#### **Specifications**

| Model name   |          |            |    | PUZ-WZ50VAA       | PUZ-WZ60VAA PUZ-WZ8 |      |  |  |  |
|--|----------|------------|----|-------------------|---------------------|------|--|--|--|
| Refrigerant  |          |            |    | R290*1            |                     |      |  |  |  |
| Dimensions HxWxD mm                                    |          |            | mm | 1020 x 1050 x 480 |                     |      |  |  |  |
| Weight kg  |          |            | kg | 89                | 89 89 117           |      |  |  |  |
| Power supply (V / Phase / Hz)                          |          |            |    | 230 / 1-ph / 50   |                     |      |  |  |  |
| Heating  | A7W35*2  | Nominal    | kW | 4.00              | 5.00                | 6.00 |  |  |  |
|  |          | COP        |    | 5.10              | 5.00                | 4.70 |  |  |  |
|  | A2W35*2  | Nominal kW |    | 5.00              | 6.00                | 8.00 |  |  |  |
|  |          | COP        |    | 3.15              | 3.10                | 3.05 |  |  |  |
| Average climate water outlet 35°C*3                    |          | Class      |    | A+++              | A+++                | A+++ |  |  |  |
|  |          | ης         |    | 182%              | 179%                | 176% |  |  |  |
| Average climate water outlet 55°C*3                    |          | Class      |    | A++               | A++                 | A++  |  |  |  |
|  |          | ηs         |    | 138%              | 139%                | 140% |  |  |  |
| DHW 200L(L) Load Class Profile (Average climate)*4 ηwh |          | Class      |    | A+                | A+                  | A+   |  |  |  |
|  |          | ηwh        |    | 134%              | 134% 134%           |      |  |  |  |
| Max outlet water temperature °C                        |          |            | °C | 75                |                     |      |  |  |  |
| Cooling  | A35W7*2  | Nominal    | kW | 3.20              | 3.60                | 4.00 |  |  |  |
|  |          | EER        |    | 3.10              | 2.90                | 2.70 |  |  |  |
|  | A35W18*2 | Nominal    | kW | 4.20              | 4.60                | 5.00 |  |  |  |
|  |          | EER        |    | 3.20              | 3.00                | 2.80 |  |  |  |
| PWL (Heating)*5  |          |            | dB | 56                | 56                  | 58   |  |  |  |
| Max operating current A                                |          |            | А  | 13                | 13                  | 22   |  |  |  |
| Breaker size A   |          |            | А  | 16 16 25          |                     |      |  |  |  |
| Guaranteed Heating                                     |          |            | °C | -25~24            |                     |      |  |  |  |
| Operation  | DHW      |            | °C | -25~46            |                     |      |  |  |  |
| range  | Cooling  |            | °C | 10~46             |                     |      |  |  |  |
|  |          |            |    |                   |                     |      |  |  |  |

\*1 Refrigerant leakage contribute to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global than a refrigerant with higher GWP, if leaked to the atomosphere. This warming appliance contains a refrigerant fluid with a GWP equal to 3. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 3 times higher than 1 kg of CO2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional. The GWP of R290 is 3 in the IPCC 4th Assessment Report.

\*2 Air-to-Water values are measured based on EN14825.

\*4 ηwh values are measured based on EN16147.

\*5 Sound power levels are measured based on EN112102.

### Combination table

|             |              |              |              |              |              |               | 0 "           |              |              |              |              |               |               |               |         |           |           |           |
|-------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------|-----------|-----------|-----------|
|             |              |              |              |              |              |               | Суш           | nder         |              |              |              |               |               |               |         |           | obox      |           |
|             |              |              | He           | ating o      | only         |               |               |              |              | Re           | eversib      | le            |               |               |         | Reve      | rsible    |           |
|             | EHPT17X-VM2E | EHPT17X-VM6E | EHPT17X-YM9E | EHPT20X-YM9E | EHPT20X-TM9E | EHPT20X-MEHEW | EHPT30X-YM9EE | ERPT17X-VM2E | ERPT20X-VM2E | ERPT20X-VM6E | ERPT20X-YM9E | ERPT30X-VM2EE | ERPT30X-VM6EE | ERPT30X-YM9EE | ERPX-ME | ERPX-VM2E | ERPX-VM6E | ERPX-YM9E |
| PUZ-WZ50VAA | •            | •            | •            | •            | •            | •             | •             | •            | •            | •            | •            | •             | •             | •             | •       | •         | •         | •         |
| PUZ-WZ60VAA | •            | •            | •            | •            | •            | •             | •             | •            | •            | •            | •            | •             | •             | •             | •       | •         | •         |           |
| PUZ-WZ80VAA | •            | •            | •            | •            | •            | •             | •             | •            | •            |              | •            | •             | •             | •             | •       | •         | •         | •         |

# E-generation indoor unit connectable to PUZ-WZ

Ecodan's line-up has many types of indoor units to satisfy diverse customers' needs, requests and local regulations. It includes various size of tank up to 300L, with/without booster heater, with/ without an expansion vessel, etc. In addition, reversible hydrobox and cylinder units are available.



#### New Design

Ecodan E-generation is now available in a new design. This simpler and more sophisticated new logo unit blends in nicely with any interior

#### **Available Indoor Units**

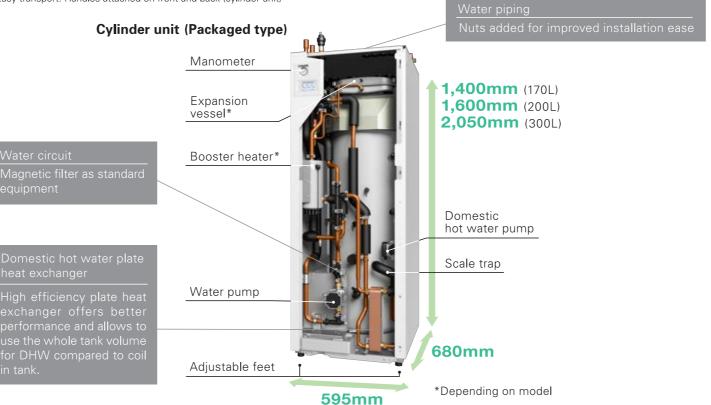
- Reversible (for heating/cooling) or Heating only model
- With/without booster heater
- With/without expansion vessel
- Cylinder unit has an integrated 170L/200L/300L stainless steel tank
- Hydrobox allows control for domestic hot water with a stand-alone tank (locally supplied)

### All-in-one Compact Indoor Unit

- All-in-one: Key functional components are incorporated
- Compact cylinder unit: 1,400~2,050mm in height
- Compact hydrobox: Only 530×360mm footprint • Easy installation: Factory fitted pressure relief valve

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- Easy service: Relevant parts are located at the front of the unit for easy maintenance
- Easy transport: Handles attached on front and back (cylinder unit)



## MITSUBISHI ELECTRIC CORPORATION

New publication, effective April 2023. Specifications subject to change without notice.



### Changes for the Better

## Air-to-water PUZ-WZ series







# **Environmentally-friendly refrigerant R290**

PUZ-WZ series is outdoor unit that adopts R290 as new refrigerant. Mitsubishi Electric is contributing to environmental conservation by introducing R290 refrigerant into the heat pumps. Not only the shift to R290, but also the reduction in refrigerant usage has enabled a significant reduction in CO<sub>2</sub> emissions compared to previous models. PUZ-WZ series is our first R290 heat pump and we are striving to make a sustainable future.

It is a natural refrigerant with very low global warming potential (GWP) of 3, about 1/225 compared to R32. The introduction of R290 will greatly contribute to the reduction of greenhouse gas emissions and the improvement of R290? renewable energy ratio efficiency. R290 is also very unique refrigerant with excellent thermal performance, large evaporation latent heat, and refrigerant savings in the system. It supports more comfortable lifestyles.

|     | R290 | R32 | R410a |
|-----|------|-----|-------|
| GWP | 3    | 675 | 2,088 |

\* These GWP values are based on Regulation (EU) No.517/2014 from IPCC 4th edition.

# Minimization of greenhouse gas emissions

We have introduced new refrigerant R290 with GWP of 3 as an alternative to high GWP refrigerant subject to F-gas regulation. In addition, by reducing the refrigerant amount, we have achieved a significant reduction in greenhouse gas emissions compared to previous models.

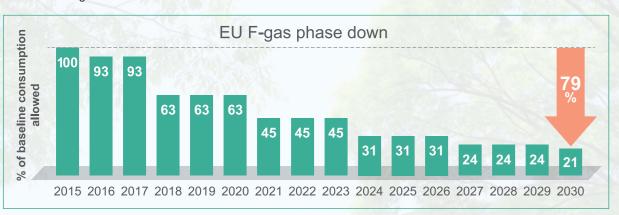
|  | Current model*1 | New model*2 |  |  |  |  |
|--|-----------------|-------------|--|--|--|--|
| Refrigerant  | R32             | R290        |  |  |  |  |
| Amount   | 2.2kg           | 0.6kg       |  |  |  |  |
| GWP  | 675             | 3           |  |  |  |  |
| t-CO <sub>2</sub> eq                                   | 1.4850          | 0.0018      |  |  |  |  |
| *1 In case of PUZ-WM60VAA<br>*2 In case of PUZ-WZ60VAA | 82              | 25          |  |  |  |  |

## F-gas regulation

F-Gas regulation is a set of rules and guidelines that is now in place throughout the European Union. The goal is to reduce F-gas emissions by 79% from 2015 through 2030. Specific measures are as follows:

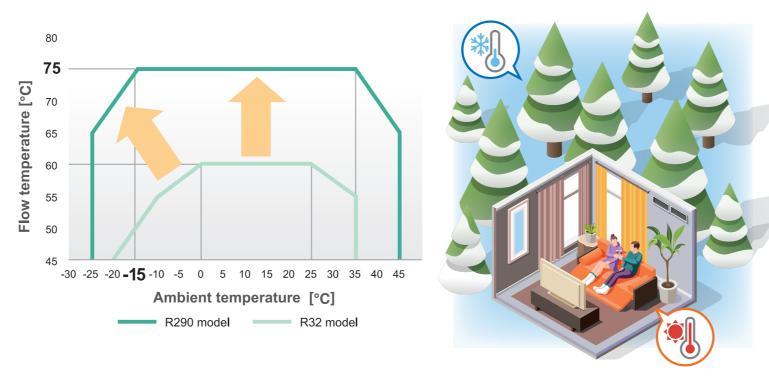
- 1. Limiting the total amount of the most important F-gases (HFCs) that can be sold in the EU from 2015 onwards
- 2. Banning the use of F-gases in many new types of equipment where less harmful alternatives are widely available
- 3. Requiring checks, proper servicing and recovery of the gases at the end of the equipment's life

To achieve this goal, PUZ-WZ series is committed to using environmentally friendly refrigerant and to reducing the amount of refrigerant used.



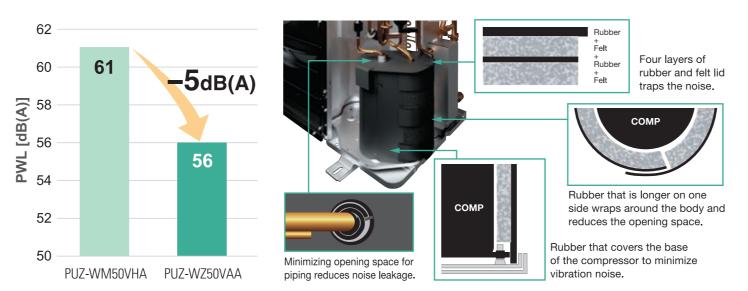
## 75°C Max. Flow Temperature

This new model extends the guaranteed operation range to -25°C ambient temperature, while utilizing the refrigerant properties of R290 to efficiently achieve higher hot water temperatures. It provides high-temperature hot water at 75°C down to -15°C ambient temperature. This allows PUZ-WZ heat pump to be an alternative solution to conventional fossil boilers.



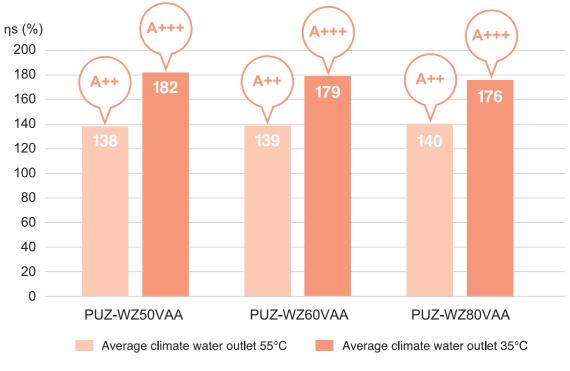
## **Quiet Comfort**

Reinforced soundproof structure reduces compressor noise, achieving lower sound level than current model. PUZ-WZ50VAA reduces noise by 5dB(A) compared to PUZ-WM50VHA. The gapless structure ensures sealing and noise suppression by covering the compressor's base and rubber foot. This enables flexible installation in dense residential areas.



# **High Energy Efficiency**

All models have achieved the "RANK A+++" for SCOP at low temperature. SCOP has been improved from the current R32 model to achieve further energy savings, contributing to users' energy cost reduction.



## **Unique Performance of 2 Compressors**

PUZ-WZ80VAA has 2 refrigerant circuits (INVERTER+FIXED) for wider modulation range while maintaining refrigerant reduction.

At low capacity, only the inverter circuit operates. When the inverter circuit reaches maximum capacity, the fixed speed circuit turns on. On/Off short cycles are suppressed by reducing the minimum capacity thanks to a wide capacity control range.

The refrigerant amount per circuit is reduced to less than 600g. Even in the unlikely event of refrigerant leakage during transportation or installation, the leakage volume can be reduced to 600g at maximum. This allows for more reliable and flexible installation possibilities.

