

|                 |       |          |           |                        |                        |                        |                        |
|-----------------|-------|----------|-----------|------------------------|------------------------|------------------------|------------------------|
| Efficiency data | Range | 8kW(1 Ø) | 10kW(1 Ø) | 12kW(1 Ø)<br>12kW(3 Ø) | 15kW(1 Ø)<br>15kW(3 Ø) | 20kW(1 Ø)<br>20kW(3 Ø) | 24kW(1 Ø)<br>24kW(3 Ø) |
|-----------------|-------|----------|-----------|------------------------|------------------------|------------------------|------------------------|

|                                                      |       |       |             |             |             |             |             |
|------------------------------------------------------|-------|-------|-------------|-------------|-------------|-------------|-------------|
| Seasonal space heating eff. class (35°C / 55°C)      |       | -     | A+++ / A+++ | A+++ / A+++ | A+++ / A+++ | A+++ / A+++ | A+++ / A+++ |
| Seasonal space heating efficiency (ηS) (35°C / 55°C) |       | %     | 210/162     | 211/160     | 208/163     | 207/162     | 205/158     |
| SCOP (35°C / 55°C)                                   |       |       | 5.32/4.12   | 5.34/4.08   | 5.26/4.16   | 5.25/4.12   | 5.2/4.02    |
| Sound power level(outdoor unit)                      | Rated | dB(A) | 45          | 45          | 46          | 46          | 47          |
| Sound pressure level at 3 m 1)(outdoor unit)         | Rated | dB(A) | 28          | 28          | 29          | 29          | 30          |
| Sound power level(indoor unit)                       | Rated | dB(A) | 40          |             |             |             |             |
| Testbedingungen/ Testbed conditions                  | Rated | dB(A) | 33          |             |             |             |             |

|                                     |      |                              |  |  |  |  |  |
|-------------------------------------|------|------------------------------|--|--|--|--|--|
| Testbedingungen/ Testbed conditions | Unit | Rated capacity and COP / EER |  |  |  |  |  |
|-------------------------------------|------|------------------------------|--|--|--|--|--|

|                         |                        |        |           |           |           |            |            |            |
|-------------------------|------------------------|--------|-----------|-----------|-----------|------------|------------|------------|
| Air +7°C / water +35°C  | Heating capacity / COP | kW / - | 6.4/5.31  | 7.50/5.23 | 9.34/5.08 | 11.43/5.16 | 14.57/5.12 | 18.08/5.06 |
| Air -7°C / water +35°C  | Heating capacity / COP | kW / - | 6.0/3.55  | 7.0/3.53  | 8.2/3.5   | 10.54/3.51 | 15/3.38    | 16.25/3.45 |
| Air +7°C / water +55°C  | Heating capacity / COP | kW / - | 5.35/3.17 | 6.35/3.19 | 8.69/3.41 | 10.47/3.4  | 12.05/3.14 | 16.23/3.35 |
| Air -7°C / water +55°C  | Heating capacity / COP | kW / - | 5.76/2.82 | 6.57/2.76 | 8.11/2.68 | 10.14/2.71 | 13.51/2.69 | 16.06/2.7  |
| Air +35°C / water +18°C | Cooling capacity / EER | kW / - | 6.2/3.43  | 7.0/3.45  | 9.2/3.24  | 12.23/3.64 | 16.3/3.7   | 18.52/3.63 |
| Air +35°C / water +7°C  | Cooling capacity / EER | kW / - | 5.8/3.06  | 6.6/3.02  | 8.18/2.78 | 11.37/2.93 | 14.82/2.94 | 16.71/3.01 |

|                          |      |        |        |        |        |        |        |
|--------------------------|------|--------|--------|--------|--------|--------|--------|
| Außengerät/ Outdoor unit | unit | HSL08V | HSL10V | HSL12V | HSL15V | HSL20V | HSL24V |
|--------------------------|------|--------|--------|--------|--------|--------|--------|

|                            |                                  |          |                          |        |                   |        |                    |        |
|----------------------------|----------------------------------|----------|--------------------------|--------|-------------------|--------|--------------------|--------|
| Refrigerant                | Typ                              | -        | R290                     |        |                   |        |                    |        |
|                            | GWP                              | -        | 3                        |        |                   |        |                    |        |
|                            | Precharged amount                | kg       | 0.83                     | 0.83   | 0.86              | 1.3    | 2.1                | 2.3    |
|                            | t-CO2 eq.                        | -        | 0.0025                   | 0.0025 | 0.0026            | 0.0039 | 0.0063             | 0.0069 |
| Piping connections (water) | Inlet / outlet diameter          | inch     | Male thread 1"           |        |                   |        | Male thread 1-1/4" |        |
| Operation range            | Heating & DHW (Min. ~ Max.)      | °C       | -28~40                   |        |                   |        |                    |        |
| (outdoor air temperature)  | Cooling (Min. ~ Max.)            | °C       | 10~45                    |        |                   |        |                    |        |
| Dimension                  | W × H × D                        | mm       | 1400*1025*520            |        |                   |        | 1400*1650*520      |        |
| Weight                     | Empty                            | kg       | 156                      | 157    | 163               | 178    | 210                | 230    |
| Power supply               | Voltage, phase, frequency        | V, Ø, Hz | 230,1,50                 |        | 230,1,50/400,3,50 |        | 400,3,50           |        |
| Exterior                   | Color of chassis / RAL code      | -        | Anthracite Grey/RAL 7016 |        |                   |        |                    |        |
|                            | Color of front grille / RAL code | -        | Anthracite Grey/RAL 7016 |        |                   |        |                    |        |

|             |      |                 |                    |
|-------------|------|-----------------|--------------------|
| Indoor unit | Unit | DSK03/09-QPVTSG | DSK03/09-QPVTSL200 |
|-------------|------|-----------------|--------------------|

|                                                |                              |          |                                     |                  |
|------------------------------------------------|------------------------------|----------|-------------------------------------|------------------|
| Operation range<br>(leaving water temperature) | Heating (Min. ~ Max.)        | °C       | 15 ~ 75                             |                  |
|                                                | Cooling (Min. ~ Max.)        | °C       | 12 ~ 27                             |                  |
|                                                | DHW (Min. ~ Max.)            | °C       | 15 ~ 65                             |                  |
| Built-in water tank                            | Buffer tank                  | L        | 18                                  | 26               |
|                                                | DHW tank3)                   | L        | -                                   | 200              |
|                                                | PCM Precharged amount        | kg       | 16                                  | 23               |
| Backup heater                                  | Capacity combination         | kW       | 3.0/3.0 + 3.0 + 3.0                 |                  |
|                                                | Powersupply                  | V, Ø, Hz | 220 ~ 240, 1, 50 / 380 ~ 415, 3, 50 |                  |
|                                                | Rated running current        | A        | 13/13                               |                  |
| Piping connections (water)                     | Heating circuit outlet pipe  | inch     | Male thread 1"                      |                  |
|                                                | Heating circuit inlet pipe   | inch     | Male thread 1"                      |                  |
|                                                | Outlet pipe to outdoor unit  | inch     | Male thread 1"                      |                  |
|                                                | Inlet pipe from outdoor unit | inch     | Male thread 1"                      |                  |
|                                                | DHW outlet pipe              | inch     | Male thread 1"                      | Male thread 3/4" |
|                                                | Cold water inlet pipe        | inch     | Male thread 1"                      | Male thread 3/4" |
| Dimension                                      | W × H × D                    | mm       | 450*360*900                         | 600*610*1870     |
| Weight                                         | Empty                        | kg       | 57                                  | 197              |
| Power supply                                   | Voltage, phase, frequency    | V, Ø, Hz | 220 ~ 240, 1, 50                    |                  |
|                                                | Recommended circuit breaker  | A        | 10                                  | 25               |
| Exterior                                       | Color / RAL code             | -        | Signal White / RAL 9016             |                  |

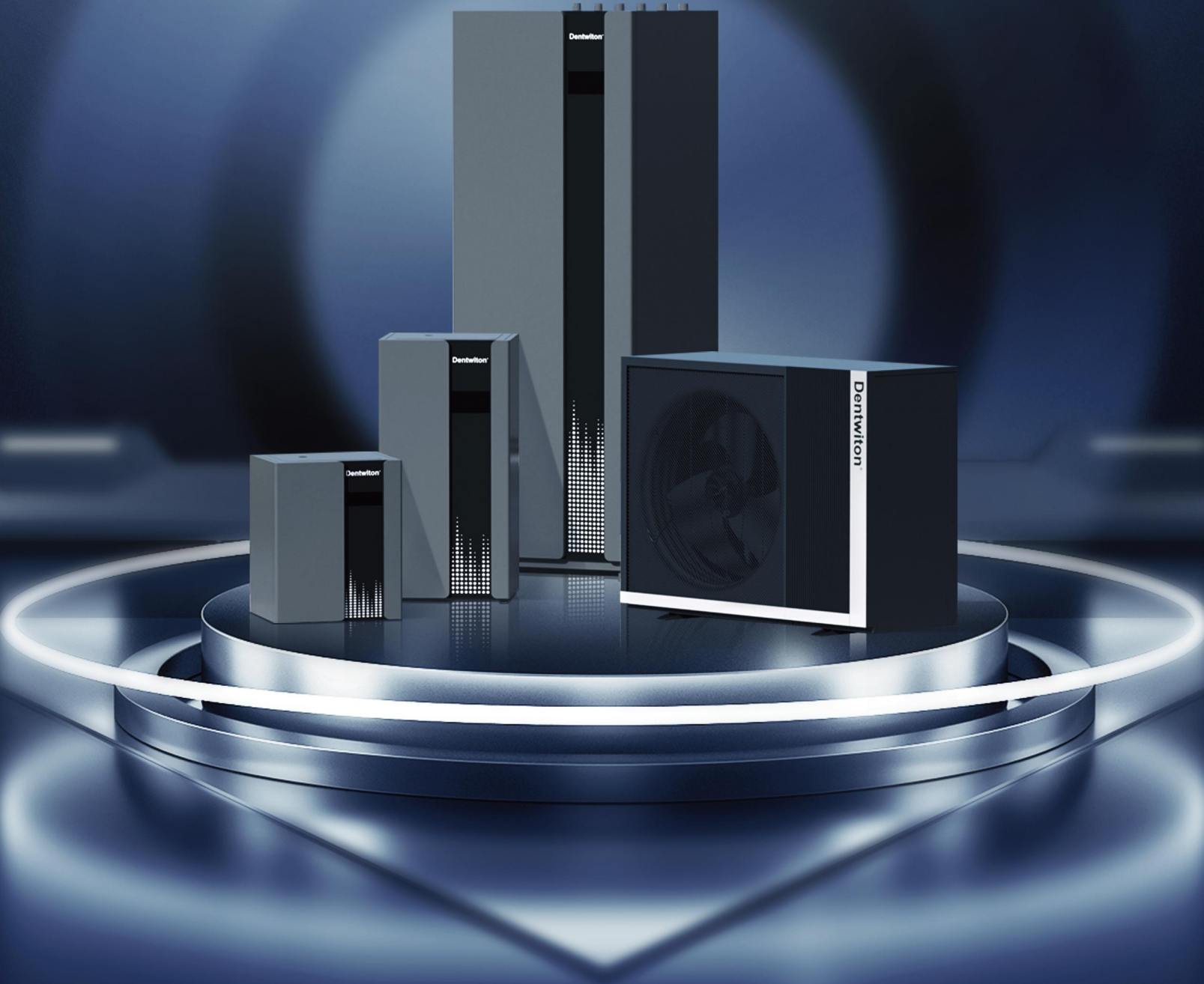
1)Sound power level is measured in accordance with EN 12102-1 and ISO 9614. Sound pressure level is converted from sound power level based on a tonality penalty of 0 dB and installation in free-field. The directivity index (Q) is assumed as 2.

\*Dentwiton reserves the right to alter the standards of the manufactured devices or to withdraw products from its offer without notice.

Ultimate Silence

R290

Ultra-high energy efficiency



► Design measures on silence



Over-sized Silent Fan Blades



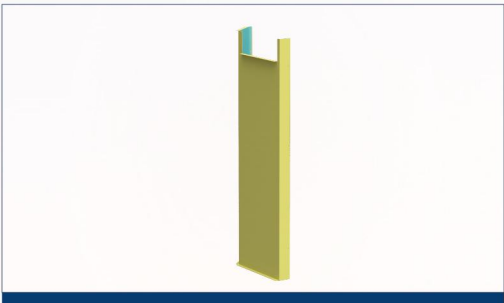
Air Guiding Loop Design (on Depth and Relative Position of Fan Blades)



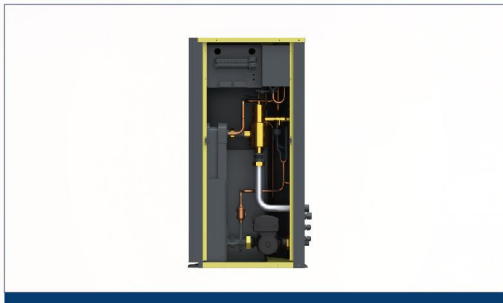
Suspension Compressor Chassis + Dual-layer Soundproof Material application



Compressor Wrapped in an Independent Soundproof Chamber



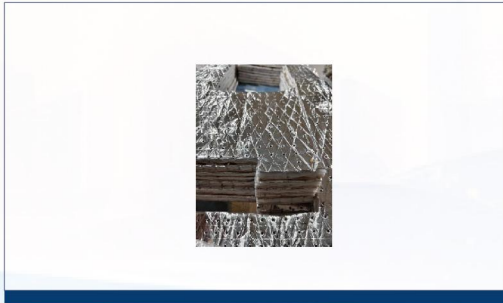
Double-sided Material Arrangement on the Partition Panel



High-density Cotton Sealed in Metal Sheet Connections

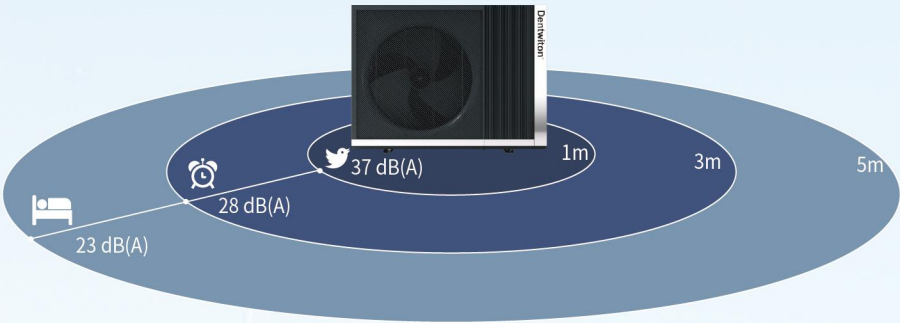
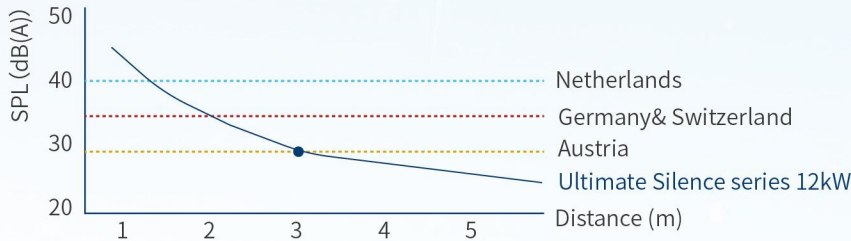


Optimized Design to Minimize Pipeline Resonance Noise and Airflow Whistle in the Pipeline



Additional Sound-absorbing Material Placed in the Compressor Chamber and Throttle Piping

► Ensuring regulatory compliance across all EU markets



Customers can have peace of mind with no risk of complaints and no additional costs for acoustic enclosures.

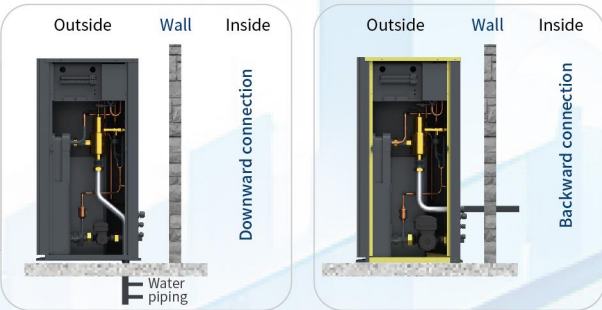
► Ultra-high energy efficiency

Seasonal efficiency at 35°C : **A+++**  
Seasonal efficiency at 55°C : **A+++**  
Water heating: **A**

Natural refrigerant:  
R-290 refrigerant with low global warming potential (GWP=3)

► Easy installation

The two-way piping connection method not only grants greater installation flexibility but also offers distinct advantages when it comes to concealing underground piping for both aesthetic and frost protection purposes.



► Application and Products of Phase Change Materials (PCM)

- 1.PCM Integrated Inside the Hydraulic Module and Sanitary Hot Water (SHW) Tank of the Hydraulic Tower
- 2.Phase Change Water Tank Products (Thermal Matrix)
  - Compact Structure, Flexible Installation
  - No Mandatory Maintenance Required
  - PCM in a state of solid substances, No Risk of Expansion or Leakage
  - Prolonged Warranty Period
  - Direct output of Hot Water with Very Low Risk of Legionella
  - Customizable Phase Change Points applicable for Various Project

