



# Technical data / Scope of supply

| Performance data   |   | Values in brackets: (1 Compressor)                          |                     | WZSV 62(H)(K)3M        | WZSV 92(H)(K)3M        |
|--|---|---|---------------------|------------------------|------------------------|
| Heating capacity   COP   | for B0/W35 acc. to DIN EN 14511-x: 2013 | Partial load operation                                      | kW   COP            | 3.32   4.86            | 4.00   4.76            |
|  | for B0/W45 acc. to DIN EN 14511-x: 2013 | Partial load operation                                      | kW   COP            | 3.09   3.76            | 3.82   3.74            |
|  | for B0/W55 acc. to DIN EN 14511-x: 2013 | Partial load operation                                      | kW   COP            | 2.95   3.13            | 3.41   2.90            |
|  | for B7/W35 flow of B0/W35               | Partial load operation                                      | kW   COP            | 4.18   5.94            | 4.91   5.74            |
| Heating capacity   | for B0/W35                              | min.   max.   | kW   kW             | 1.25   5.95            | 1.77   8.65            |
|  | for B0/W45                              | min.   max.   | kW   kW             | 1.16   5.50            | 1.79   8.42            |
|  | for B0/W55                              | min.   max.   | kW   kW             | 1.00   5.17            | 1.96   8.18            |
|  | for B7/W35                              | min.   max.   | kW   kW             | 1.55   7.20            | 2.31   10.60           |
| Cooling capacity at max. flow rate (B15/W25), units with passive cooling: Identifier K                                   |   |   | kW                  | 5.8                    | 7.8                    |
| <b>Operating limits</b>  |   |   |                     |                        |                        |
| Heating circuit return min.   Heating circuit flow max.  | Heating                                 | within heat source min./max.                                | °C                  | 20   65                | 20   65                |
| Heating circuit return min.   Heating circuit flow max.  | Cooling                                 | within heat source min./max.                                | °C                  | 18                     | 18                     |
| Heat source, heating   |   | min.   max.   | °C                  | -5   30                | -5   30                |
| Additional operating points  |   |   | ...                 | B-9/W60                | B-9/W60                |
| <b>Sound</b>   |   |   |                     |                        |                        |
| Sound pressure level at 1 m distance from edge of unit   |   | min.   max.   | dB(A)               | 29   36                | 29   39                |
| Sound power level  |   | min.   max.   | dB(A)               | -                      | -                      |
| Sound power level acc. to DIN EN 12102-1: 2017   |   |   | dB(A)               | 44   51                | 44   54                |
| Tonality   Low-frequency   |   |   | dB(A)   • yes – no  | -                      | -                      |
| <b>Heat source</b>   |   |   |                     |                        |                        |
| Flow rate (pipe dimensioning)  |   |   | l/h                 | 1450                   | 2000                   |
| Max. free heat pump pressure $\Delta p$ (with cooling $\Delta pK$ ***)   Flow rate                                       |   |   | bar (bar)   l/h     | 0.5 ( 0.47 )   1450    | 0.56 (0.49)   2000     |
| Approved anti-freeze mixture   |   | Monoethylene glycol   Propylene glycol   Methanol   Ethanol |                     | •   •   •   •          | •   •   •   •          |
| Anti-freeze concentration: Minimum frost protection down to  |   |   | °C                  | -15                    | -15                    |
| Max. allowable operating pressure  |   |   | bar                 | 3                      | 3                      |
| Circulation pump control range   |   | min.   max.   | l/h                 | 300   3500             | 300   4000             |
| <b>Heating circuit</b>   |   |   |                     |                        |                        |
| Flow rate (pipe dimensioning)   Min. volume buffer tank in series   Min. volume separation buffer tank                   |   |   | l/h   l   l         | 1050   -   -           | 1500   -   -           |
| Max. free heat pump pressure $\Delta p$ (with cooling $\Delta pK$ )   Volume flow  |   |   | bar (bar)   l/h     | 0.65 (0.63)   1050     | 0.46 (0.41)   1500     |
| Max. allowable operating pressure  |   |   | bar                 | 3                      | 3                      |
| <b>General unit data</b>   |   |   |                     |                        |                        |
| Total weight (with cooling)  |   |   | kg (kg)             | 240 (248)              | 244 (252)              |
| Box weight (with cooling)   Tower weight (with cooling)  |   |   | kg (kg)   kg (kg)   | 80 (88)   160 (160)    | 84 (92)   160 (160)    |
| Refrigerant type   Refrigerant capacity  |   |   | ...   kg            | R407C   1.16           | R407c   1.25           |
| <b>Domestic hot water tank</b>   |   |   |                     |                        |                        |
| Net volume   |   |   | l                   | 178                    | 178                    |
| Magnesium sacrificial anode  |   | Impressed current   Magnesium                               | • yes – no          | •   -                  | •   -                  |
| Domestic hot water temperature, heating pump mode   Electric heating element   |   |   | up to °C   up to °C | 58   65                | 58   65                |
| Mixed water quantity according to ErP: 2009/125/EC (at 40 °C, draw-off of 10 l/min)                                      |   |   | l                   | 240                    | 240                    |
| Standing loss according to ErP: 2009/125/EC (at 65 °C)   |   |   | W                   | 60                     | 60                     |
| Maximum pressure   Test pressure   |   |   | bar   bar           | 10   13                | 10   13                |
| <b>Electrics</b>   |   |   |                     |                        |                        |
| Voltage code   all-pole fuse protection for heat pump **)  |   |   | ...   A             | -                      | -                      |
| Voltage code   all-pole fuse protection for heat pump **) + electric heating element **)                                 |   |   | ...   A             | 3~N/PE/400V/50Hz   C16 | 3~N/PE/400V/50Hz   C16 |
| Voltage code   Control voltage fuse protection **)   |   |   | ...   A             | 1~N/PE/230V/50Hz   B10 | 1~N/PE/230V/50Hz   B10 |
| Voltage code   Electric heating element fuse protection **)  |   |   | ...   A             | -                      | -                      |
| HP*): effect. Power consumption B0/W35 (partial load operation) DIN EN 14511-x: 2013   Electric consumption   cos $\phi$ |   |   | kW   A   ...        | 0.68   3.0   1.0       | 0.84   3.6   1.0       |
| HP*): effective power consumption B0/W35 acc. to DIN EN 14511-x: 2013: min.   max.                                       |   |   | kW   kW             | 0.24   1.4             | 0.3   2.2              |
| HP*): Max. machine current   Max. power consumption within the operating limits  |   |   | A   kW              | 12   2.6               | 12   2.9               |
| Starting current: direct   with soft starter   |   |   | A   A               | < 5   -                | < 5   -                |
| Degree of protection   |   |   | IP                  | 20                     | 20                     |
| Residual current circuit breaker   |   | if required   | type                | B                      | B                      |
| Electric heating element output  |   | 3   2   1 phase   | kW   kW   kW        | -   6   3              | -   6   3              |
| Circulation pump power consumption, heating circuit   heat source  |   | min.   max.   | W   W               | 2 - 60   5 - 87        | 2 - 60   3 - 140       |
| <b>Other unit information</b>  |   |   |                     |                        |                        |
| Safety valve Heating circuit   Response pressure   |   | included in scope of supply: • yes – no   bar               |                     | •   3                  | •   3                  |
| Safety valve Heat source   Response pressure   |   | included in scope of supply: • yes – no   bar               |                     | -   -                  | -   -                  |
| Buffer tank   Volume   |   | included in scope of supply: • yes – no   l                 |                     | -   -                  | -   -                  |
| Diaphragm expansion vessel Heating circuit   Volume   Prepressure  |   | incl. in scope of supply: • yes – no   l   bar              |                     | -   -                  | -   -                  |
| Diaphragm expansion vessel Heat source   Volume   Prepressure  |   | incl. in scope of supply: • yes – no   l   bar              |                     | -   -                  | -   -                  |
| Overflow valve   Changeover valve, heating -Domestic hot water   |   | integrated: • yes – no                                      |                     | •   •                  | •   •                  |
| Vibration decoupling, Heating circuit   Heat source  |   | included in scope of supply or integrated: • yes – no       |                     | •   •                  | •   •                  |
| Controller   Heat quantity recording   Extension board   |   | included in scope of supply or integrated: • yes – no       |                     | •   •   -              | •   •   -              |

\*) Only compressor, \*\*) Follow local regulations, \*\*\*) Figures for 25% mono-ethylene glycol

The performance data and the operating limits apply to clean heat exchangers

813596b

813590c



# Technical data / Scope of supply

| Performance data   |                                    | Values in brackets: (1 Compressor)                          |                     | WZSV 122(H)(K)3M       |  |
|--|------------------------------------|---|---------------------|------------------------|--|
| Heating capacity   COP   | for B0/W35 to DIN EN 14511-x: 2013 | Partial load operation                                      | kW   COP            | 5.06   4.87            |  |
|  | for B0/W45 to DIN EN 14511-x: 2013 | Partial load operation                                      | kW   COP            | 4.78   3.75            |  |
|  | for B0/W55 to DIN EN 14511-x: 2013 | Partial load operation                                      | kW   COP            | 4.58   3.13            |  |
|  | for B7/W35 flow of B0/W35          | Partial load operation                                      | kW   COP            | 5.92   6.08            |  |
| Heating capacity   | for B0/W35 to DIN EN 14511-x: 2013 | min.   max.   | kW   kW             | 2.48   13.56           |  |
|  | for B0/W45 to DIN EN 14511-x: 2013 | min.   max.   | kW   kW             | 2.24   12.88           |  |
|  | for B0/W55 to DIN EN 14511-x: 2013 | min.   max.   | kW   kW             | 2.54   12.53           |  |
|  | for B7/W35 to DIN EN 14511-x: 2013 | min.   max.   | kW   kW             | 2.94   15.82           |  |
| Cooling capacity at max. volume flow (B15/W25), units with passive cooling: Identifier K                           |                                    |   | kW                  | 12.3                   |  |
| <b>Limits of use</b>   |                                    |   |                     |                        |  |
| Heating circuit return min.   Heating circuit flow max. Heating  |                                    | within heat source min./max.                                | °C                  | 20   65                |  |
| Heating circuit return min.   Heating circuit flow max. Cooling  |                                    | within heat source min./max.                                | °C                  | 18                     |  |
| Heat source  |                                    | min.   max.   | °C                  | -5   30                |  |
| Additional operating points  |                                    |   | ...                 | B-9/W60                |  |
| <b>Sound</b>   |                                    |   |                     |                        |  |
| Sound pressure level at 1 m distance from edge of unit   |                                    | min.   max.   | dB(A)               | 29   38                |  |
| Sound power level  |                                    | min.   max.   | dB(A)               | -                      |  |
| Sound power level acc. to DIN EN 12102-1: 2017   |                                    |   | dB(A)               | 44   53                |  |
| Tonality   Low-frequency   |                                    |   | dB(A)   • yes – no  | -                      |  |
| <b>Heat source</b>   |                                    |   |                     |                        |  |
| Flow rate (pipe dimensioning)  |                                    |   | l/h                 | 3200                   |  |
| Max. free heat pump pressure Δp (with cooling ΔpK) ***   Flow rate   |                                    |   | bar (bar)   l/h     | 1.08 (1.03)   1270     |  |
| Approved anti-freeze mixture   |                                    | Monoethylene glycol   Propylene glycol   Methanol   Ethanol |                     | •   •   •   •          |  |
| Anti-freeze concentration: Minimum frost protection down to  |                                    |   | °C                  | -15                    |  |
| Max. allowable operating pressure  |                                    |   | bar                 | 3                      |  |
| Circulation pump control range   |                                    | min.   max.   | l/h                 |                        |  |
| <b>Heating circuit</b>   |                                    |   |                     |                        |  |
| Flow rate (pipe dimensioning)   Min. volume buffer tank in series   Min. volume separation buffer tank             |                                    |   | l/h                 | 2300   -   -           |  |
| Max. free heat pump pressure Δp (with cooling ΔpK)   Volume flow   |                                    |   | bar (bar)   l/h     | 0.69 (0.65)   870      |  |
| Max. allowable operating pressure  |                                    |   | bar                 | 3                      |  |
| <b>General unit data</b>   |                                    |   |                     |                        |  |
| Total weight (with cooling)  |                                    |   | kg (kg)             | 263 (271)              |  |
| Box weight (with cooling)   Tower weight (with cooling)  |                                    |   | kg (kg)   kg (kg)   | 103 (111)   160 (160)  |  |
| Refrigerant type   Refrigerant capacity  |                                    |   | ...   kg            | R407c   2.0            |  |
| <b>Domestic hot water tank</b>   |                                    |   |                     |                        |  |
| Net volume   |                                    |   | l                   | 178                    |  |
| Magnesium sacrificial anode   Impressed current   Magnesium  |                                    |   | • yes – no          | •                      |  |
| Domestic hot water temperature, heating pump mode   Electric heating element                                       |                                    |   | up to °C   up to °C | 58   65                |  |
| Mixed water quantity according to ERP: 2009/125/EC (at 40 °C, draw-off of 10 l/min)                                |                                    |   | l                   | 240                    |  |
| Standing loss according to ERP: 2009/125/EC (at 65 °C)   |                                    |   | W                   | 60                     |  |
| Maximum pressure   Test pressure   |                                    |   | bar   bar           | 10                     |  |
| <b>Electrics</b>   |                                    |   |                     |                        |  |
| Voltage code   all-pole fuse protection for heat pump **)  |                                    |   | ...   A             | 3~N/PE/400V/50Hz   C10 |  |
| Voltage code   all-pole fuse protection for heat pump *) + electric heating element **)                            |                                    |   | ...   A             | -                      |  |
| Voltage code   Control voltage fuse protection **)   |                                    |   | ...   A             | 1~N/PE/230V/50Hz   B10 |  |
| Voltage code   Electric heating element fuse protection **)  |                                    |   | ...   A             | 3~N/PE/400V/50Hz   B16 |  |
| HP*): effect. Power consumption B0/W35 (partial load operation) DIN EN 14511-x: 2013   Electric consumption I cosφ |                                    |   | kW   A   ...        | 1.04   1.7   0.88      |  |
| HP*): effective power consumption B0/W35 acc. to DIN EN 14511-x: 2013: min.   max.                                 |                                    |   | kW   kW             | 0.53   3.29            |  |
| HP*): Max. machine current   Max. power consumption within the operating limits                                    |                                    |   | A   kW              | 9.0   5.5              |  |
| Starting current: direct   with soft starter   |                                    |   | A   A               | < 5   -                |  |
| Degree of protection   |                                    |   | IP                  | 20                     |  |
| Residual current circuit breaker if required   |                                    |   | type                | B                      |  |
| Electric heating element output 3   2   1 phase  |                                    |   | kW   kW   kW        | 9   6   3              |  |
| Circulation pump power consumption, heating circuit   heat source  |                                    | min.   max.   | W   W               | 2 – 60   3 – 180       |  |
| <b>Other unit information</b>  |                                    |   |                     |                        |  |
| Safety valve Heating circuit   Response pressure   |                                    | included in scope of supply: • yes – no   bar               |                     | •   3                  |  |
| Safety valve Heat source   Response pressure   |                                    | included in scope of supply: • yes – no   bar               |                     | -   -                  |  |
| Buffer tank   Volume   |                                    | included in scope of supply: • yes – no   l                 |                     | -   -                  |  |
| Diaphragm expansion vessel Heating circuit   Volume   Prepressure  |                                    | incl. in scope of supply: • yes – no     bar                |                     | -   -                  |  |
| Diaphragm expansion vessel Heat source   Volume   Prepressure  |                                    | incl. in scope of supply: • yes – no     bar                |                     | -   -                  |  |
| Overflow valve   Changeover valve, heating -Domestic hot water   |                                    | integrated: • yes – no                                      |                     | •   •                  |  |
| Vibration decoupling, Heating circuit   Heat source  |                                    | included in scope of supply or integrated: • yes – no       |                     | •   •                  |  |
| Controller   Heat quantity recording   Extension board   |                                    | included in scope of supply or integrated: • yes – no       |                     | •   •   -              |  |

\*) Only compressor, \*\*) Follow local regulations, \*\*\*) Figures for 25% mono-ethylene glycol

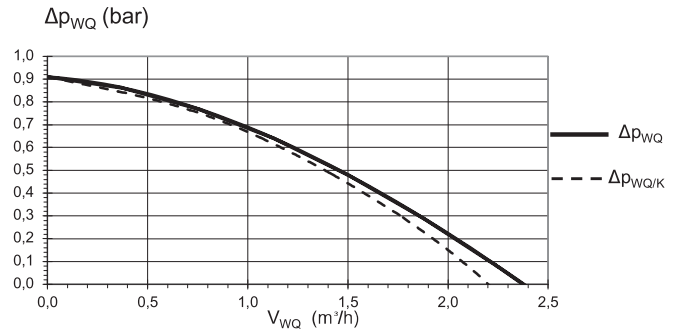
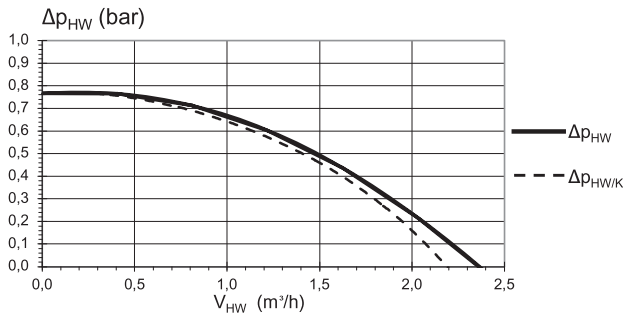
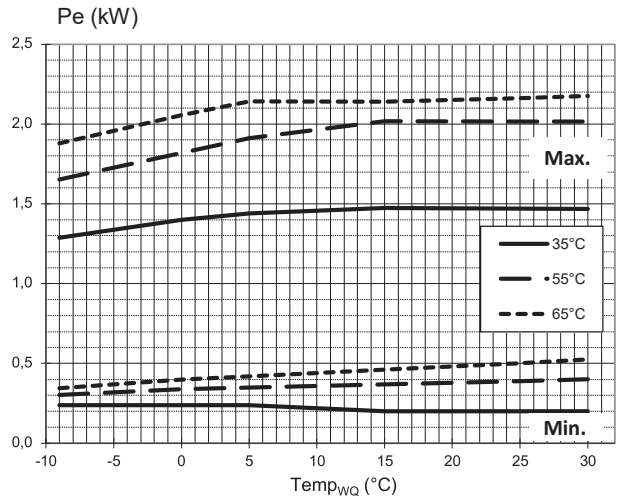
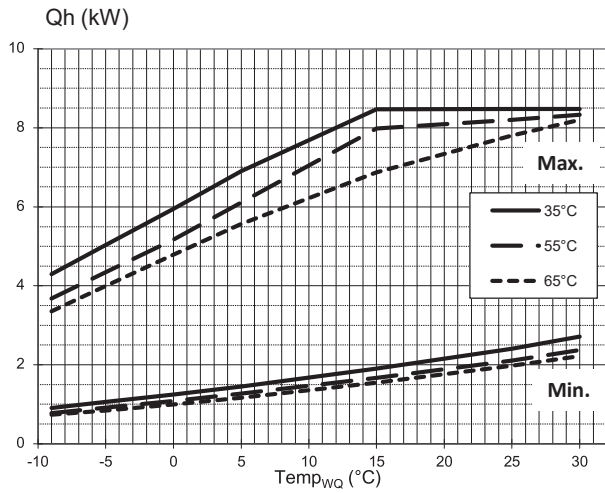
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The performance data and the operating limits apply to clean heat exchangers



# WZSV 62(H)(K)3M

# Performance curves



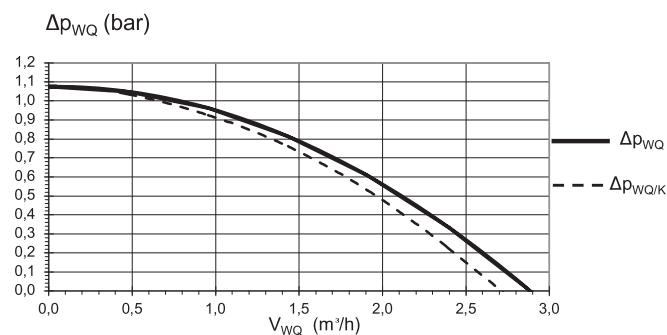
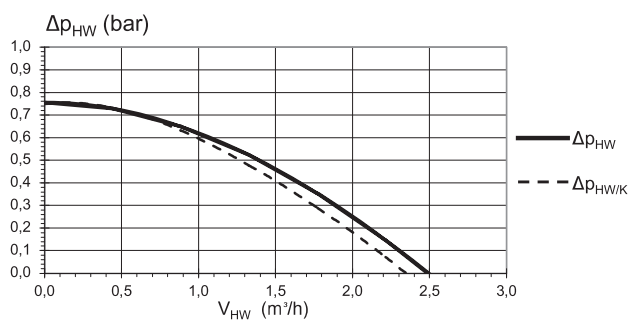
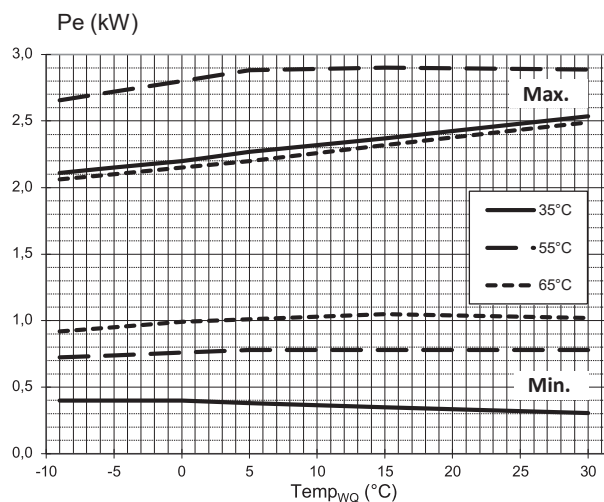
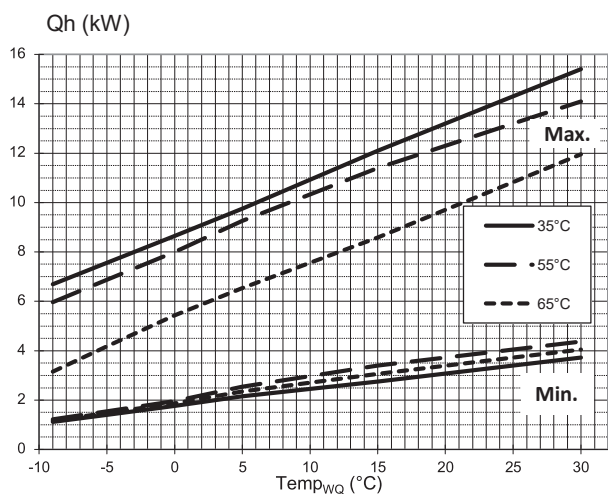
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|                                   |  |
|-----------------------------------|--|
| Keys:                             | UK823000L/170408   |
| $\dot{V}_{HW}$                    | Heating water volume flow rate   |
| $\dot{V}_{WQ}$                    | Heat source volume flow rate   |
| $Temp_{WQ}$                       | Heat source temperature  |
| $Q_h$                             | Heating capacity   |
| $Pe$                              | Power consumption  |
| COP                               | Coefficient of performance   |
| $\Delta p_{HW} / \Delta p_{HW/K}$ | Heating circuit free pressure / Heating circuit with cooling free pressure |
| $\Delta p_{WQ} / \Delta p_{WQ/K}$ | Heat source free pressure / Heat source with cooling free pressure         |



# Performance curves

# WZSV 92(H)(K)3M



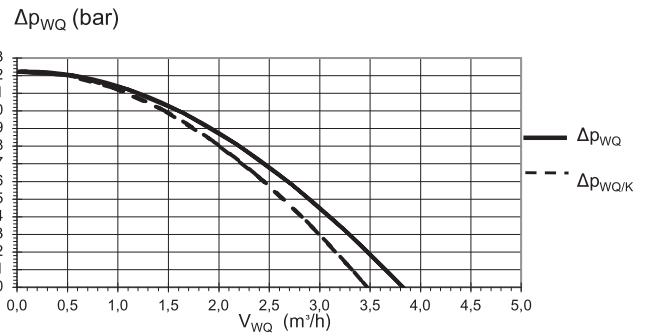
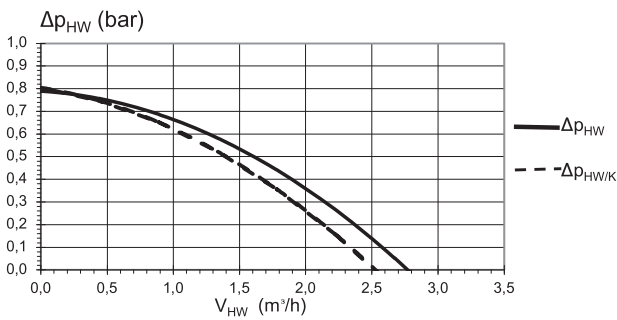
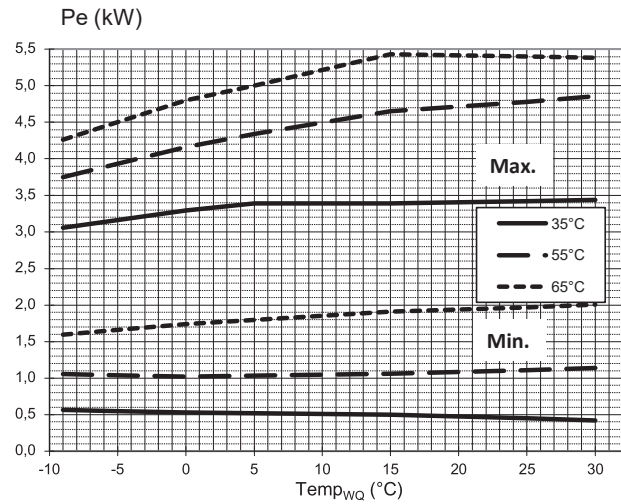
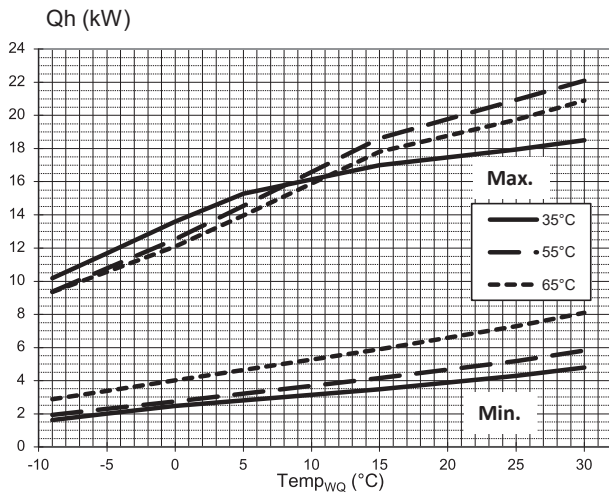
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|                                   |  |
|-----------------------------------|--|
| Keys:                             | UK823000L/170408   |
| $\dot{V}_{HW}$                    | Heating water volume flow rate   |
| $\dot{V}_{wQ}$                    | Heat source volume flow rate   |
| Temp <sub>wQ</sub>                | Heat source temperature  |
| Q <sub>h</sub>                    | Heating capacity   |
| Pe                                | Power consumption  |
| COP                               | Coefficient of performance   |
| $\Delta p_{HW} / \Delta p_{HW/K}$ | Heating circuit free pressure / Heating circuit with cooling free pressure |
| $\Delta p_{wQ} / \Delta p_{wQ/K}$ | Heat source free pressure / Heat source with cooling free pressure         |



# WZSV 122(H)(K)3M

# Performance curves



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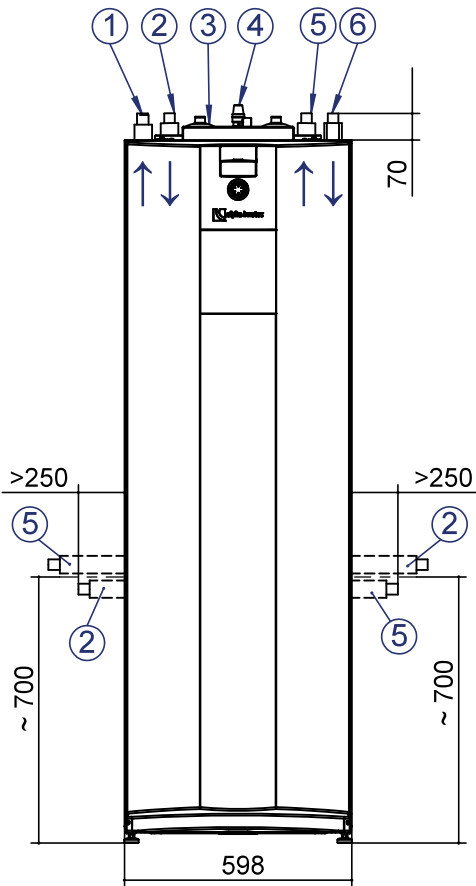
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|-----------------------------------|--|
| Keys:                             | UK823000L/170408   |
| $\dot{V}_{HW}$                    | Heating water volume flow rate   |
| $\dot{V}_{WQ}$                    | Heat source volume flow rate   |
| Temp <sub>WQ</sub>                | Heat source temperature  |
| Q <sub>h</sub>                    | Heating capacity   |
| Pe                                | Power consumption  |
| COP                               | Coefficient of performance   |
| $\Delta p_{HW} / \Delta p_{HW/K}$ | Heating circuit free pressure / Heating circuit with cooling free pressure |
| $\Delta p_{WQ} / \Delta p_{WQ/K}$ | Heat source free pressure / Heat source with cooling free pressure         |



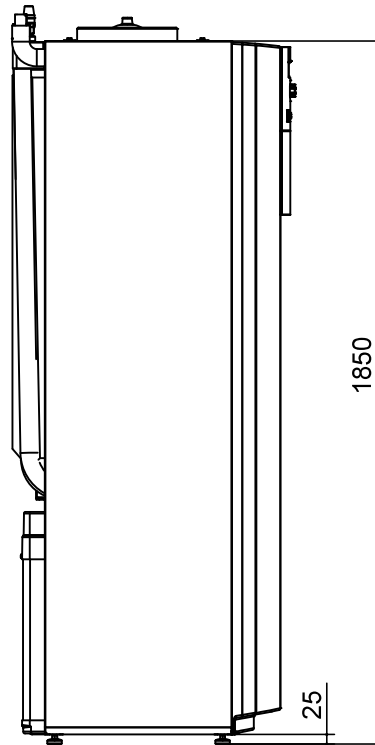
# Dimensional drawings

# WZSV 62(H)(K)3M – WZSV 122(H)(K)3M

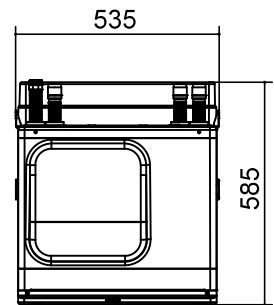
**A**



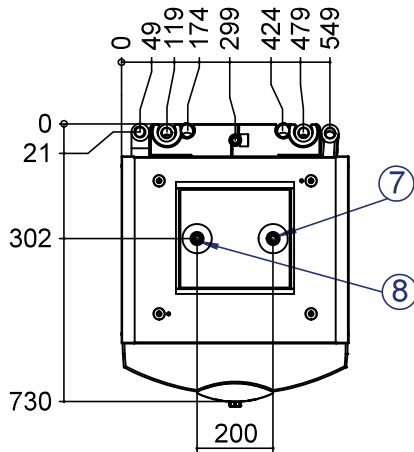
**B**



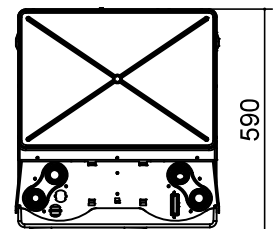
**A1**



**C**



**C1**



| Pos. | Name   | Dim.                    |
|------|--|-------------------------|
| 1    | Heating water outlet (flow)  | Ø 28 *)                 |
| 2    | Heat source inlet (in heat pump) optionally at the top, on the right or left | Ø 28 *)                 |
| 3    | Heating water inlet (return)   | Ø 33 **)                |
| 4    | Heating circuit safety valve (in the separate package)                       | Rp 3/4" internal thread |
| 5    | Heat source outlet (from heat pump) optionally at top, right or left         | Ø 28 *)                 |
| 6    | Domestic hot water charging circuit inlet (Return)                           | Ø 28 *)                 |
| 7    | Drinkwater warm  | R 3/4" external thread  |
| 8    | Drinkwater cold  | R 3/4" external thread  |

Keys: UK819447a

All dimensions in mm..

|    |                          |
|----|--------------------------|
| A  | Front view               |
| B  | Side view from left      |
| C  | Plan view                |
| A1 | Front view of module box |
| C1 | Top view of module box   |

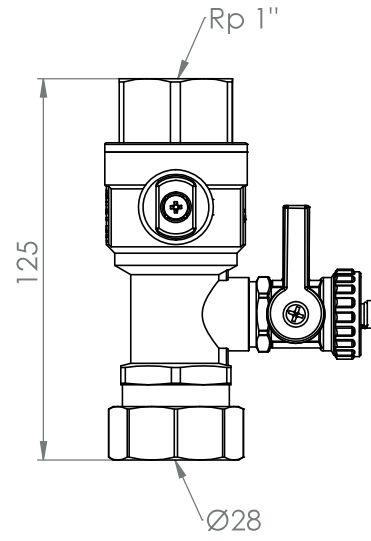
\*) outside diameter \*\*) inside diameter



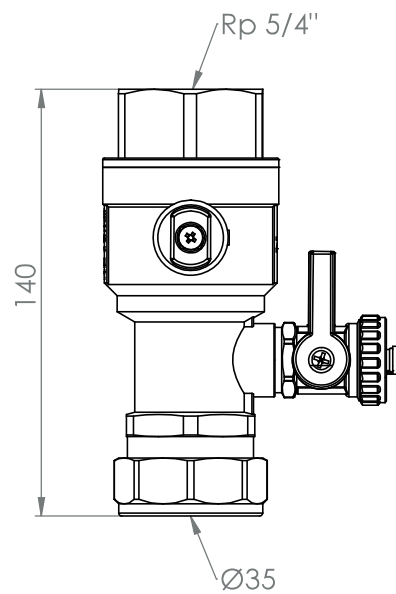
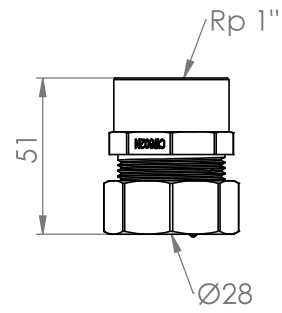
# Connections

# Dimensional drawings

Heating circuit



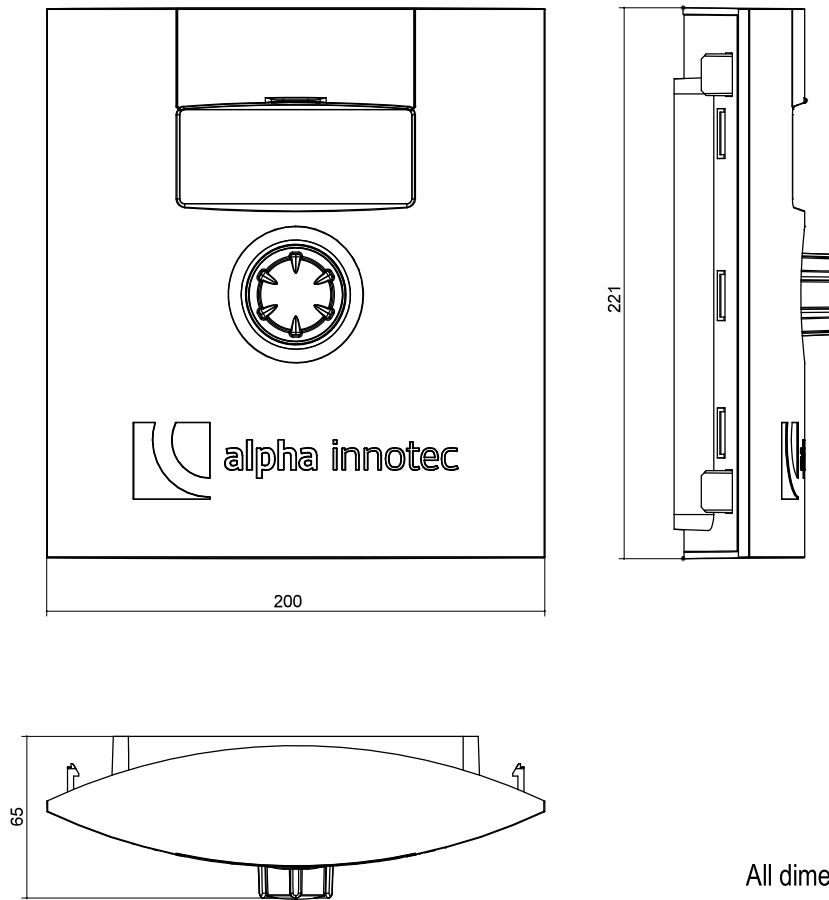
Heating source





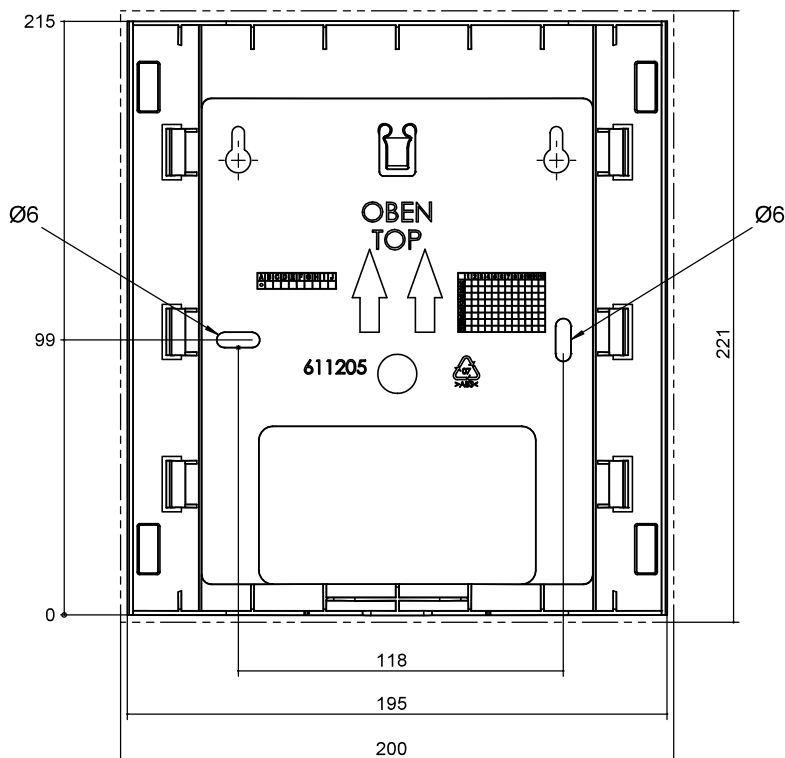
## Dimensional drawings

## Control unit



All dimensions in mm..

## Wall-mounted bracket



All dimensions in mm..

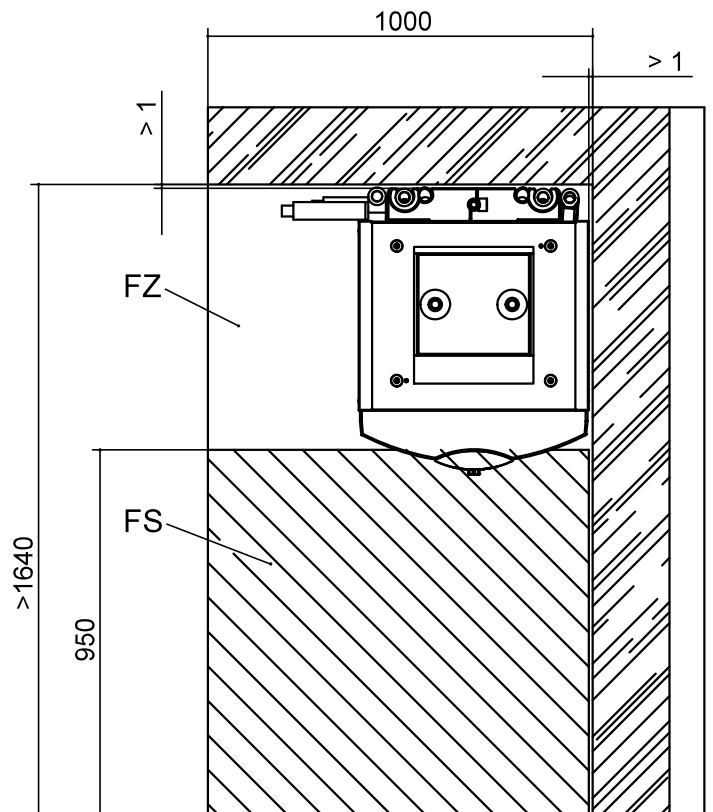
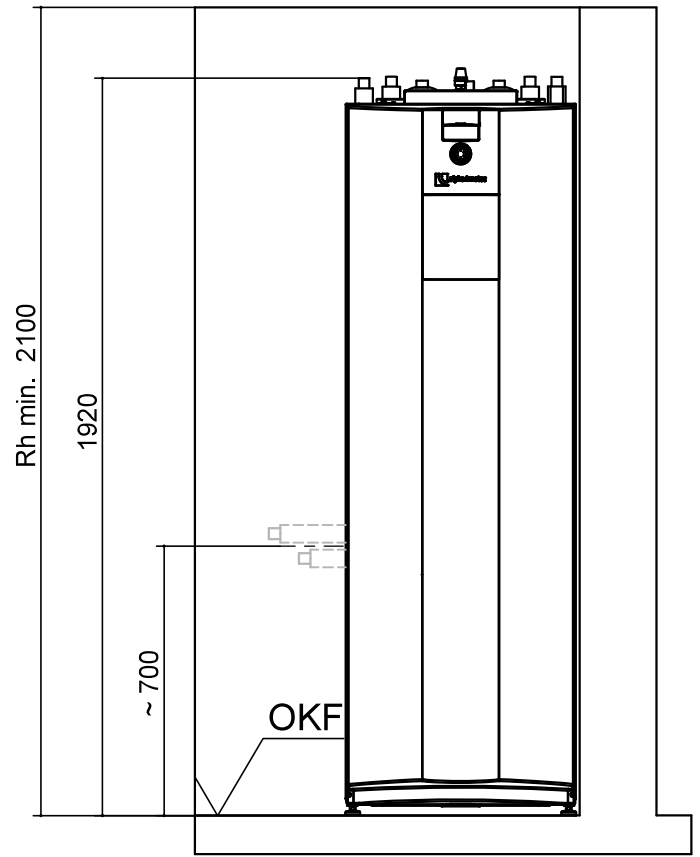




# WZSV 62(H)(K)3M – WZSV 122(H)(K)3M

# Installation plan 1

## V1



Keys: UK819448

All dimensions in mm.

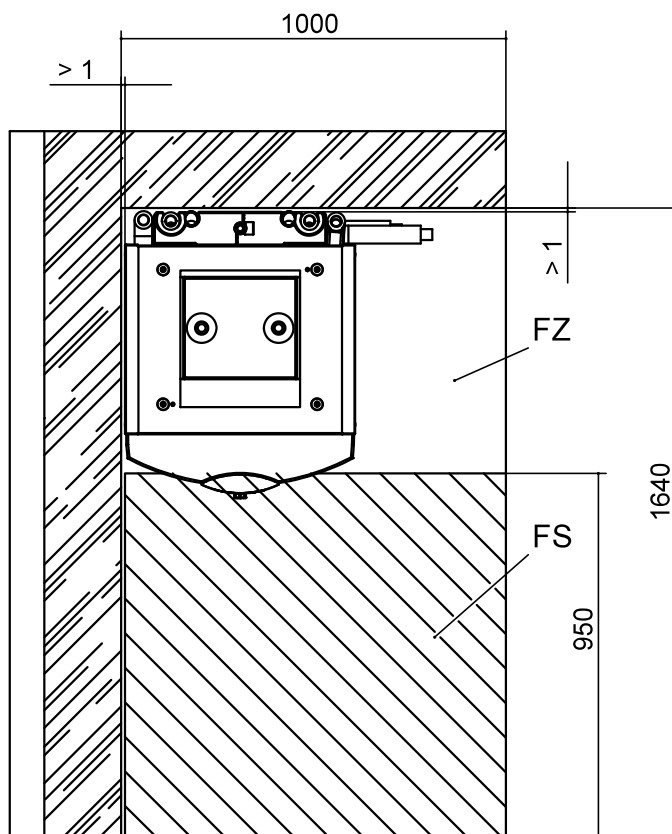
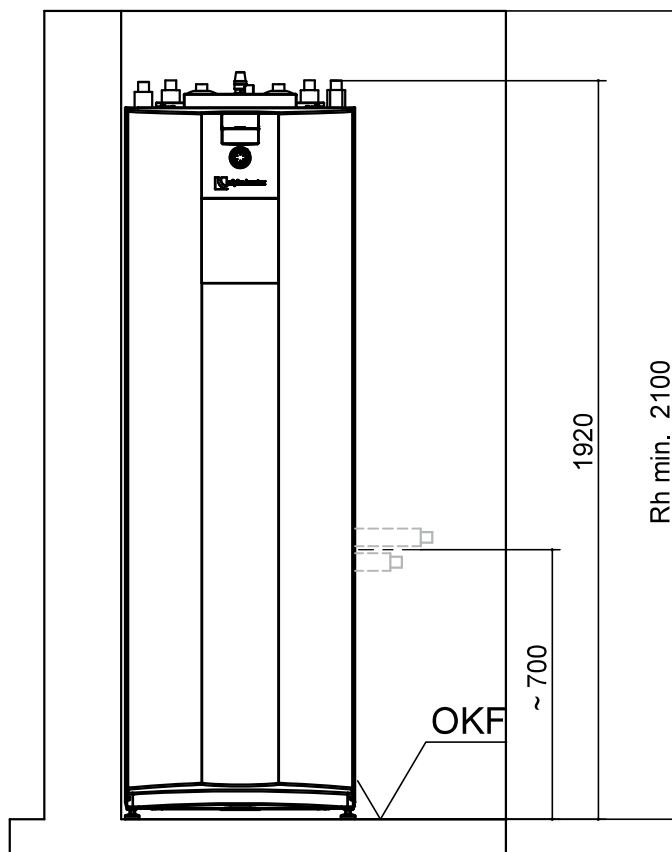
|         |   |
|---------|---|
| V1      | Version 1   |
| FS      | Free space for service purposes                   |
| FZ      | Free space for functionally necessary accessories |
| OKF     | Finished floor level                              |
| Rh min. | minimum room height                               |



# Installation plan 2

## V2

### WZSV 62(H)(K)3M – WZSV 122(H)(K)3M



Keys: UK819448

All dimensions in mm.

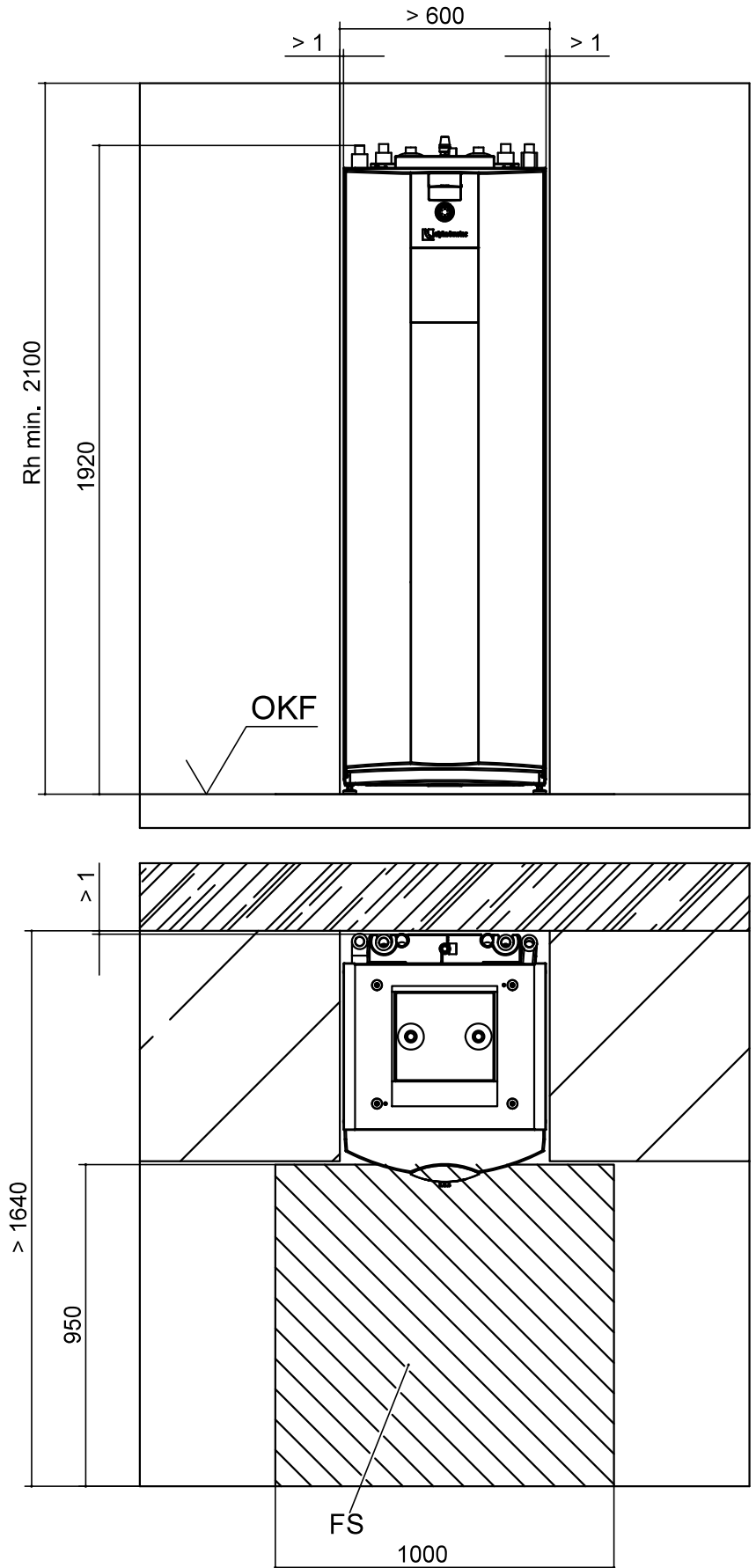
|         |   |
|---------|---|
| V2      | Version 2   |
| FS      | Free space for service purposes                   |
| FZ      | Free space for functionally necessary accessories |
| OKF     | Finished floor level                              |
| Rh min. | minimum room height                               |



WZSV 62(H)(K)3M – WZSV 122(H)(K)3M

Installation plan 3

V3



Keys: UK819448

All dimensions in mm.

|         |                                 |
|---------|---------------------------------|
| V3      | Version 3                       |
| FS      | Free space for service purposes |
| OKF     | Finished floor level            |
| Rh min. | minimum room height             |