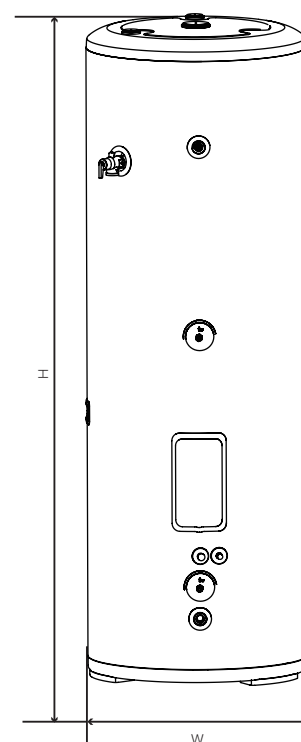
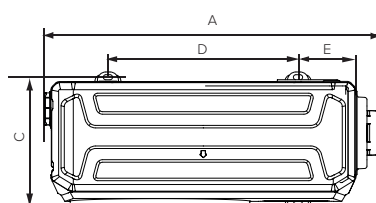
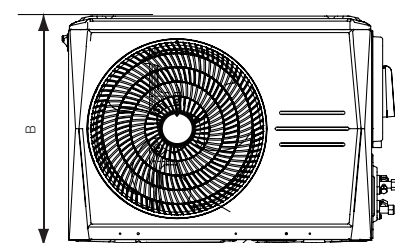
- Ambient Temperature  $-15^{\circ}\text{C} \sim 46^{\circ}\text{C}$ .
- Leaving water temperature  $52^{\circ}\text{C} \sim 70^{\circ}\text{C}$ .

Designed by Emerald, proudly Australian since 2006, this Heat Pump Split System is designed for efficiency and reliability in a range of climates.

The Emerald Hot Water Heat Pump Split System performs well in any environment and has an optional built-in electric heater to boost hot water supply. The refrigerant cycling heat pump's heat exchanger is situated in the water tank to reduce energy loss, making it effective even in lower outdoor temperatures all year round.

| Outdoor unit   |     |     |     |     |
|----------------|-----|-----|-----|-----|
| Dimension (mm) |     |     |     |     |
| A              | B   | C   | D   | E   |
| 804            | 555 | 327 | 452 | 137 |

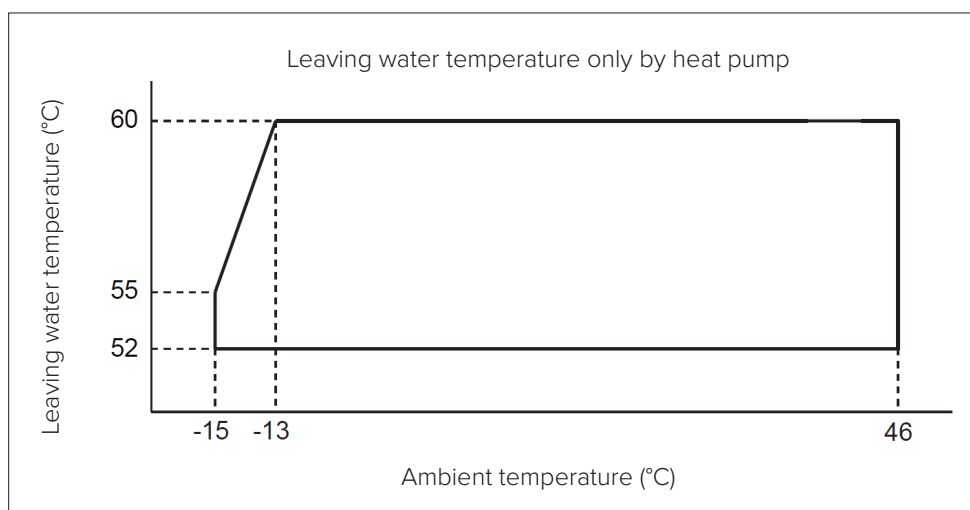
| Tank     |        |        |
|----------|--------|--------|
| SIZE (L) | W (mm) | H (mm) |
| 200      | 505    | 1665   |
| 300      | 580    | 1735   |



## Specifications

|              |                              |                              |                   |         |                                                    |         |
|--------------|------------------------------|------------------------------|-------------------|---------|----------------------------------------------------|---------|
| General      | Model number                 |                              | HPR200            | HPR200E | HPR300                                             | HPR300E |
|              | Ambient temperature          |                              | °C                |         |                                                    |         |
|              | Leaving water temperature    |                              | °C                |         |                                                    |         |
|              | Heating                      | Capacity <sup>1</sup>        | W                 |         | 2800                                               |         |
|              |                              | Maximum power input          | W                 |         | 1150                                               |         |
|              | Hot water yield              |                              | m <sup>3</sup> /h |         | 0.0602                                             |         |
|              | Refrigerant piping           | Liquid side                  | mm/inch           |         | φ6.35 / φ1/4'                                      |         |
|              |                              | Gas side                     | mm/inch           |         | φ9.52 / φ3/8'                                      |         |
|              |                              | Max. height difference       | m                 |         | 10                                                 |         |
|              |                              | Max. refrigerant pipe length | m                 |         | 20                                                 |         |
| Outdoor Unit | Design pressure              |                              | MPa               |         | 3.3                                                |         |
|              | Outdoor unit power supply    |                              | V/N/Hz            |         | 220-240/1/50                                       |         |
|              | Max. current                 |                              | A                 |         | 5.2                                                |         |
|              | Compressor Type              |                              | Type              |         | DC inverter rotary                                 |         |
|              | Fan                          | Type                         | Type              |         | DC inverter                                        |         |
|              | Air side heat exchanger      |                              | Type              |         | Hydraulic aluminum fin + Inner grooved copper tube |         |
|              | Throttle                     |                              | Type              |         | Electric expansion valve                           |         |
|              | Outdoor sound pressure level |                              | dB(A)             |         | 54                                                 |         |
|              | Dimension                    | Unit dimension (L*W*H)       | mm                |         | 804*327*555                                        |         |
|              |                              | Packing dimension (L*W*H)    | mm                |         | 845*390*630                                        |         |
|              |                              | Net weight                   | kg                |         | 27                                                 |         |
|              | Refrigerant                  | Type                         |                   |         | R290                                               |         |
|              |                              | Charged volume               | g                 |         | 470                                                |         |
| Water Tank   | Tank volume                  |                              | L                 |         | 200                                                |         |
|              | Electric heater              | Capacity                     | kW                |         | -                                                  |         |
|              |                              | Power supply                 | V/N/Hz            |         | 220-240V/1/50                                      |         |
|              | Dimension                    | Unit dimension (Ø*H)         | mm                |         | 505*505*1665                                       |         |
|              |                              | Packing dimension (W*D*H)    | mm                |         | 1775*635*590                                       |         |
|              |                              | Net weight                   | kg                |         | 74                                                 |         |

1. Ambient temperature 19/15°C(DB/WB), Initial water temp. 9°C, Terminative water temp. 60°C.
2. Ambient temperature 19/15°C(DB/WB), Initial water temp. 15°C, Terminative water temp. 55°C.



## Specifications (commercial)

|                 |                              |                              |         |                                                    |             |                      |           |  |
|-----------------|------------------------------|------------------------------|---------|----------------------------------------------------|-------------|----------------------|-----------|--|
| General         | Model number                 |                              |         | HPR200-1                                           | HPR200E-1   | HPR300-1             | HPR300E-1 |  |
|                 | Ambient temperature          |                              | ℃       | -15~46                                             |             |                      |           |  |
|                 | Leaving water temperature    |                              | ℃       | 52~70℃ (default 60℃)                               |             | 52~70℃ (default 60℃) |           |  |
|                 | Heating                      | Capacity <sup>1</sup>        | W       | 2800                                               |             |                      |           |  |
|                 |                              | Maximum power input          | W       | 1150                                               |             |                      |           |  |
|                 | Hot water yield              |                              | m³/h    | 0.0602                                             |             |                      |           |  |
|                 | Refrigerant piping           | Liquid side                  | mm/inch | φ6.35 / φ1/4'                                      |             |                      |           |  |
|                 |                              | Gas side                     | mm/inch | φ9.52 / φ3/8'                                      |             |                      |           |  |
|                 |                              | Max. height difference       | m       | 10                                                 |             |                      |           |  |
|                 |                              | Max. refrigerant pipe length | m       | 20                                                 |             |                      |           |  |
| Design pressure |                              | MPa                          | 3.3     |                                                    |             |                      |           |  |
| Outdoor Unit    | Outdoor unit power supply    |                              | V/N/Hz  | 220-240/1/50                                       |             |                      |           |  |
|                 | Max. current                 |                              | A       | 5.2                                                | 14.3        | 5.2                  | 14.3      |  |
|                 | Compressor Type              |                              | Type    | DC inverter rotary                                 |             |                      |           |  |
|                 | Fan                          | Type                         | Type    | DC inverter                                        |             |                      |           |  |
|                 | Air side heat exchanger      |                              | Type    | Hydraulic aluminum fin + Inner grooved copper tube |             |                      |           |  |
|                 | Throttle                     |                              | Type    | Electric expansion valve                           |             |                      |           |  |
|                 | Outdoor sound pressure level |                              | dB(A)   | 54                                                 |             |                      |           |  |
|                 | Dimension                    | Unit dimension (L*W*H)       |         | mm                                                 | 804*327*555 |                      |           |  |
|                 |                              | Packing dimension (L*W*H)    |         | mm                                                 | 845*390*630 |                      |           |  |
|                 |                              | Net weight                   |         | kg                                                 | 27          |                      |           |  |
|                 | Refrigerant                  | Type                         |         | R290                                               |             |                      |           |  |
|                 |                              | Charged volume               |         | g                                                  | 470         |                      |           |  |
|                 | Water Tank                   | Tank volume                  |         | L                                                  | 200         |                      | 300       |  |
| Electric heater |                              | Capacity                     | kW      | -                                                  | 2.1         | -                    | 2.1       |  |
|                 |                              | Power supply                 | V/N/Hz  | 220-240V/1/50                                      |             |                      |           |  |
| Dimension       |                              | Unit dimension (Ø*H)         | mm      | 505*505*1665                                       |             | 580*580*1735         |           |  |
|                 |                              | Packing dimension (W*D*H)    | mm      | 1775*635*590                                       |             | 1835*690*670         |           |  |
|                 |                              | Net weight                   | kg      | 74                                                 | 76          | 100                  | 102       |  |

1. Ambient temperature 19/15°C(DB/WB), Initial water temp. 9°C, Terminative water temp. 60°C.
2. Ambient temperature 19/15°C(DB/WB), Initial water temp. 15°C, Terminative water temp. 55°C.

| Ambient temperature | Leaving water temperature |
|---------------------|---------------------------|
| -15~46°C            | 52-70°C                   |

