### E-Generation High Temperature Series

### SPLIT-TYPE AIR-TO-WATER HEAT PUMP





Heating Capacity: 8.0kW – 14.0kW

Cooling Capacity: 8.0kW – 14.0kW

An advanced, energy-efficient solution for whole-home heating, cooling, and domestic hot water. Ideal for both new builds and retrofit applications, the new E-Generation High Temperature Split-Type Series delivers water temperatures up to 70°C, making it a smart replacement for gas, coal, or diesel boilers. Designed for flexible installation across residential and commercial projects.

#### **High Efficiency Performance**





### Ultra Quiet Operation



- \*1 PUZ-SHWM80VAA under nominal heating conditions at outdoor temp 7°C, outlet water temp 35°C, inlet water temp 30°C, as tested to EN14511 standard.
- \*2 PUZ-SHWM80VAA under nominal cooling conditions at outdoor temp: 30°C, outlet water temp 18°C, inlet water temp 23°C, as tested to EN14511 standard.
- \*3 PUZ-SHWM80VAA measured 1m from outdoor unit.
- \*4 For heating-only applications.
- \*5 PUZ-SHWM100V/YAA at 35°C flow temperature.

# ecodan

### **HYDROBOX SPLIT SYSTEM**

### **Key Features**

#### **High Flow Temperatures**

Up to 70°C Heating Flow Temperatures make the E-Generation Series the ideal solution as a replacement for gas boilers producing hot water and heating radiators.

#### **Ultra Quiet Noise Levels**

The Ecodan E-Generation Series is our quietest yet, operating with industry leading noise levels from  $41 dBA^{*3}$ .



### **New Intuitive Touch Screen Controller**

The easy to use touchscreen allows for easy monitoring of energy use and tailored comfort control. The improved commissioning wizard offers easier installation for contractors.

### **Easier Installation and Longer Pipe Lengths**

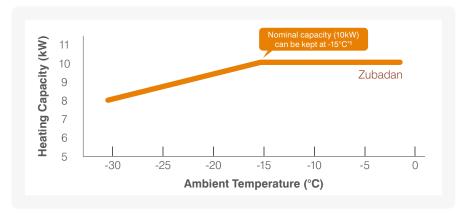
Now with G1" tightening nuts instead of compression fitting for smoother installation. Long pipe runs with up to 30m\*4 of chargeless piping length can be achieved for flexible installation options.

### **Magnetic Filter for Improved Efficiency**

The new magnetic filter keeps the water in the circuit clean to prevent clogging and deterioration of pumps and 3-way valve, ensuring high performance and longevity.

### **Zubadan Technology for Low Temperature Performance**

All models include Zubadan Technology to maintain full capacity in outdoor temperature conditions down to -15°C.





### **Specifications**

### Split-Type Air-To-Water Heat Pump

| OUTDOOR UNIT                        |                           |           | PUZ-SHWM80VAA           | PUZ-SHWM100VAA          | PUZ-SHWM140VA           |
|-------------------------------------|---------------------------|-----------|-------------------------|-------------------------|-------------------------|
| Heating* <sup>1</sup> (A2/W35)      | Capacity                  | [kW]      | 8.00                    | 10.00                   | 14.00                   |
|                                     | Power Input               | [kW]      | 2.10                    | 2.81                    | 4.24                    |
|                                     | COP                       |           | 3.80                    | 3.55                    | 3.30                    |
| Operating Outdoor Temperature Range | Heating                   | [°C DB]   | -30 to +24              | -30 to +24              | -30 to +24              |
|                                     | DHW                       | [°C DB]   | -30 to +42              | -30 to +42              | -30 to +42              |
| Sound Pressure Level (noise)*2      | SPL (Heating)             | [dBA]     | 41                      | 44                      | 46                      |
| Sound Power Level*3                 | PWL (Heating)             | [dBA]     | 54                      | 58                      | 58                      |
| Dimensions                          | Width                     | [mm]      | 1050                    | 1050                    | 1050                    |
|                                     | Depth                     | [mm]      | 480                     | 480                     | 480                     |
|                                     | Height                    | [mm]      | 1040                    | 1040                    | 1040                    |
| Weight                              |                           | [kg]      | 106                     | 106.5                   | 114.5                   |
| Refrigerant Data                    | Туре                      |           | R32                     | R32                     | R32                     |
|                                     | Charge (Up to 30m)        | [kg]      | 1.8                     | 1.8                     | 1.8                     |
|                                     | Pipe size – Gas / Liquid⁴ | [mm (in)] | 6.35 (1/4) / 12.7 (1/2) | 6.35 (1/4) / 12.7 (1/2) | 6.35 (1/4) / 12.7 (1/2) |
|                                     | Connection Type           |           | Flared                  | Flared                  | Flared                  |
|                                     | Min – Max Pipe Length*5   | [m]       | 2-30                    | 2-30                    | 2-30                    |
|                                     | Max Height Difference     | [m]       | 30                      | 30                      | 30                      |
| Electrical Data                     | Electrical Supply         |           | 1Ph, 230V, 50Hz         | 1Ph, 230V, 50Hz         | 1Ph, 230V, 50Hz         |
|                                     | Maximum Current           | [A]       | 19                      | 27                      | 35                      |
|                                     | Fuse Rating               | [A]       | 25                      | 30                      | 40                      |

<sup>\*1</sup> Under normal heating conditions at outdoor temp: 2°CDB / 1°CWB, outlet water temp 35°C, inlet water temp 30°C.

\*2 Sound measured to EN14511 at 1m from outdoor unit. In Heating Mode.

\*3 Sound Power Levels are measured based on EN12102:2013. In Heating Mode.

\*4 15.88 (5/8) for cooling applications, refer to installation manual for piping lengths in Cooling Mode.

\*5 Max pipe length up to 50m in heating mode – refer to installation manual regarding min internal space for Hydrobox.

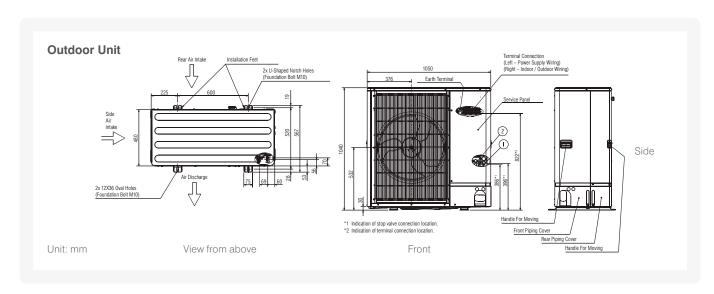
| HYDROBOX                |  |                                 |         | ERSF-VM2E*6                 |
|-------------------------|--|---------------------------------|---------|-----------------------------|
| Hydrobox Type           |  |                                 |         | Split                       |
| Outdoor Capacity Range  | Nominal  |                                 | [kW]    | 8 – 14                      |
| Heating Operating Range |  | Heating Flow Temperature        | [°C]    | 20 – 70                     |
| Water Data              |  | Max Flow Rate                   | [L/min] | 36.9                        |
|                         |  | Primary Pump                    |         | Grundfos UPM 3K 15 – 75 130 |
|                         |  | Connection Size (Heating / DHW) |         | G1 Tightening Nut           |
|                         |  | Primary Expansion Vessel        | [L]     | 10                          |
|                         |  | Charge Pressure                 | [Bar]   | 1                           |
| Water Safety Devices    | Water Circuit                                      | Control Thermistor              | [°C]    | 1 – 80                      |
|                         |  | Pressure Relief Valve           | [Bar]   | 3                           |
|                         |  | Flow Sensor Min Flow Rate       | [L/min] | 5.0                         |
| Dimensions              |  | Width                           | [mm]    | 530                         |
|                         |  | Depth                           | [mm]    | 360                         |
|                         |  | Height                          | [mm]    | 800                         |
| Weight Empty / Full     |  |                                 | [kg]    | 39 / 45                     |
| Electrical Data         | Control Board (Optionally Powered by Outdoor Unit) | Electrical Supply               |         | 1Ph, 230V, 50Hz             |
|                         |  | Breaker                         | [A]     | 10                          |
|                         | Booster Heater (Optionally Powered if Required)    | Electrical Supply               |         | 1Ph, 230V, 50Hz             |
|                         |  | Capacity                        | [kW]    | 2                           |
|                         |  | Max Running Current             | [A]     | 9                           |
|                         |  | Breaker                         | [A]     | 16                          |

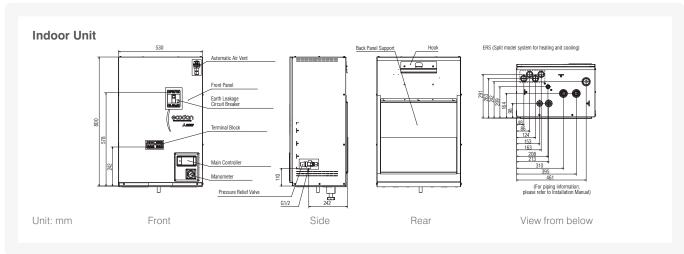
Hydrobox includes: Flow Temperature Controller (FTC7) with Remote Controller and Temperature Sensors, Water Circulation Pump, Flow Sensor, Booster Heater and Expansion Vessel. \*6 Reversible (heating and cooling) model.



### **Specifications**

### **Dimensions**





### **Main Remote Controller - FTC7**



### Simple User-friendly Controller with New Design

- New design for simple and intuitive operation
- Colour display and touch screen for excellent visibility
- Wide range of convenient functions in response to user demand

### **Function Settings**

- Energy Monitoring
- Two-Zone Control (cooling and heating)
- Two separate schedules
- Built-in room temperature sensors
- Hybrid Control (boiler interlock)
- Floor Drying Mode
- Weekly timer
- Holiday Mode
- Legionella prevention
- Error codes





### Manufactured in the United Kingdom

The Mitsubishi Electric manufacturing facility in Livingston, Scotland produces E-Generation Hydrobox and Controls for the UK and European markets and includes a purpose-built Ecodan testing facility.

## Black Diamond Technologies and Mitsubishi Electric – an Exclusive Partnership Since 1981



The Mitsubishi Electric Product Range has been exclusively distributed by 100% locally owned and operated Black Diamond Technologies Limited for over 40 years in New Zealand.

The combination of an internationally trusted brand with the comfort of a locally owned and operated company means that you will always get the best products, the best local service and the best local support.

Based in Wellington with a further 4 support offices throughout New Zealand, Black Diamond Technologies Limited is here to help.

## Our Vision – Creating New Zealand's Sustainable Future



Black Diamond Technologies Limited in partnership with Mitsubishi Electric, strives to develop and introduce new technologies for New Zealanders that will make our lives more comfortable while also creating a greener tomorrow.

## Our Nationwide Trained Specialist Installation Network

Mitsubishi Electric Hot Water Heat Pumps are installed through an extensive network of trained specialist dealers. This ensures you are supported with a superior level of product and installation quality.



### **Full 5 Year Warranty**

Every Ecodan Air Source Heat Pump comes with a full 5 year warranty as standard, subject to the following conditions:

- The Ecodan purchase and installation is registered with BDT.
- The Ecodan must be installed and commissioned by a trained BDT installer.







