

# HYDRO ALL-IN-ONE R290



AW042HUGHA  
AW062HUGHA  
AW082HUGHA  
AW102HUGHA  
  
AW10NHUGHA



HU102F20AHYA  
HU162F20AHYA  
  
HU102F20AHYAE3  
HU162F20AHYAE3

Our all in one unit has the expansion vessel , flow switch and water pump inside the all in one unit.

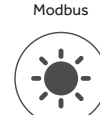
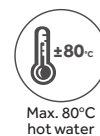
The all in one units have a wiring centre mounted inside them to make wiring simpler. It connects to the outdoor unit with a 2 core cable.

| Model                                           |                               |         | Hydro All in one 4kW-1Ph    | Hydro All in one 6kW-1Ph | Hydro All in one 8kW-1Ph | Hydro All in one 10kW-1Ph | Hydro All in one 10kW-3Ph |
|-------------------------------------------------|-------------------------------|---------|-----------------------------|--------------------------|--------------------------|---------------------------|---------------------------|
| Heating (LWT 35°C / OAT 7°C)                    | Capacity                      | kW      | 4.00                        | 6.00                     | 8.00                     | 10.00                     | 10.00                     |
|                                                 | Power input                   | kW      | 0.73                        | 1.12                     | 1.50                     | 1.96                      | 1.96                      |
|                                                 | COP                           | W/W     | 5.50                        | 5.35                     | 5.35                     | 5.10                      | 5.10                      |
| Heating (LWT 55°C / OAT 7°C)                    | Capacity                      | kW      | 4.00                        | 6.00                     | 8.00                     | 10.00                     | 10.00                     |
|                                                 | Power input                   | kW      | 1.19                        | 1.82                     | 2.35                     | 3.13                      | 3.13                      |
|                                                 | COP                           | W/W     | 3.35                        | 3.30                     | 3.40                     | 3.20                      | 3.20                      |
| Space heating Average climate water outlet 35°C | SCOP                          | -       | 5.10                        | 5.10                     | 5.20                     | 5.10                      | 5.10                      |
|                                                 | ns                            | %       | 201                         | 201                      | 205                      | 201                       | 201                       |
|                                                 | Energy class                  | -       | A+++                        | A+++                     | A+++                     | A+++                      | A+++                      |
| Space heating Average climate water outlet 55°C | SCOP                          | -       | 3.85                        | 3.83                     | 3.85                     | 3.83                      | 3.83                      |
|                                                 | ns                            | %       | 151                         | 150                      | 151                      | 150                       | 150                       |
|                                                 | Energy class                  | -       | A+++                        | A+++                     | A+++                     | A+++                      | A+++                      |
| Cooling (LWT 18°C / OAT 35°C)                   | Capacity                      | kW      | 4.00                        | 6.00                     | 7.50                     | 9.50                      | 9.50                      |
|                                                 | Power input                   | kW      | 0.79                        | 1.20                     | 1.58                     | 2.21                      | 2.21                      |
|                                                 | EER                           | -       | 5.05                        | 5.00                     | 4.75                     | 4.30                      | 4.30                      |
| Cooling (LWT 7°C / OAT 35°C)                    | Capacity                      | kW      | 3.50                        | 5.00                     | 6.80                     | 8.50                      | 8.50                      |
|                                                 | Power input                   | kW      | 0.95                        | 1.37                     | 1.97                     | 2.62                      | 2.62                      |
|                                                 | EER                           | -       | 3.70                        | 3.65                     | 3.45                     | 3.25                      | 3.25                      |
| Indoor Unit                                     |                               |         | HU102F20AHYA                | HU102F20AHYA             | HU102F20AHYA             | HU102F20AHYA              | HU102F20AHYAE3            |
| Leaving water temperature range                 | Heating                       | °C      | 20-80                       | 20-80                    | 20-80                    | 20-80                     | 20-80                     |
|                                                 | Cooling                       | °C      | 5-25                        | 5-25                     | 5-25                     | 5-25                      | 5-25                      |
| Storage temperature range (Tank)                | DHW                           | °C      | 25-75                       | 25-75                    | 25-75                    | 25-75                     | 25-75                     |
| Water piping Connection                         | Inlet/Outlet (except for DHW) | inch    | R 1/R 1                     | R 1/R 1                  | R 1/R 1                  | R 1/R 1                   | R 1/R 1                   |
|                                                 | Inlet/Outlet (DHW)            | inch    | R 3/4                       | R 3/4                    | R 3/4                    | R 3/4                     | R 3/4                     |
| Expansion Tank                                  | L                             |         | 8                           | 8                        | 8                        | 8                         | 8                         |
| Primary circuit                                 | Pressure relief valve         | bar     | 3                           | 3                        | 3                        | 3                         | 3                         |
| Power supply                                    | V/ph/Hz                       |         | 220-240/1/50                | 220-240/1/50             | 220-240/1/50             | 220-240/1/50              | 220-240/1/50              |
| Max running current*(1)                         | A                             |         | 14.1                        | 14.1                     | 14.1                     | 14.1                      | 14.1                      |
| Recommended circuit breaker                     | A                             |         | 20.0                        | 20.0                     | 20.0                     | 20.0                      | 20.0                      |
| DHW Tank                                        | Type                          | -       | 2205 duplex stainless steel |                          |                          |                           |                           |
|                                                 | Tank Volume                   | L       | 200                         | 200                      | 200                      | 200                       | 200                       |
|                                                 | Maximum water pressure limit  | bar     | 7                           | 7                        | 7                        | 7                         | 7                         |
|                                                 | Tank heater                   | kW      | 3                           | 3                        | 3                        | 3                         | 3                         |
| Declared load profile                           | -                             | L       | L                           | L                        | L                        | L                         | L                         |
| COP*(2)                                         | -                             |         | 3.37                        | 3.37                     | 3.45                     | 3.45                      | 3.45                      |
| Water heating energy efficiency class           | -                             |         | A+                          | A+                       | A+                       | A+                        | A+                        |
| Backup electric heater                          | Power supply                  | V/ph/Hz | 220-240/1/50                | 220-240/1/50             | 220-240/1/50             | 220-240/1/50              | 380-415/3/50              |
|                                                 | Capacity                      | kW      | 1+2                         | 1+2                      | 1+2                      | 1+2                       | 1+2                       |
|                                                 | Steps                         | -       | 2                           | 2                        | 2                        | 2                         | 2                         |
|                                                 | Max Running current           | A       | 14.0                        | 14.0                     | 14.0                     | 14.0                      | 5.0                       |
|                                                 | Recommended circuit breaker   | A       | 20.0                        | 20.0                     | 20.0                     | 20.0                      | 10.0                      |
| Sound power level                               | dB                            |         | 40                          | 40                       | 40                       | 40                        | 40                        |
| Net Dimension                                   | (HxWxD)                       | mm      | 1780 × 590 × 595            | 1780 × 590 × 595         | 1780 × 590 × 595         | 1780 × 590 × 595          | 1780 × 590 × 595          |
| Packaging dimension                             | (HxWxD)                       | mm      | 2060 × 695 × 695            | 2060 × 695 × 695         | 2060 × 695 × 695         | 2060 × 695 × 695          | 2060 × 695 × 695          |
| Net / Gross weight                              | kg                            |         | 115 / 131                   | 115 / 131                | 115 / 131                | 115 / 131                 | 115.5 / 131.5             |
| Outdoor Unit                                    |                               |         | AW042HUGHA                  | AW062HUGHA               | AW082HUGHA               | AW102HUGHA                | AW10NHUGHA                |
| Outdoor operating temperature range             | Heating                       | °C      | -25 ~ 35                    | -25 ~ 35                 | -25 ~ 35                 | -25 ~ 35                  | -25 ~ 35                  |
|                                                 | Cooling                       | °C      | 10 ~ 48                     | 10 ~ 48                  | 10 ~ 48                  | 10 ~ 48                   | 10 ~ 48                   |
|                                                 | DHW                           | °C      | -25 ~ 43                    | -25 ~ 43                 | -25 ~ 43                 | -25 ~ 43                  | -25 ~ 43                  |
| Water piping connection                         | Inlet/Outlet                  | inch    | R 1/R 1                     | R 1/R 1                  | R 1/R 1                  | R 1/R 1                   | R 1/R 1                   |
| Compressor                                      | Quantity                      | -       | 1                           | 1                        | 1                        | 1                         | 1                         |
|                                                 | Type                          | -       | DC inverter twin rotary     |                          |                          |                           |                           |
| Refrigerant                                     | Type                          | -       | R290                        |                          |                          |                           |                           |
|                                                 | Charge/CO2 Eq.                | kg/T    | 0.8/2.4                     | 0.8/2.4                  | 0.9/2.7                  | 0.9/2.7                   | 0.9/2.7                   |
| Sound pressure level *(3)                       | dB(A)                         |         | 44                          | 47                       | 48                       | 49                        | 49                        |
| Sound power level *(3)                          | dB                            |         | 55                          | 58                       | 59                       | 60                        | 60                        |
| Net Dimension                                   | (HxWxD)                       | mm      | 790 × 1250 × 380            | 790 × 1250 × 380         | 790 × 1250 × 380         | 790 × 1250 × 380          | 790 × 1250 × 380          |
| Packaging dimension                             | (HxWxD)                       | mm      | 1022 × 1395 × 550           | 1022 × 1395 × 550        | 1022 × 1395 × 550        | 1022 × 1395 × 550         | 1022 × 1395 × 550         |
| Net / Gross weight                              | kg                            |         | 86/109                      | 86/109                   | 98/121                   | 98/121                    | 113/136                   |
| Power supply                                    | V/ph/Hz                       |         | 220-240/1/50                | 220-240/1/50             | 220-240/1/50             | 220-240/1/50              | 380-415/3/50              |
| Max running current                             | A                             |         | 13.5                        | 13.5                     | 18.6                     | 18.6                      | 6.2                       |
| Recommended circuit breaker                     | A                             |         | 16.0                        | 16.0                     | 20.0                     | 20.0                      | 16.0                      |

\*(1)Max running current does not include backup electric heater, which is individually powered on.

\*(2)The testing conditions refer to EN16147 average climate

\*(3)The testing conditions refer to EN14511-2018 and the testing method refers to EN12102-2017 (A7/W35)



# HYDRO ALL-IN-ONE R290



AW122HVGHA  
AW142HVGHA  
AW162HVGHA

AW12NHVGHA  
AW14NHVGHA  
AW16NHVGHA



HU102F20AHYA  
HU162F20AHYA

HU102F20AHYAE3  
HU162F20AHYAE3

Our all in one unit has the expansion vessel, flow switch and water pump inside the all in one unit.

The all in one units have a wiring centre mounted inside them to make wiring simpler. It connects to the outdoor unit with a 2 core cable.

| Model                                                 |                                  |         | Hydro All in one<br>12kW-1Ph | Hydro All in one<br>14kW-1Ph | Hydro All in one<br>16kW-1Ph | Hydro All in one<br>12kW-3Ph | Hydro All in one<br>14kW-3Ph | Hydro All in one<br>16kW-3Ph |
|-------------------------------------------------------|----------------------------------|---------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Heating<br>(LWT 35°C / OAT 7°C)                       | Capacity                         | kW      | 12.00                        | 14.00                        | 16.00                        | 12.00                        | 14.00                        | 16.00                        |
|                                                       | Power input                      | kW      | 2.35                         | 2.83                         | 3.23                         | 2.35                         | 2.83                         | 3.23                         |
|                                                       | COP                              | W/W     | 5.10                         | 4.95                         | 4.95                         | 5.10                         | 4.95                         | 4.95                         |
| Heating<br>(LWT 55°C / OAT 7°C)                       | Capacity                         | kW      | 11.50                        | 13.50                        | 15.50                        | 11.50                        | 13.50                        | 15.50                        |
|                                                       | Power input                      | kW      | 3.48                         | 4.22                         | 5.08                         | 3.48                         | 4.22                         | 5.08                         |
|                                                       | COP                              | W/W     | 3.30                         | 3.20                         | 3.05                         | 3.30                         | 3.20                         | 3.05                         |
| Space heating<br>Average climate<br>water outlet 35°C | SCOP                             | -       | 4.82                         | 4.80                         | 4.80                         | 4.82                         | 4.80                         | 4.80                         |
|                                                       | ns                               | %       | 190                          | 189                          | 189                          | 190                          | 189                          | 189                          |
|                                                       | Energy class                     | -       | A+++                         | A+++                         | A+++                         | A+++                         | A+++                         | A+++                         |
| Space heating<br>Average climate<br>water outlet 55°C | SCOP                             | -       | 3.85                         | 3.83                         | 3.85                         | 3.85                         | 3.83                         | 3.85                         |
|                                                       | ns                               | %       | 151                          | 150                          | 151                          | 151                          | 150                          | 151                          |
|                                                       | Energy class                     | -       | A+++                         | A+++                         | A+++                         | A+++                         | A+++                         | A+++                         |
| Cooling<br>(LWT 18°C / OAT 35°C)                      | Capacity                         | kW      | 11.50                        | 13.50                        | 15.50                        | 11.50                        | 13.50                        | 15.50                        |
|                                                       | Power input                      | kW      | 2.56                         | 3.14                         | 3.88                         | 2.56                         | 3.14                         | 3.88                         |
|                                                       | EER                              | -       | 4.50                         | 4.30                         | 4.00                         | 4.50                         | 4.30                         | 4.00                         |
| Cooling<br>(LWT 7°C / OAT 35°C)                       | Capacity                         | kW      | 10.00                        | 12.00                        | 14.00                        | 10.00                        | 12.00                        | 14.00                        |
|                                                       | Power input                      | kW      | 2.99                         | 3.75                         | 4.52                         | 2.99                         | 3.75                         | 4.52                         |
|                                                       | EER                              | -       | 3.35                         | 3.20                         | 3.10                         | 3.35                         | 3.20                         | 3.10                         |
| Indoor Unit                                           |                                  |         | HU162F20AHYA                 | HU162F20AHYA                 | HU162F20AHYA                 | HU162F20AHYAE3               | HU162F20AHYAE3               | HU162F20AHYAE3               |
| Leaving water<br>temperature range                    | Heating                          | °C      | 20-80                        | 20-80                        | 20-80                        | 20-80                        | 20-80                        | 20-80                        |
|                                                       | Cooling                          | °C      | 5-25                         | 5-25                         | 5-25                         | 5-25                         | 5-25                         | 5-25                         |
| Storage temperature<br>range (Tank)                   | DHW                              | °C      | 25-75                        | 25-75                        | 25-75                        | 25-75                        | 25-75                        | 25-75                        |
|                                                       |                                  |         |                              |                              |                              |                              |                              |                              |
| Water piping Connection                               | Inlet/Outlet<br>(except for DHW) | inch    | R 1/R 1                      | R 1/R 1                      | R 1/R 1                      | R 1/R 1                      | R 1/R 1                      | R 1/R 1                      |
|                                                       | Inlet/Outlet (DHW)               | inch    | R 3/4                        | R 3/4                        | R 3/4                        | R 3/4                        | R 3/4                        | R 3/4                        |
| Expansion Tank                                        |                                  | L       | 8                            | 8                            | 8                            | 8                            | 8                            | 8                            |
| Primary circuit                                       | Pressure relief valve            | bar     | 3                            | 3                            | 3                            | 3                            | 3                            | 3                            |
| Power supply                                          |                                  | V/ph/Hz | 220-240/1/50                 | 220-240/1/50                 | 220-240/1/50                 | 220-240/1/50                 | 220-240/1/50                 | 220-240/1/50                 |
| Max running current*(1)                               |                                  | A       | 15.0                         | 15.0                         | 15.0                         | 15.0                         | 15.0                         | 15.0                         |
| Recommended circuit breaker                           |                                  | A       | 20.0                         | 20.0                         | 20.0                         | 20.0                         | 20.0                         | 20.0                         |
| DHW Tank                                              | Type                             | -       | 2205 duplex stainless steel  |                              |                              |                              |                              |                              |
|                                                       | Tank Volume                      | L       | 200                          | 200                          | 200                          | 200                          | 200                          | 200                          |
|                                                       | Maximum water<br>pressure limit  | bar     | 7                            | 7                            | 7                            | 7                            | 7                            | 7                            |
|                                                       | Tank heater                      | kW      | 3                            | 3                            | 3                            | 3                            | 3                            | 3                            |
| Declared load profile                                 |                                  | -       | L                            | L                            | L                            | L                            | L                            | L                            |
| COP*(2)                                               |                                  | -       | 3.5                          | 3.5                          | 3.5                          | 3.5                          | 3.5                          | 3.5                          |
| Water heating energy efficiency class                 |                                  | -       | A+                           | A+                           | A+                           | A+                           | A+                           | A+                           |
| Backup electric heater                                | Power supply                     | V/ph/Hz | 220-240/1/50                 | 220-240/1/50                 | 220-240/1/50                 | 380-415/3/50                 | 380-415/3/50                 | 380-415/3/50                 |
|                                                       | Capacity                         | kW      | 2+4                          | 2+4                          | 2+4                          | 2+4                          | 2+4                          | 2+4                          |
|                                                       | Steps                            | -       | 2                            | 2                            | 2                            | 2                            | 2                            | 2                            |
|                                                       | Max Running current              | A       | 27.5                         | 27.5                         | 27.5                         | 9.5                          | 9.5                          | 9.5                          |
|                                                       | Recommended<br>circuit breaker   | A       | 40.0                         | 40.0                         | 40.0                         | 16.0                         | 16.0                         | 16.0                         |
| Sound power level                                     |                                  | dB      | 42                           | 42                           | 42                           | 42                           | 42                           | 42                           |
| Net Dimension                                         | (HxWxD)                          | mm      | 1780 × 590 × 595             | 1780 × 590 × 595             | 1780 × 590 × 595             | 1780 × 590 × 595             | 1780 × 590 × 595             | 1780 × 590 × 595             |
| Packaging dimension                                   | (HxWxD)                          | mm      | 2060 × 695 × 695             | 2060 × 695 × 695             | 2060 × 695 × 695             | 2060 × 695 × 695             | 2060 × 695 × 695             | 2060 × 695 × 695             |
| Net / Gross weight                                    |                                  | kg      | 116.5 / 132.5                | 116.5 / 132.5                | 116.5 / 132.5                | 117 / 133                    | 117 / 133                    | 117 / 133                    |
| Outdoor Unit                                          |                                  |         | AW122HVGHA                   | AW142HVGHA                   | AW162HVGHA                   | AW12NHVGHA                   | AW14NHVGHA                   | AW16NHVGHA                   |
| Outdoor operating<br>temperature range                | Heating                          | °C      | -25 ~ 35                     | -25 ~ 35                     | -25 ~ 35                     | -25 ~ 35                     | -25 ~ 35                     | -25 ~ 35                     |
|                                                       | Cooling                          | °C      | 10 ~ 48                      | 10 ~ 48                      | 10 ~ 48                      | 10 ~ 48                      | 10 ~ 48                      | 10 ~ 48                      |
|                                                       | DHW                              | °C      | -25 ~ 43                     | -25 ~ 43                     | -25 ~ 43                     | -25 ~ 43                     | -25 ~ 43                     | -25 ~ 43                     |
| Water piping connection                               | Inlet/Outlet                     | inch    | R 1/R 1                      | R 1/R 1                      | R 1/R 1                      | R 1/R 1                      | R 1/R 1                      | R 1/R 1                      |
| Compressor                                            | Quantity                         | -       | 1                            | 1                            | 1                            | 1                            | 1                            | 1                            |
|                                                       | Type                             | -       | DC inverter twin rotary      |                              |                              |                              |                              |                              |
| Refrigerant                                           | Type                             | -       | R290                         |                              |                              |                              |                              |                              |
|                                                       | Charge/CO2 Eq.                   | kg/T    | 1.05/3.15                    | 1.05/3.15                    | 1.25/3.75                    | 1.05/3.15                    | 1.05/3.15                    | 1.25/3.75                    |
| Sound pressure level *(3)                             |                                  | dB(A)   | 52                           | 53                           | 55                           | 52                           | 53                           | 55                           |
| Sound power level *(3)                                |                                  | dB      | 63                           | 64                           | 66                           | 63                           | 64                           | 66                           |
| Net Dimension                                         | (HxWxD)                          | mm      | 880 × 1250 × 460             | 880 × 1250 × 460             | 880 × 1250 × 460             | 880 × 1250 × 460             | 880 × 1250 × 460             | 880 × 1250 × 460             |
| Packaging dimension                                   | (HxWxD)                          | mm      | 1112 × 1396 × 630            | 1112 × 1396 × 630            | 1112 × 1396 × 630            | 1112 × 1396 × 630            | 1112 × 1396 × 630            | 1112 × 1396 × 630            |
| Net / Gross weight                                    |                                  | kg      | 114/140                      | 114/140                      | 123/149                      | 129/155                      | 129/155                      | 138/164                      |
| Power supply                                          |                                  | V/ph/Hz | 220-240/1/50                 | 220-240/1/50                 | 220-240/1/50                 | 380-415/3/50                 | 380-415/3/50                 | 380-415/3/50                 |
| Max running current                                   |                                  | A       | 30.6                         | 30.6                         | 34.8                         | 10.2                         | 10.2                         | 11.6                         |
| Recommended circuit breaker                           |                                  | A       | 32.0                         | 32.0                         | 40.0                         | 16.0                         | 16.0                         | 16.0                         |

\*(1) Max running current does not include backup electric heater, which is individually powered on.

\*(2) The testing conditions refer to EN16147 average climate

\*(3) The testing conditions refer to EN14511-2018 and the testing method refers to EN12102-2017 (A7/W35)

The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.



R290



A+++ / A+++



Max. 80°C hot water



Climate Curve



2 Zone Control



Auto Mode



Smart Grid



BMS



Modbus



DHW Tank Solar Control



Pool Heating



Anti-freezing

# HYDRO ALL-IN-ONE R290



AW042HUGHA  
AW062HUGHA  
AW082HUGHA  
AW102HUGHA  
AW10NHUGHA



HU102F16AHYA  
HU102F16AHYAE3

Our all in one unit has the expansion vessel, flow switch and water pump inside the all in one unit.

The all in one units have a wiring centre mounted inside them to make wiring simpler. It connects to the outdoor unit with a 2 core cable.

| Model                                           |                               |         | Hydro All in one 4kW-1Ph    | Hydro All in one 6kW-1Ph | Hydro All in one 8kW-1Ph | Hydro All in one 10kW-1Ph | Hydro All in one 10kW-3Ph |
|-------------------------------------------------|-------------------------------|---------|-----------------------------|--------------------------|--------------------------|---------------------------|---------------------------|
| Heating (LWT 35°C / OAT 7°C)                    | Capacity                      | kW      | 4.00                        | 6.00                     | 8.00                     | 10.00                     | 10.00                     |
|                                                 | Power input                   | kW      | 0.73                        | 1.12                     | 1.50                     | 1.96                      | 1.96                      |
|                                                 | COP                           | W/W     | 5.50                        | 5.35                     | 5.35                     | 5.10                      | 5.10                      |
| Heating (LWT 55°C / OAT 7°C)                    | Capacity                      | kW      | 4.00                        | 6.00                     | 8.00                     | 10.00                     | 10.00                     |
|                                                 | Power input                   | kW      | 1.19                        | 1.82                     | 2.35                     | 3.13                      | 3.13                      |
|                                                 | COP                           | W/W     | 3.35                        | 3.30                     | 3.40                     | 3.20                      | 3.20                      |
| Space heating Average climate water outlet 35°C | SCOP                          | -       | 5.10                        | 5.10                     | 5.20                     | 5.10                      | 5.10                      |
|                                                 | ns                            | %       | 201                         | 201                      | 205                      | 201                       | 201                       |
|                                                 | Energy class                  | -       | A+++                        | A+++                     | A+++                     | A+++                      | A+++                      |
| Space heating Average climate water outlet 55°C | SCOP                          | -       | 3.85                        | 3.83                     | 3.85                     | 3.83                      | 3.83                      |
|                                                 | ns                            | %       | 151                         | 150                      | 151                      | 150                       | 150                       |
|                                                 | Energy class                  | -       | A+++                        | A+++                     | A+++                     | A+++                      | A+++                      |
| Cooling (LWT 18°C / OAT 35°C)                   | Capacity                      | kW      | 4.00                        | 6.00                     | 7.50                     | 9.50                      | 9.50                      |
|                                                 | Power input                   | kW      | 0.79                        | 1.20                     | 1.58                     | 2.21                      | 2.21                      |
|                                                 | EER                           | -       | 5.05                        | 5.00                     | 4.75                     | 4.30                      | 4.30                      |
| Cooling (LWT 7°C / OAT 35°C)                    | Capacity                      | kW      | 3.50                        | 5.00                     | 6.80                     | 8.50                      | 8.50                      |
|                                                 | Power input                   | kW      | 0.95                        | 1.37                     | 1.97                     | 2.62                      | 2.62                      |
|                                                 | EER                           | -       | 3.70                        | 3.65                     | 3.45                     | 3.25                      | 3.25                      |
| Indoor Unit                                     |                               |         | HU102F16AHYA                | HU102F16AHYA             | HU102F16AHYA             | HU102F16AHYA              | HU102F16AHYAE3            |
| Leaving water temperature range                 | Heating                       | °C      | 20-80                       | 20-80                    | 20-80                    | 20-80                     | 20-80                     |
|                                                 | Cooling                       | °C      | 5-25                        | 5-25                     | 5-25                     | 5-25                      | 5-25                      |
| Storage temperature range (Tank)                | DHW                           | °C      | 25-75                       | 25-75                    | 25-75                    | 25-75                     | 25-75                     |
| Water piping Connection                         | Inlet/Outlet (except for DHW) | inch    | R 1/ R 1                    | R 1/ R 1                 | R 1/ R 1                 | R 1/ R 1                  | R 1/ R 1                  |
|                                                 | Inlet/Outlet (DHW)            | inch    | R 3/4                       | R 3/4                    | R 3/4                    | R 3/4                     | R 3/4                     |
| Expansion Tank                                  | L                             |         | 8                           | 8                        | 8                        | 8                         | 8                         |
| Primary circuit                                 | Pressure relief valve         | bar     | 3                           | 3                        | 3                        | 3                         | 3                         |
| Power supply                                    | V/ph/Hz                       |         | 220-240/1/50                | 220-240/1/50             | 220-240/1/50             | 220-240/1/50              | 220-240/1/50              |
| Max running current*(1)                         | A                             |         | 14.1                        | 14.1                     | 14.1                     | 14.1                      | 14.1                      |
| Recommended circuit breaker                     | A                             |         | 20.0                        | 20.0                     | 20.0                     | 20.0                      | 20.0                      |
| DHW Tank                                        | Type                          | -       | 2205 duplex stainless steel |                          |                          |                           |                           |
|                                                 | Tank Volume                   | L       | 160                         | 160                      | 160                      | 160                       | 160                       |
|                                                 | Maximum water pressure limit  | bar     | 7                           | 7                        | 7                        | 7                         | 7                         |
|                                                 | Tank heater                   | kW      | 3                           | 3                        | 3                        | 3                         | 3                         |
| Declared load profile                           | -                             | L       | L                           | L                        | L                        | L                         | L                         |
| COPx(2)                                         | -                             |         | 3.16                        | 3.16                     | 3.16                     | 3.16                      | 3.16                      |
| Water heating energy efficiency class           | -                             |         | A+                          | A+                       | A+                       | A+                        | A+                        |
| Backup electric heater                          | Power supply                  | V/ph/Hz | 220-240/1/50                | 220-240/1/50             | 220-240/1/50             | 220-240/1/50              | 380-415/3/50              |
|                                                 | Capacity                      | kW      | 1+2                         | 1+2                      | 1+2                      | 1+2                       | 1+2                       |
|                                                 | Steps                         | -       | 2                           | 2                        | 2                        | 2                         | 2                         |
|                                                 | Max Running current           | A       | 14.0                        | 14.0                     | 14.0                     | 14.0                      | 5.0                       |
|                                                 | Recommended circuit breaker   | A       | 20.0                        | 20.0                     | 20.0                     | 20.0                      | 10.0                      |
| Sound power level                               | dB                            |         | 40                          | 40                       | 40                       | 40                        | 40                        |
| Net Dimension                                   | (HxWxD)                       | mm      | 1580x590x590                | 1580x590x590             | 1580x590x590             | 1580x590x590              | 1580x590x590              |
| Packaging dimension                             | (HxWxD)                       | mm      | 1860x695x695                | 1860x695x695             | 1860x695x695             | 1860x695x695              | 1860x695x695              |
| Net / Gross weight                              | kg                            |         | 103 / 121                   | 103 / 121                | 103 / 121                | 103 / 121                 | 103.5 / 121.5             |
| Outdoor Unit                                    |                               |         | AW042HUGHA                  | AW062HUGHA               | AW082HUGHA               | AW102HUGHA                | AW10NHUGHA                |
| Outdoor operating temperature range             | Heating                       | °C      | -25 ~ 35                    | -25 ~ 35                 | -25 ~ 35                 | -25 ~ 35                  | -25 ~ 35                  |
|                                                 | Cooling                       | °C      | 10 ~ 48                     | 10 ~ 48                  | 10 ~ 48                  | 10 ~ 48                   | 10 ~ 48                   |
|                                                 | DHW                           | °C      | -25 ~ 43                    | -25 ~ 43                 | -25 ~ 43                 | -25 ~ 43                  | -25 ~ 43                  |
| Water piping connection                         | Inlet/Outlet                  | inch    | R 1/ R 1                    | R 1/ R 1                 | R 1/ R 1                 | R 1/ R 1                  | R 1/ R 1                  |
| Compressor                                      | Quantity                      | -       | 1                           | 1                        | 1                        | 1                         | 1                         |
|                                                 | Type                          | -       | DC inverter twin rotary     |                          |                          |                           |                           |
| Refrigerant                                     | Type                          | -       | R290                        |                          |                          |                           |                           |
|                                                 | Charge/CO2 Eq.                | kg/T    | 0.8/2.4                     | 0.8/2.4                  | 0.9/2.7                  | 0.9/2.7                   | 0.9/2.7                   |
| Sound pressure level *(3)                       | dB(A)                         |         | 44                          | 47                       | 48                       | 49                        | 49                        |
| Sound power level *(3)                          | dB                            |         | 55                          | 58                       | 59                       | 60                        | 60                        |
| Net Dimension                                   | (HxWxD)                       | mm      | 790x1250x380                | 790x1250x380             | 790x1250x380             | 790x1250x380              | 790x1250x380              |
| Packaging dimension                             | (HxWxD)                       | mm      | 1022x1395x550               | 1022x1395x550            | 1022x1395x550            | 1022x1395x550             | 1022x1395x550             |
| Net / Gross weight                              | kg                            |         | 82/106                      | 82/106                   | 91/115                   | 91/115                    | 101/125                   |
| Power supply                                    | V/ph/Hz                       |         | 220-240/1/50                | 220-240/1/50             | 220-240/1/50             | 220-240/1/50              | 380-415/3/50              |
| Max running current                             | A                             |         | 13.5                        | 13.5                     | 18.6                     | 18.6                      | 6.2                       |
| Recommended circuit breaker                     | A                             |         | 16.0                        | 16.0                     | 20.0                     | 20.0                      | 16.0                      |

\*(1)Max running current does not include backup electric heater, which is individually powered on.

\*(2)The testing conditions refer to EN16147 average climate

\*(3)The testing conditions refer to EN14511-2018 and the testing method refers to EN12102-2017 (A7/W35)



NEW

# HYDRO ALL-IN-ONE R290



AW042HUGHA  
AW062HUGHA  
AW082HUGHA  
AW162HVGHA  
AW102HUGHA



HU102F24AHYA  
HU162F24AHYA  
HU102F24AHYAE3

Our all in one unit has the expansion vessel, flow switch and water pump inside the all in one unit.

The all in one units have a wiring centre mounted inside them to make wiring simpler. It connects to the outdoor unit with a 2 core cable.

| Model                                                 |                                  |         | Hydro All in one<br>4kW-1Ph | Hydro All in one<br>6kW-1Ph | Hydro All in one<br>8kW-1Ph | Hydro All in one<br>10kW-1Ph | Hydro All in one<br>10kW-3Ph |
|-------------------------------------------------------|----------------------------------|---------|-----------------------------|-----------------------------|-----------------------------|------------------------------|------------------------------|
| Heating<br>(LWT 35°C / OAT 7°C)                       | Capacity                         | kW      | 4.00                        | 6.00                        | 8.00                        | 10.00                        | 10.00                        |
|                                                       | Power input                      | kW      | 0.73                        | 1.12                        | 1.50                        | 1.96                         | 1.96                         |
|                                                       | COP                              | W/W     | 5.50                        | 5.35                        | 5.35                        | 5.10                         | 5.10                         |
| Heating<br>(LWT 55°C / OAT 7°C)                       | Capacity                         | kW      | 4.00                        | 6.00                        | 8.00                        | 10.00                        | 10.00                        |
|                                                       | Power input                      | kW      | 1.19                        | 1.82                        | 2.35                        | 3.13                         | 3.13                         |
|                                                       | COP                              | W/W     | 3.35                        | 3.30                        | 3.40                        | 3.20                         | 3.20                         |
| Space heating<br>Average climate<br>water outlet 35°C | SCOP                             | -       | 5.10                        | 5.10                        | 5.20                        | 5.10                         | 5.10                         |
|                                                       | ns                               | %       | 201                         | 201                         | 205                         | 201                          | 201                          |
|                                                       | Energy class                     | -       | A+++                        | A+++                        | A+++                        | A+++                         | A+++                         |
| Space heating<br>Average climate<br>water outlet 55°C | SCOP                             | -       | 3.85                        | 3.83                        | 3.85                        | 3.83                         | 3.83                         |
|                                                       | ns                               | %       | 151                         | 150                         | 151                         | 150                          | 150                          |
|                                                       | Energy class                     | -       | A+++                        | A+++                        | A+++                        | A+++                         | A+++                         |
| Cooling<br>(LWT 18°C / OAT 35°C)                      | Capacity                         | kW      | 4.00                        | 6.00                        | 7.50                        | 9.50                         | 9.50                         |
|                                                       | Power input                      | kW      | 0.79                        | 1.20                        | 1.58                        | 2.21                         | 2.21                         |
|                                                       | EER                              | -       | 5.05                        | 5.00                        | 4.75                        | 4.30                         | 4.30                         |
| Cooling<br>(LWT 7°C / OAT 35°C)                       | Capacity                         | kW      | 3.50                        | 5.00                        | 6.80                        | 8.50                         | 8.50                         |
|                                                       | Power input                      | kW      | 0.95                        | 1.37                        | 1.97                        | 2.62                         | 2.62                         |
|                                                       | EER                              | -       | 3.70                        | 3.65                        | 3.45                        | 3.25                         | 3.25                         |
| Indoor Unit                                           |                                  |         | HU102F24AHYA                | HU102F24AHYA                | HU162F24AHYA                | HU162F24AHYA                 | HU102F24AHYAE3               |
| Leaving water<br>temperature range                    | Heating                          | °C      | 20-80                       | 20-80                       | 20-80                       | 20-80                        | 20-80                        |
|                                                       | Cooling                          | °C      | 5-25                        | 5-25                        | 5-25                        | 5-25                         | 5-25                         |
| Storage temperature<br>range (Tank)                   | DHW                              | °C      | 25-75                       | 25-75                       | 25-75                       | 25-75                        | 25-75                        |
| Water piping Connection                               | Inlet/Outlet<br>(except for DHW) | inch    | R 1/ R 1                    | R 1/ R 1                    | R 1/ R 1                    | R 1/ R 1                     | R 1/ R 1                     |
|                                                       | Inlet/Outlet (DHW)               | inch    | R 3/4                       | R 3/4                       | R 3/4                       | R 3/4                        | R 3/4                        |
| Expansion Tank                                        |                                  | L       | 8                           | 8                           | 8                           | 8                            | 8                            |
| Primary circuit                                       | Pressure relief valve            | bar     | 3                           | 3                           | 3                           | 3                            | 3                            |
| Power supply                                          |                                  | V/ph/Hz | 220-240/1/50                | 220-240/1/50                | 220-240/1/50                | 220-240/1/50                 | 220-240/1/50                 |
| Max running current*(1)                               |                                  | A       | 14.1                        | 14.1                        | 14.1                        | 14.1                         | 14.1                         |
| Recommended circuit breaker                           |                                  | A       | 20.0                        | 20.0                        | 20.0                        | 20.0                         | 20.0                         |
| DHW Tank                                              | Type                             | -       | 2205 duplex stainless steel |                             |                             |                              |                              |
|                                                       | Tank Volume                      | L       | 240                         | 240                         | 240                         | 240                          | 240                          |
|                                                       | Maximum water<br>pressure limit  | bar     | 7                           | 7                           | 7                           | 7                            | 7                            |
|                                                       | Tank heater                      | kW      | 3                           | 3                           | 3                           | 3                            | 3                            |
| Declared load profile                                 |                                  | -       | XL                          | XL                          | XL                          | XL                           | XL                           |
| COPx(2)                                               |                                  | -       | 3.17                        | 3.17                        | 3.17                        | 3.17                         | 3.13                         |
| Water heating energy efficiency class                 |                                  | -       | A+                          | A+                          | A+                          | A+                           | A+                           |
| Backup electric heater                                | Power supply                     | V/ph/Hz | 220-240/1/50                | 220-240/1/50                | 220-240/1/50                | 220-240/1/50                 | 220-240/1/50                 |
|                                                       | Capacity                         | kW      | 1+2                         | 1+2                         | 1+2                         | 1+2                          | 2+4                          |
|                                                       | Steps                            | -       | 2                           | 2                           | 2                           | 2                            | 2                            |
|                                                       | Max Running current              | A       | 14.0                        | 14.0                        | 14.0                        | 14.0                         | 27.5                         |
|                                                       | Recommended<br>circuit breaker   | A       | 20.0                        | 20.0                        | 20.0                        | 20.0                         | 40.0                         |
| Sound power level                                     |                                  | dB      | 40                          | 40                          | 40                          | 40                           | 42                           |
| Net Dimension                                         | (HxWxD)                          | mm      | 1985x590x590                | 1985x590x590                | 1985x590x590                | 1985x590x590                 | 1985x590x590                 |
| Packaging dimension                                   | (HxWxD)                          | mm      | 2265x695x695                | 2265x695x695                | 2265x695x695                | 2265x695x695                 | 2265x695x695                 |
| Net / Gross weight                                    |                                  | kg      | 120.5 / 139.5               | 120.5 / 139.5               | 120.5 / 139.5               | 120.5 / 139.5                | 122 / 141                    |
| Outdoor Unit                                          |                                  |         | AW042HUGHA                  | AW062HUGHA                  | AW082HUGHA                  | AW102HUGHA                   | AW10NHUGHA                   |
| Outdoor operating<br>temperature range                | Heating                          | °C      | -25 ~ 35                    | -25 ~ 35                    | -25 ~ 35                    | -25 ~ 35                     | -25 ~ 35                     |
|                                                       | Cooling                          | °C      | 10 ~ 48                     | 10 ~ 48                     | 10 ~ 48                     | 10 ~ 48                      | 10 ~ 48                      |
|                                                       | DHW                              | °C      | -25 ~ 43                    | -25 ~ 43                    | -25 ~ 43                    | -25 ~ 43                     | -25 ~ 43                     |
| Water piping connection                               | Inlet/Outlet                     | inch    | R 1/ R 1                    | R 1/ R 1                    | R 1/ R 1                    | R 1/ R 1                     | R 1/ R 1                     |
| Compressor                                            | Quantity                         | -       | 1                           | 1                           | 1                           | 1                            | 1                            |
|                                                       | Type                             | -       | DC inverter twin rotary     |                             |                             |                              |                              |
| Refrigerant                                           | Type                             | -       | R290                        |                             |                             |                              |                              |
|                                                       | Charge/CO2 Eq.                   | kg/T    | 0.8/2.4                     | 0.8/2.4                     | 0.9/2.7                     | 0.9/2.7                      | 1.05/3.15                    |
| Sound pressure level *(3)                             |                                  | dB(A)   | 44                          | 47                          | 48                          | 49                           | 52                           |
| Sound power level *(3)                                |                                  | dB      | 55                          | 58                          | 59                          | 60                           | 63                           |
| Net Dimension                                         | (HxWxD)                          | mm      | 790x1250x380                | 790x1250x380                | 790x1250x380                | 790x1250x380                 | 880x1250x460                 |
| Packaging dimension                                   | (HxWxD)                          | mm      | 1022x1395x550               | 1022x1395x550               | 1022x1395x550               | 1022x1395x550                | 1112x1396x630                |
| Net / Gross weight                                    |                                  | kg      | 82/106                      | 82/106                      | 91/115                      | 91/115                       | 111/138                      |
| Power supply                                          |                                  | V/ph/Hz | 220-240/1/50                | 220-240/1/50                | 220-240/1/50                | 220-240/1/50                 | 220-240/1/50                 |
| Max running current                                   |                                  | A       | 13.5                        | 13.5                        | 18.6                        | 18.6                         | 30.6                         |
| Recommended circuit breaker                           |                                  | A       | 16.0                        | 16.0                        | 20.0                        | 20.0                         | 32.0                         |

\*(1)Max running current does not include backup electric heater, which is individually powered on.

\*(2)The testing conditions refer to EN16147 average climate

\*(3)The testing conditions refer to EN14511-2018 and the testing method refers to EN12102-2017 (A7/W35)

The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.



# HYDRO ALL-IN-ONE R290



AW122HVGHA  
AW142HVGHA  
AW162HVGHA



HU162F24AHYA

Our all in one unit has the expansion vessel , flow switch and water pump inside the all in one unit.

The all in one units have a wiring centre mounted inside them to make wiring simpler. It connects to the outdoor unit with a 2 core cable.

| Model                                           |                               |         | Hydro All in one 12kW-1Ph   | Hydro All in one 14kW-1Ph | Hydro All in one 16kW-1Ph |
|-------------------------------------------------|-------------------------------|---------|-----------------------------|---------------------------|---------------------------|
| Heating (LWT 35°C / OAT 7°C)                    | Capacity                      | kW      | 12.00                       | 14.00                     | 16.00                     |
|                                                 | Power input                   | kW      | 2.35                        | 2.83                      | 3.23                      |
|                                                 | COP                           | W/W     | 5.10                        | 4.95                      | 4.95                      |
| Heating (LWT 55°C / OAT 7°C)                    | Capacity                      | kW      | 11.50                       | 13.50                     | 15.50                     |
|                                                 | Power input                   | kW      | 3.48                        | 4.22                      | 5.08                      |
|                                                 | COP                           | W/W     | 3.30                        | 3.20                      | 3.05                      |
| Space heating Average climate water outlet 35°C | SCOP                          | -       | 4.82                        | 4.80                      | 4.80                      |
|                                                 | ns                            | %       | 190                         | 189                       | 189                       |
|                                                 | Energy class                  | -       | A+++                        | A+++                      | A+++                      |
| Space heating Average climate water outlet 55°C | SCOP                          | -       | 3.85                        | 3.83                      | 3.85                      |
|                                                 | ns                            | %       | 151                         | 150                       | 151                       |
|                                                 | Energy class                  | -       | A+++                        | A+++                      | A+++                      |
| Cooling (LWT 18°C / OAT 35°C)                   | Capacity                      | kW      | 11.50                       | 13.50                     | 15.50                     |
|                                                 | Power input                   | kW      | 2.56                        | 3.14                      | 3.88                      |
|                                                 | EER                           | -       | 4.50                        | 4.30                      | 4.00                      |
| Cooling (LWT 7°C / OAT 35°C)                    | Capacity                      | kW      | 10.00                       | 12.00                     | 14.00                     |
|                                                 | Power input                   | kW      | 2.99                        | 3.75                      | 4.52                      |
|                                                 | EER                           | -       | 3.35                        | 3.20                      | 3.10                      |
| Indoor Unit                                     |                               |         | HU162F24AHYA                | HU162F24AHYA              | HU162F24AHYA              |
| Leaving water temperature range                 | Heating                       | °C      | 20-80                       | 20-80                     | 20-80                     |
|                                                 | Cooling                       | °C      | 5-25                        | 5-25                      | 5-25                      |
| Storage temperature range (Tank)                | DHW                           | °C      | 25-75                       | 25-75                     | 25-75                     |
| Water piping Connection                         | Inlet/Outlet (except for DHW) | inch    | R 1/ R 1                    | R 1/ R 1                  | R 1/ R 1                  |
|                                                 | Inlet/Outlet (DHW)            | inch    | R 3/4                       | R 3/4                     | R 3/4                     |
| Expansion Tank                                  | L                             |         | 8                           | 8                         | 8                         |
| Primary circuit                                 | Pressure relief valve         | bar     | 3                           | 3                         | 3                         |
| Power supply                                    | V/ph/Hz                       |         | 220-240/1/50                | 220-240/1/50              | 220-240/1/50              |
| Max running current*(1)                         | A                             |         | 14.1                        | 15.0                      | 15.0                      |
| Recommended circuit breaker                     | A                             |         | 20.0                        | 20.0                      | 20.0                      |
| DHW Tank                                        | Type                          | -       | 2205 duplex stainless steel |                           |                           |
|                                                 | Tank Volume                   | L       | 240                         | 240                       | 240                       |
|                                                 | Maximum water pressure limit  | bar     | 7                           | 7                         | 7                         |
|                                                 | Tank heater                   | kW      | 3                           | 3                         | 3                         |
| Declared load profile                           | -                             |         | XL                          | XL                        | XL                        |
| COPx(2)                                         | -                             |         | 3.17                        | 3.13                      | 3.13                      |
| Water heating energy efficiency class           | -                             |         | A+                          | A+                        | A+                        |
| Backup electric heater                          | Power supply                  | V/ph/Hz | 220-240/1/50                | 220-240/1/50              | 220-240/1/50              |
|                                                 | Capacity                      | kW      | 1+2                         | 2+4                       | 2+4                       |
|                                                 | Steps                         | -       | 2                           | 2                         | 2                         |
|                                                 | Max Running current           | A       | 14.0                        | 27.5                      | 27.5                      |
|                                                 | Recommended circuit breaker   | A       | 20.0                        | 40.0                      | 40.0                      |
| Sound power level                               | dB                            |         | 40                          | 42                        | 42                        |
| Net Dimension                                   | (HxWxD)                       | mm      | 1985x590x590                | 1985x590x590              | 1985x590x590              |
| Packaging dimension                             | (HxWxD)                       | mm      | 2265x695x695                | 2265x695x695              | 2265x695x695              |
| Net / Gross weight                              | kg                            |         | 120.5 / 139.5               | 122 / 141                 | 122 / 141                 |
| Outdoor Unit                                    |                               |         | AW122HVGHA                  | AW142HVGHA                | AW162HVGHA                |
| Outdoor operating temperature range             | Heating                       | °C      | -25 ~ 35                    | -25 ~ 35                  | -25 ~ 35                  |
|                                                 | Cooling                       | °C      | 10 ~ 48                     | 10 ~ 48                   | 10 ~ 48                   |
|                                                 | DHW                           | °C      | -25 ~ 43                    | -25 ~ 43                  | -25 ~ 43                  |
| Water piping connection                         | Inlet/Outlet                  | inch    | R 1/ R 1                    | R 1/ R 1                  | R 1/ R 1                  |
|                                                 | Quantity                      | -       | 1                           | 1                         | 1                         |
| Compressor                                      | Type                          | -       | DC inverter twin rotary     |                           |                           |
|                                                 | Refrigerant                   | -       | R290                        |                           |                           |
| Refrigerant                                     | Charge/CO2 Eq.                | kg/T    | 1.05/3.15                   | 1.05/3.15                 | 1.25/3.75                 |
|                                                 | Sound pressure level *(3)     | dB(A)   | 52                          | 53                        | 55                        |
| Sound power level *(3)                          |                               | dB      | 63                          | 64                        | 66                        |
|                                                 | Net Dimension                 | (HxWxD) | 880x1250x460                | 880x1250x460              | 880x1250x460              |
| Packaging dimension                             | (HxWxD)                       | mm      | 1112x1396x630               | 1112x1396x630             | 1112x1396x630             |
| Net / Gross weight                              | kg                            |         | 111/138                     | 111/138                   | 115/142                   |
| Power supply                                    | V/ph/Hz                       |         | 220-240/1/50                | 220-240/1/50              | 220-240/1/50              |
| Max running current                             | A                             |         | 30.6                        | 34.8                      | 34.8                      |
| Recommended circuit breaker                     | A                             |         | 32.0                        | 32.0                      | 40.0                      |

\*(1)Max running current does not include backup electric heater, which is individually powered on.

\*(2)The testing conditions refer to EN16147 average climate

\*(3)The testing conditions refer to EN14511-2018 and the testing method refers to EN12102-2017 (A7/W35)



NEW

## HYDRO ALL-IN-ONE R290



AW042HUGHA  
AW142HVGHA  
AW162HVGHA  
AW16NHVGHA



HU102F24AHYA  
HU102F24AHYAE  
HU162F24AHYA  
HU162F24AHYAE3

Our all in one unit has the expansion vessel, flow switch and water pump inside the all in one unit.

The all in one units have a wiring centre mounted inside them to make wiring simpler. It connects to the outdoor unit with a 2 core cable.

| Model                                                 |                                  |         | Hydro All in one<br>12kW-3Ph | Hydro All in one<br>14kW-3Ph | Hydro All in one<br>16kW-3Ph |
|-------------------------------------------------------|----------------------------------|---------|------------------------------|------------------------------|------------------------------|
| Heating<br>(LWT 35°C / OAT 7°C)                       | Capacity                         | kW      | 12.00                        | 14.00                        | 16.00                        |
|                                                       | Power input                      | kW      | 2.35                         | 2.83                         | 3.23                         |
|                                                       | COP                              | W/W     | 5.10                         | 4.95                         | 4.95                         |
| Heating<br>(LWT 55°C / OAT 7°C)                       | Capacity                         | kW      | 11.50                        | 13.50                        | 15.50                        |
|                                                       | Power input                      | kW      | 3.48                         | 4.22                         | 5.08                         |
|                                                       | COP                              | W/W     | 3.30                         | 3.20                         | 3.05                         |
| Space heating<br>Average climate<br>water outlet 35°C | SCOP                             | -       | 4.82                         | 4.80                         | 4.80                         |
|                                                       | ns                               | %       | 190                          | 189                          | 189                          |
|                                                       | Energy class                     | -       | A+++                         | A+++                         | A+++                         |
| Space heating<br>Average climate<br>water outlet 55°C | SCOP                             | -       | 3.85                         | 3.83                         | 3.85                         |
|                                                       | ns                               | %       | 151                          | 150                          | 151                          |
|                                                       | Energy class                     | -       | A+++                         | A+++                         | A+++                         |
| Cooling<br>(LWT 18°C / OAT 35°C)                      | Capacity                         | kW      | 11.50                        | 13.50                        | 15.50                        |
|                                                       | Power input                      | kW      | 2.56                         | 3.14                         | 3.88                         |
|                                                       | EER                              | -       | 4.50                         | 4.30                         | 4.00                         |
| Cooling<br>(LWT 7°C / OAT 35°C)                       | Capacity                         | kW      | 10.00                        | 12.00                        | 14.00                        |
|                                                       | Power input                      | kW      | 2.99                         | 3.75                         | 4.52                         |
|                                                       | EER                              | -       | 3.35                         | 3.20                         | 3.10                         |
| Indoor Unit                                           |                                  |         | HU162F24AHYAE3               | HU162F24AHYAE3               | HU162F24AHYAE3               |
| Leaving water<br>temperature range                    | Heating                          | °C      | 20-80                        | 20-80                        | 20-80                        |
|                                                       | Cooling                          | °C      | 5-25                         | 5-25                         | 5-25                         |
| Storage temperature<br>range (Tank)                   | DHW                              | °C      | 25-75                        | 25-75                        | 25-75                        |
| Water piping Connection                               | Inlet/Outlet<br>(except for DHW) | inch    | R 1/R 1                      | R 1/R 1                      | R 1/R 1                      |
|                                                       | Inlet/Outlet (DHW)               | inch    | R 3/4                        | R 3/4                        | R 3/4                        |
| Expansion Tank                                        |                                  | L       | 8                            | 8                            | 8                            |
| Primary circuit                                       | Pressure relief valve            | bar     | 3                            | 3                            | 3                            |
| Power supply                                          |                                  | V/ph/Hz | 220-240/1/50                 | 220-240/1/50                 | 220-240/1/50                 |
| Max running current*(1)                               |                                  | A       | 15.0                         | 15.0                         | 15.0                         |
| Recommended circuit breaker                           |                                  | A       | 20.0                         | 20.0                         | 20.0                         |
| DHW Tank                                              | Type                             | -       | 2205 duplex stainless steel  |                              |                              |
|                                                       | Tank Volume                      | L       | 240                          | 240                          | 240                          |
|                                                       | Maximum water<br>pressure limit  | bar     | 7                            | 7                            | 7                            |
|                                                       | Tank heater                      | kW      | 3                            | 3                            | 6                            |
| Declared load profile                                 |                                  | -       | XL                           | XL                           | XL                           |
| COPx(2)                                               |                                  | -       | 3.13                         | 3.13                         | 3.13                         |
| Water heating energy efficiency class                 |                                  | -       | A+                           | A+                           | A+                           |
| Backup electric heater                                | Power supply                     | V/ph/Hz | 220-240/1/50                 | 220-240/1/50                 | 380-415/3/50                 |
|                                                       | Capacity                         | kW      | 2+4                          | 2+4                          | 2+4                          |
|                                                       | Steps                            | -       | 2                            | 2                            | 2                            |
|                                                       | Max Running current              | A       | 27.5                         | 27.5                         | 9.5                          |
|                                                       | Recommended<br>circuit breaker   | A       | 40.0                         | 40.0                         | 16.0                         |
| Sound power level                                     |                                  | dB      | 42                           | 42                           | 42                           |
| Net Dimension                                         | (HxWxD)                          | mm      | 1985x590x590                 | 1985x590x590                 | 1985x590x590                 |
| Packaging dimension                                   | (HxWxD)                          | mm      | 2265x695x695                 | 2265x695x695                 | 2265x695x695                 |
| Net / Gross weight                                    |                                  | kg      | 122 / 141                    | 122 / 141                    | 122.5 / 141.5                |
| Outdoor Unit                                          |                                  |         | AW12NHVGHA                   | AW14NHVGHA                   | AW16NHVGHA                   |
| Outdoor operating<br>temperature range                | Heating                          | °C      | -25 ~ 35                     | -25 ~ 35                     | -25 ~ 35                     |
|                                                       | Cooling                          | °C      | 10 ~ 48                      | 10 ~ 48                      | 10 ~ 48                      |
|                                                       | DHW                              | °C      | -25 ~ 43                     | -25 ~ 43                     | -25 ~ 43                     |
| Water piping connection                               | Inlet/Outlet                     | inch    | R 1/R 1                      | R 1/R 1                      | R 1/R 1                      |
| Compressor                                            | Quantity                         | -       | 1                            | 1                            | 1                            |
|                                                       | Type                             | -       | DC inverter twin rotary      |                              |                              |
| Refrigerant                                           | Type                             | -       | R290                         |                              |                              |
|                                                       | Charge/CO2 Eq.                   | kg/T    | 1.05/3.15                    | 1.05/3.15                    | 1.25/3.75                    |
| Sound pressure level *(3)                             |                                  | dB(A)   | 52                           | 53                           | 55                           |
| Sound power level *(3)                                |                                  | dB      | 63                           | 64                           | 66                           |
| Net Dimension                                         | (HxWxD)                          | mm      | 880x1250x460                 | 880x1250x460                 | 880x1250x460                 |
| Packaging dimension                                   | (HxWxD)                          | mm      | 1112x1396x630                | 1112x1396x630                | 1112x1396x630                |
| Net / Gross weight                                    |                                  | kg      | 132/159                      | 132/159                      | 136/163                      |
| Power supply                                          |                                  | V/ph/Hz | 380-415/3/50                 | 380-415/3/50                 | 380-415/3/50                 |
| Max running current                                   |                                  | A       | 10.2                         | 10.2                         | 11.6                         |
| Recommended circuit breaker                           |                                  | A       | 16.0                         | 16.0                         | 16.0                         |

\*(1) Max running current does not include backup electric heater, which is individually powered on.

\*(2) The testing conditions refer to EN16147 average climate

\*(3) The testing conditions refer to EN14511-2018 and the testing method refers to EN12102-2017 (A7/W35)

The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.

