

## AIR

High-efficiency air/water  
heat pumps

for tfl. max. 65°C

## GOLF MAXI PLUS



## Series

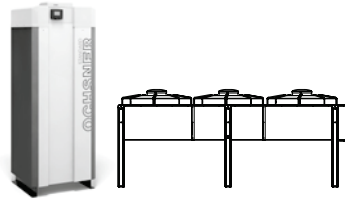
## HEATING – HEATING/COOLING

| Dimensions LxWxH [mm]  | 1150 x 400 x 650 |                                      | 1150 x 600 x 650 |              |              |              |              |              |
|--|------------------|--------------------------------------|------------------|--------------|--------------|--------------|--------------|--------------|
| Model  | GMLW 5 plus      |                                      | GMLW 9 plus      |              | GMLW 14 plus |              | GMLW 19 plus |              |
| Order number / delivery class  | 284499 / II      |                                      | 284549 / II      |              | 284599 / II  |              | 284649 / II  |              |
| Price incl. accessories (see right page)<br>incl. horizontal-split evaporator  | 9.708,-          |                                      | 12.906,-         |              | 14.033,-     |              | 17.204,-     |              |
| Maximum design rating**  | 8 kW             |                                      | 12 kW            |              | 16 kW        |              | 21 kW        |              |
| Energy efficiency class at max. flow temperature VLT   | 35°C             | 55°C                                 | 35°C             | 55°C         | 35°C         | 55°C         | 35°C         | 55°C         |
|  | A++              | A+                                   | A++              | A+           | A++          | A++          | A++          | A++          |
|  | A+++*            |                                      |                  |              |              |              |              |              |
| Technical data:  |                  |                                      |                  |              |              |              |              |              |
| Weight/hydraulic connection  | [kg]/[inch]      | 114 / 1 1/4"                         |                  | 124 / 1 1/4" |              | 135 / 1 1/4" |              | 148 / 1 1/2" |
| Phases/nominal voltage/frequency   | [-/V/Hz]         | 3/400/50                             |                  | 3/400/50     |              | 3/400/50     |              | 3/400/50     |
| Fuse (trip characteristic 'C')   | [A]              | 10                                   |                  | 10           |              | 16           |              | 20           |
| Refrigerant  |                  | R 407 C                              |                  | R 407 C      |              | R 407 C      |              | R 407 C      |
| Condenser  |                  | Stainless-steel plate HE Mat. 1.4301 |                  |              |              |              |              |              |
| Temperature difference   | [K]              | 5                                    |                  | 5            |              | 5            |              | 5            |
| Flow rate  | [m³/h]           | 1,1                                  |                  | 1,7          |              | 2,5          |              | 3,4          |
| Internal pressure difference   | [mbar]           | 26                                   |                  | 70           |              | 90           |              | 160          |
| Standard point L10/W35   |                  |                                      |                  |              |              |              |              |              |
| Heating capacity   | [kW]             | 6,8                                  |                  | 11,0         |              | 16           |              | 23,4         |
| Total power cons. / operating current  | [kW]/[A]         | 1,33/2,65                            |                  | 2,3/4,7      |              | 3,0/6,2      |              | 4,6/9,0      |
| COP EN14511/EN 255   |                  | 5,1/5,6                              |                  | 4,9/5,2      |              | 5,3/5,6      |              | 5,1/5,4      |
| Operating point L7/W35   |                  |                                      |                  |              |              |              |              |              |
| Heating capacity   | [kW]             | 6,4                                  |                  | 10,2         |              | 15,1         |              | 20,7         |
| Total power cons. / operating current  | [kW]/[A]         | 1,33/2,65                            |                  | 2,3/4,5      |              | 3,0/6,2      |              | 4,5/8,8      |
| COP EN14511/EN 255   |                  | 4,8/5,3                              |                  | 4,5/4,7      |              | 5,0/5,3      |              | 4,6/4,9      |
| Standard point L2/W35  |                  |                                      |                  |              |              |              |              |              |
| Heating capacity   | [kW]             | 5,4                                  |                  | 8,8          |              | 13,2         |              | 17,2         |
| Total power cons. / operating current  | [kW]/[A]         | 1,32/2,64                            |                  | 2,2/4,4      |              | 3,0/6,2      |              | 4,1/8,0      |
| COP EN14511/EN 255   |                  | 4,1/4,5                              |                  | 4,0/4,3      |              | 4,4/4,7      |              | 4,2/4,4      |
| Standard point L-7/W35   |                  |                                      |                  |              |              |              |              |              |
| Heating capacity   | [kW]             | 4,1                                  |                  | 6,8          |              | 10,6         |              | 13,7         |
| Total power cons. / operating current  | [kW]/[A]         | 1,28/2,60                            |                  | 2,0/4,2      |              | 2,95/6,1     |              | 3,9/7,6      |
| COP EN14511/EN 255   |                  | 3,2/3,5                              |                  | 3,3/3,6      |              | 3,6/3,8      |              | 3,5/3,8      |
| Operating point L-10/W35   |                  |                                      |                  |              |              |              |              |              |
| Heating capacity   | [kW]             | 3,7                                  |                  | 6,2          |              | 9,9          |              | 12,8         |
| Total power cons. / operating current  | [kW]/[A]         | 1,25/2,55                            |                  | 2,0/4,1      |              | 2,9/6,0      |              | 3,9/7,6      |
| COP EN14511/EN 255   |                  | 3,0/3,3                              |                  | 3,1/3,3      |              | 3,4/3,6      |              | 3,3/3,6      |
| Operating point L2/W50   |                  |                                      |                  |              |              |              |              |              |
| Heating capacity   | [kW]             | 4,7                                  |                  | 7,9          |              | 12,3         |              | 16,8         |
| Total power cons. / operating current  | [kW]/[A]         | 1,75/3,4                             |                  | 2,8/5,8      |              | 4,0/8,2      |              | 5,3/10,3     |
| COP EN14511/EN 255   |                  | 2,7/2,9                              |                  | 2,8/3,0      |              | 3,1/3,2      |              | 3,2/3,4      |
| Operating point L2/W60   |                  |                                      |                  |              |              |              |              |              |
| Heating capacity   | [kW]             | 4,3                                  |                  | 7,6          |              | 12,1         |              | 16,4         |
| Total power cons. / operating current  | [kW]/[A]         | 1,95/3,6                             |                  | 3,2/6,6      |              | 4,4/9,1      |              | 5,8/11,3     |
| COP EN14511/EN 255   |                  | 2,2/2,4                              |                  | 2,4/2,5      |              | 2,8/2,9      |              | 2,8/3,0      |
| Operating point L30/W18**  |                  |                                      |                  |              |              |              |              |              |
| Cooling capacity   | [kW]             | 4,4                                  |                  | 9,6          |              | 11,2         |              | 15,6         |
| Total power cons. / operating current  | [kW]/[A]         | 1,34/2,8                             |                  | 3,0/6,2      |              | 3,3/6,8      |              | 5,1/9,9      |
| COP EER  |                  | 3,3                                  |                  | 3,2          |              | 3,4          |              | 3,1          |
| Operating point L30/W7**   |                  |                                      |                  |              |              |              |              |              |
| Cooling capacity   | [kW]             | 3,1                                  |                  | 8,7          |              | 10,7         |              | 15,2         |
| Total power cons. / operating current  | [kW]/[A]         | 1,39/2,9                             |                  | 2,9/6,0      |              | 3,3/6,8      |              | 5,0/9,8      |
| COP EER  |                  | 2,2                                  |                  | 3,0          |              | 3,2          |              | 3,0          |
| Compressor   |                  |                                      |                  |              |              |              |              |              |
| Number   | [Pc.]            | 1                                    |                  | 1            |              | 1            |              | 1            |
| Type   |                  | Scroll, fully hermetic               |                  |              |              |              |              |              |
| Power stages   |                  | 1                                    |                  | 1            |              | 1            |              | 1            |
| Max. Operating current   | [A]              | 4                                    |                  | 6            |              | 10           |              | 14           |
| Max. start-up current / max. with soft-start   | [A]              | 27/13,5                              |                  | 40/20        |              | 64/32        |              | 101/50,5     |
| Horizontal-Split Evaporator for outside installation included in the scope of delivery, for technical details see page 28-29 |                  |                                      |                  |              |              |              |              |              |
| Model  |                  | VHS-M 5                              |                  | VHS-M 9      |              | VHS-M 14     |              | VHS-M 19     |

## GOLF MAXI PLUS



## STANDARD



## HEATING – HEATING/COOLING

1150 x 600 x 650

1850 x 695 x 585

## GMLW 25 plus

## GMLW 35 plus

## OLWP 65 plus

284699 / II

284749 / II

288219 / II

20.465,-

23.569,-

39.734,-

27 kW

38 kW

70 kW

35°C A++ 55°C A++

35°C A++ 55°C A++

35°C A+ 55°C A+

160 / 1 1/2"

164 / 2"

305/2"

3/400/50

3/400/50

3/400/50

25

25

80

R 407 C

R 407 C

R410 A

Stainless-steel plate HE Mat. 1.4301

5

5

5

4,4

6,0

13,0

170

220

100

## L10/W35

28,4

40,0

83,0

5,8/11,8

8,2/16,7

18,9/34,1

4,9/5,2

4,9/5,1

4,4/4,7

## L7/W35

25,8

37,2

75,6

5,6/11,4

8,1/16,5

18,9/33,3

4,6/4,9

4,6/4,8

4,0/4,2

## L2/W35

21,8

30,3

65,1

5,2/10,6

7,4/15,0

18,1/32,0

4,2/4,4

4,1/4,4

3,6/4,0

## L-7/W35

17,5

25,1

47,3

5,0/10,2

7,4/15,0

16,3/30,1

3,5/3,8

3,4/3,6

2,9/3,1

## L-10/W35

16,3

23,4

41,4

5,0/10,2

7,4/15,0

15,9/29,0

3,3/3,6

3,2/3,4

2,6/2,8

## L2/W50

21,2

27,4

57,3

6,6/13,4

8,8/17,9

20,9/38,2

3,2/3,4

3,1/3,3

2,7/2,9

## L2/W60

20,8

26,4

54,2

7,3/14,8

9,3/18,9

23,6/43,8

2,8/3,0

2,8/3,0

2,3/2,3

## L30/W18\*\*

17,9

27,2

66,8

5,7/11,6

8,4/17,1

20,9/33,6

3,1

3,2

3,2

## L30/W7\*\*

17,2

25,9

61,7

5,6/11,4

8,3/16,9

20,6/33,5

3,1

3,1

3,0

1

1

1

Scroll, fully hermetic

1

1

1

18,3

23,2

64

99/49,5

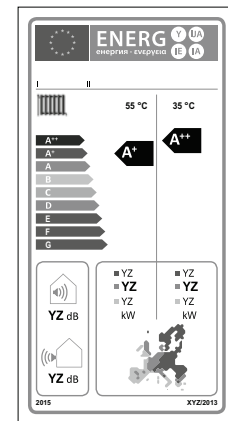
127/63,5

248/124

VHS-M 25

VHS-M 35

VHS 65



Sample label



**OLWP 65 plus**  
with EC-fans, available from  
2nd quarter 2014

## Accessories included in price of heat pump:

OTE plus Interior Climate Manager

Heat use system flow meter WNA DN 32 1 1/4", DN 40 1 1/2", DN 50 2"

Noise-dampening underlay pad

2 x flexible connecting hose per WP 1 1/4", 1 1/2" x 750 mm or 2" x 1000 mm with bend

High-efficiency, energy-saving circulation pump – heat use/heat source internal (only for GMLW 5 plus, GMLW 9 plus, GMLW 14 plus and GMLW 19 plus)

Horizontal-Split Evaporator

## Optional accessories:

| Accessories  | Nr.    | Models                      | Price   |
|--|--------|-----------------------------|---------|
|  | 990494 | GMLW 5 plus (built into HP) | 457,-   |
| Hot-water heating<br>via external 3-way valve  | 290229 | GMLW 9 plus + 14 plus       | 279,-   |
|  | 290341 | GMLW 19 plus + 25 plus      | 345,-   |
|  | 290342 | GMLW 35 plus                | 372,-   |
| Commissioning lump sum<br>(see pages 62-63. Laying or<br>connection of pipework not<br>included) Net | 801101 | GMLW 5 plus                 | 818,-   |
|  | 801106 | GMLW 9 plus + 14 plus       | 926,-   |
|  | 801107 | GMLW 19 plus                | 952,-   |
|  | 801108 | GMLW 25 plus                | 1.066,- |
|  | 801109 | GMLW 35 plus                | 1.176,- |
|  | 801104 | OLWP 65 plus                | 3.095,- |
| Start-up current limiter   | 990808 | GMLW 5 plus – 14 plus       | 219,-   |
|  | 990803 | GMLW 19 plus                | 268,-   |
|  | 990804 | GMLW 25 plus + 35 plus      | 307,-   |
|  | 990373 | GMLW 60<br>OLWP 65 plus     | 1.484,- |
| *Heating/cooling surcharge<br>based on air heat source   | 980152 | all                         | 521,-   |
| Heating/cooling upgrade with<br>touch-display Room Terminal<br>and integrated web2com<br>server      | 980169 | in addition to 980152 - all | 490,-   |
| High-efficiency, energy-saving heat use system circulation pump - external                           |        |                             |         |
| Circulation pump 30  | 922461 | GMLW 25 plus + 35 plus      | 1.221,- |
| Circulation pump 65  | 922462 | OLWP 65 plus                | 2.572,- |

\* A+++ for top appliances which achieve this value, classification allowed from 2017.

\*\* Maximum sizing rating is equivalent to the P-design specification of the Ecodesign – Directive and takes into account the heat pump rating + proportionate E-rod. According to the graphic „Sorted Annual Load Curve“ (page 31) an E-rod proportion of up to 3% can be assumed with an appropriate design sizing for medium climate conditions.

Delivery class II - max. 4 weeks, order-based manufacture

Important information supplementing the General Terms and Conditions on pages 22–23, 30–31 and 56–57. A buffer storage tank is crucial for the provision of energy for defrosting. An E-rod placed in the separation tank is mandatory for the GMLW series in order to provide the building with frost protection. Consider flow rate when heating hot water (see pages 54–57). Insulate the pipework of systems with a cooling function against condensation.

Δt GMLW plus – exterior temperature to FLT = max. 75 K.

We strongly recommend the 'cover for split exterior components' accessory to protect the fan against environmental influences such as rain, snow, leaves etc.

The pipework of systems with a cooling function must be insulated against condensation.

Ensure that the hydraulic safety and pressure systems are appropriately sized to ensure operational safety, particularly for defrosting or cooling operations. Inspect on an annual basis in accordance with official standards.

As an approximation: System filling pressure during heating and cooling operation [bar] = MEV inlet pressure + 0.5 [bar]

Prices in €, excl. VAT

## AIR

## GOLF MAXI

## AIR STATION-OUTDOOR INSTALLATION

High-efficiency-Air/Water-heat pumps

tv max. 55°C



| Series   | HEATING – HEATING/COOLING |            |                 |           |                 | HEATING           |                 |           |                 |            |      |           |
|--|---------------------------|------------|-----------------|-----------|-----------------|-------------------|-----------------|-----------|-----------------|------------|------|-----------|
| Dimensions LxWxH [mm]  | 1150 x 600 x 650          |            |                 |           |                 | 1116 x 784 x 1182 |                 |           |                 |            |      |           |
| Model  | <b>GMLW 9</b>             |            | <b>GMLW 14</b>  |           | <b>OLWA 9</b>   |                   | <b>OLWA 13</b>  |           | <b>OLWA 18</b>  |            |      |           |
| Order number / delivery class  | 284539 / II               |            | 284589 / II     |           | 281530 / II     |                   | 281580 / II     |           | 281630 / II     |            |      |           |
| Price incl. accessories (see right-hand side of page), horizontal-split evaporator | <b>11.465,-</b>           |            | <b>12.354,-</b> |           | <b>11.334,-</b> |                   | <b>11.467,-</b> |           | <b>11.882,-</b> |            |      |           |
| Maximum design rating**  | <b>12 kW</b>              |            | <b>16 kW</b>    |           | <b>12 kW</b>    |                   | <b>16 kW</b>    |           | <b>21 kW</b>    |            |      |           |
| Energy efficiency class at max. flow temperature VLT                               | 35°C                      | <b>A++</b> | 55°C            | <b>A+</b> | 35°C            | <b>A++</b>        | 55°C            | <b>A+</b> | 35°C            | <b>A++</b> | 55°C | <b>A+</b> |

## Technical data:

|   |             |                                      |                |                                      |                        |                  |
|---|-------------|--------------------------------------|----------------|--------------------------------------|------------------------|------------------|
| Weight/hydraulic connection   | [kg]/[Inch] | 120 / 1 1/4"                         | 130 / 1 1/4"   | 336 / 1 1/4"                         | 346 / 1 1/4"           | 351 / 1 1/4"     |
| Phases/nominal voltage/frequency  | [-/V/Hz]    | 3/400/50                             | 3/400/50       | 3/400/50                             | 3/400/50               | 3/400/50         |
| Fuse (trip characteristic 'C')  | [A]         | 10                                   | 16             | 16                                   | 16                     | 16               |
| Refrigerant   |             | R 407 C                              | R 407 C        | R 407 C                              | R 407 C                | R 407 C          |
| Condenser   |             | Stainless-steel plate HE Mat. 1.4301 |                | Stainless-steel plate HE Mat. 1.4301 |                        |                  |
| Temperature difference  | [K]         | 5                                    | 5              | 5                                    | 5                      | 5                |
| Flow rate   | [m³/h]      | 1,7                                  | 2,6            | 1,55                                 | 2,12                   | 2,64             |
| Internal pressure difference  | [mbar]      | 70                                   | 100            | 70                                   | 110                    | 200              |
| <b>Standard point L10/W35</b>   |             |                                      |                |                                      |                        |                  |
| Heating capacity  | [kW]        | <b>10,7</b>                          | <b>16,0</b>    | <b>9,5</b>                           | <b>13,3</b>            | <b>17,8</b>      |
| Total power cons. / operating current   | [kW]/[A]    | <b>2,4/5,1</b>                       | <b>3,7/7,9</b> | <b>2,3/3,6</b>                       | <b>2,9/6,3</b>         | <b>4,2/9,1</b>   |
| COP EN14511/EN 255  |             | <b>4,5/4,8</b>                       | <b>4,3/4,7</b> | <b>4,1/ -</b>                        | <b>4,6/ -</b>          | <b>4,2/ -</b>    |
| <b>Operating point L7/W35</b>   |             |                                      |                |                                      |                        |                  |
| Heating capacity  | [kW]        | 9,7                                  | 14,8           | 9,01                                 | 12,3                   | 15,31            |
| Total power cons. / operating current   | [kW]/[A]    | 2,3/4,9                              | 3,6/7,6        | 2,26/3,5                             | 2,87/6,4               | 4,06/9,9         |
| COP EN14511/EN 255  |             | 4,2/4,5                              | 4,1/4,4        | 3,99/ -                              | 4,29/ -                | 3,77/ -          |
| <b>Standard point L2/W35</b>  |             |                                      |                |                                      |                        |                  |
| Heating capacity  | [kW]        | <b>8,3</b>                           | <b>12,4</b>    | <b>8,1</b>                           | <b>11,28</b>           | <b>14,82</b>     |
| Total power cons. / operating current   | [kW]/[A]    | <b>2,1/4,5</b>                       | <b>3,3/7,0</b> | <b>2,4/3,7</b>                       | <b>3,03/6,5</b>        | <b>4,23/10,0</b> |
| COP EN14511/EN 255  |             | <b>4,0/4,3</b>                       | <b>3,8/4,1</b> | <b>3,38/ -</b>                       | <b>3,72/ -</b>         | <b>3,5/ -</b>    |
| <b>Standard point L-7/W35</b>   |             |                                      |                |                                      |                        |                  |
| Heating capacity  | [kW]        | <b>6,3</b>                           | <b>9,5</b>     | <b>6,6</b>                           | <b>9,6</b>             | <b>13,0</b>      |
| Total power cons. / operating current   | [kW]/[A]    | <b>2,1/4,5</b>                       | <b>3,3/7,0</b> | <b>2,2/3,6</b>                       | <b>3,0/6,3</b>         | <b>4,2/9,8</b>   |
| COP EN14511/EN 255  |             | <b>3,0/3,3</b>                       | <b>2,9/3,2</b> | <b>3,0/ -</b>                        | <b>3,2/ -</b>          | <b>3,1/ -</b>    |
| <b>Operating point L-10/W35</b>   |             |                                      |                |                                      |                        |                  |
| Heating capacity  | [kW]        | 5,7                                  | 8,6            | -                                    | -                      | -                |
| Total power cons. / operating current   | [kW]/[A]    | 2,0/4,2                              | 3,2/6,8        | -                                    | -                      | -                |
| COP EN14511/EN 255  |             | 2,9/3,1                              | 2,7/3,0        | -                                    | -                      | -                |
| <b>Operating point L2/W50</b>   |             |                                      |                |                                      |                        |                  |
| Heating capacity  | [kW]        | 7,6                                  | 11,2           | -                                    | -                      | -                |
| Total power cons. / operating current   | [kW]/[A]    | 3,1/6,6                              | 4,8/10,2       | -                                    | -                      | -                |
| COP EN14511/EN 255  |             | 2,5/2,6                              | 2,3/2,5        | -                                    | -                      | -                |
| <b>Operating point L30/W18*</b>   |             |                                      |                |                                      |                        |                  |
| Cooling capacity  | [kW]        | 7,1                                  | 10,6           | L35/W20                              | L35/W20                | L35/W20          |
| Power cons./Operating current   | [kW]/[A]    | 2,1/4,5                              | 3,3/7,0        | 9,7                                  | 13,5                   | 15,8             |
| COP EER   |             | 3,4                                  | 3,2            | 3,3/ -                               | 4,5/ -                 | 7,2/ -           |
| <b>Operating point L30/W7*</b>  |             |                                      |                |                                      |                        |                  |
| Cooling capacity  | [kW]        | 6,5                                  | 10,0           | L35/W7                               | L35/W7                 | L35/W7           |
| Power cons./Operating current   | [kW]/[A]    | 2,1/4,5                              | 3,3/7,0        | 6,7                                  | 9,2                    | 12,5             |
| COP EER   |             | 3,1                                  | 3,0            | 2,8/ -                               | 3,9/ -                 | 5,9/ -           |
| <b>Compressor</b>   |             |                                      |                |                                      |                        |                  |
| Number  | [Pc.]       | 1                                    | 1              | 1                                    | 1                      | 1                |
| Type  |             | Scroll, fully hermetic               |                |                                      | Scroll, fully hermetic |                  |
| Power stages  |             | 1                                    | 1              | 1                                    | 1                      | 1                |
| Max. operating current  | [A]         | 7                                    | 11             | 5,1                                  | 8,6                    | 12,0             |
| Max. start-up current   | [A]         | 46                                   | 65,5           | -                                    | -                      | -                |
| Max. with soft-start  | [A]         | 23                                   | 32,7           | <30 integrated                       | <30 integrated         | <30 integrated   |
| <b>Horizontal-split evaporator</b> for external installation (not included in price. See pages 28–29) |             |                                      |                |                                      |                        |                  |
| Model   |             | VHS-M 14                             | VHS-M 14       | integrated 1.4401/Cu                 |                        |                  |

## AIR STATION-INDOOR INSTALLATION

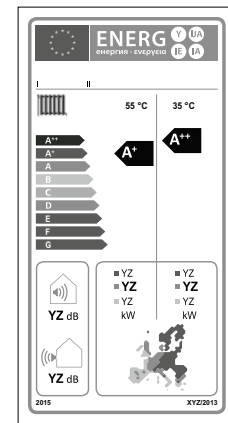


## HEATING

1116 x 784 x 1182

| OLWI 9                         | OLWI 13                        | OLWI 18                        |
|--------------------------------|--------------------------------|--------------------------------|
| 282530 / II                    | 282580 / II                    | 282630 / II                    |
| <b>13.593,-</b>                | <b>13.726,-</b>                | <b>14.141,-</b>                |
| <b>12 kW</b>                   | <b>16 kW</b>                   | <b>21 kW</b>                   |
| 35°C <b>A++</b> 55°C <b>A+</b> | 35°C <b>A++</b> 55°C <b>A+</b> | 35°C <b>A++</b> 55°C <b>A+</b> |

| 297 / 1 1/4"                         | 307 / 1 1/4"    | 312 / 1 1/4"     |
|--------------------------------------|-----------------|------------------|
| 3/400/50                             | 3/400/50        | 3/400/50         |
| 16                                   | 16              | 16               |
| R 407 C                              | R 407 C         | R 407 C          |
| Stainless-steel plate HE Mat. 1.4301 |                 |                  |
| 5                                    | 5               | 5                |
| 1,55                                 | 2,12            | 2,64             |
| 70                                   | 110             | 200              |
| <b>L10/W35</b>                       |                 |                  |
| <b>9,5</b>                           | <b>13,3</b>     | <b>17,8</b>      |
| <b>2,3/3,6</b>                       | <b>2,9/6,3</b>  | <b>4,2/9,1</b>   |
| <b>4,1/ -</b>                        | <b>4,6/ -</b>   | <b>4,2/ -</b>    |
| <b>L7/W35</b>                        |                 |                  |
| 9,01                                 | 12,3            | 15,31            |
| 2,26/3,5                             | 2,87/6,4        | 4,06/9,9         |
| 3,99/ -                              | 4,29/ -         | 3,77/ -          |
| <b>L2/W35</b>                        |                 |                  |
| <b>8,1</b>                           | <b>11,28</b>    | <b>14,82</b>     |
| <b>2,4/3,7</b>                       | <b>3,03/6,5</b> | <b>4,23/10,0</b> |
| <b>3,38/ -</b>                       | <b>3,72/ -</b>  | <b>3,5/ -</b>    |
| <b>L-7/W35</b>                       |                 |                  |
| <b>6,6</b>                           | <b>9,6</b>      | <b>13,0</b>      |
| <b>2,2/3,6</b>                       | <b>3,0/6,3</b>  | <b>4,2/9,8</b>   |
| <b>3,0/ -</b>                        | <b>3,2/ -</b>   | <b>3,1/ -</b>    |
| <b>L-10/W35</b>                      |                 |                  |
| -                                    | -               | -                |
| -                                    | -               | -                |
| -                                    | -               | -                |
| <b>L2/W50</b>                        |                 |                  |
| -                                    | -               | -                |
| -                                    | -               | -                |
| -                                    | -               | -                |
| L35/W20                              | L35/W20         | L35/W20          |
| 9,7                                  | 13,5            | 15,8             |
| 3,3/ -                               | 4,5/ -          | 7,2/ -           |
| 2,9                                  | 2,4             | 2,1              |
| L35/W7                               | L35/W7          | L35/W7           |
| 6,7                                  | 9,2             | 12,5             |
| 2,8/ -                               | 3,9/ -          | 5,9/ -           |
| 2,4                                  | 2,4             | 2,1              |
| 1                                    | 1               | 1                |
| Scroll, fully hermetic               |                 |                  |
| 1                                    | 1               | 1                |
| 5,1                                  | 8,6             | 12,0             |
| -                                    | -               | -                |
| <30 integrated                       | <30 integrated  | <30 integrated   |
| integrated 1.4401/Cu                 |                 |                  |



Sample label



**OLWA/OLWI**  
available from  
2nd half of 2014

## Accessories included in price of heat pump:

OTE plus Interior Climate Manager

Heat use system flow meter WNA DN 32, DN40 or DN 50

Noise-dampening underlay pad (GMLW 9 + 14)

Flexible connecting hose – 2 pcs. per heat pump 1 1/4" x 750 mm with bend (GMLW 9 + 14)

High-efficiency, energy-saving circulation pump – heat use/heat source internal (GMLW 9 + 14; OLWI 9 – 18)

OLWI including air conductor set and intake and exhaust grid, as well as integrated 3-way switchover valve for hot water heating

Horizontal Split Evaporator (GMLW 9 + 14)

## Optional accessories:

| Accessories   | Nr.    | Models                                | Price        |
|---|--------|---------------------------------------|--------------|
| Hot-water heating via external 3-way valve  | 290229 | GMLW 9 + 14                           | <b>279,-</b> |
|   | -      | OLWI 9 – 18                           | <b>incl.</b> |
| Commissioning lump sum (see pages 62-63. Laying or connection of pipework not included) Net | 290229 | OLWA 9 – 18                           | <b>279,-</b> |
|   | 801102 | GMLW 9 + 14                           | <b>927,-</b> |
|   | 801112 | OLWI 9 – 18                           | <b>611,-</b> |
| Start-up current limiter  | 801113 | OLWA 9 – 18                           | <b>611,-</b> |
|   | 990808 | GMLW 9 – 14                           | <b>219,-</b> |
| *Heating/cooling surcharge based on air heat source   | -      | OLWI 9 – 18                           | <b>incl.</b> |
|   | -      | OLWA 9 – 18                           | <b>incl.</b> |
| Heating/cooling upgrade with touch-display Room Terminal and integrated web2com server      | 980152 | GMLW 9 + 14                           | <b>521,-</b> |
| Room Terminal with Touch Display and integrated web2com Server                              | 980169 | in addition to 980152 for GMLW 9 + 14 | <b>490,-</b> |
| High-efficiency, energy-saving heat use external circulation pump                           | 918225 | OLWI 9 – 18<br>OLWA 9 – 18            | <b>824,-</b> |
| Circulation pump OLWA   | -      | included in scope of supply           | <b>incl.</b> |

\*Maximum sizing rating is equivalent to the P-design specification of the Ecodesign Directive and takes into account the heat pump rating + proportionate E-rod. According to the graphic „Sorted Annual Load Curve“ (page 31) an E-rod proportion of up to 3% can be assumed with an appropriate design sizing for medium climate conditions.

Delivery class II - max. 4 weeks, order-based manufacture

Important information supplementing the General Terms and Conditions on pages 22–23, 30–31 and 56–57. A buffer storage tank is mandatory for the provision of energy for defrosting and to balance out capacity peaks during transitional periods. An E-rod placed in the separation tank is mandatory for the GMLW series in order to provide the building with frost protection. Consider flow rate when heating hot water.

All pipe cross-sections must be sized and installed according to nominal flow rates. Operating limits with regard to heat sources and heat use systems must be observed. Consider flow rate when designing hot-water heating (see pages 58-60). The pipework of systems with a cooling function must be insulated against condensation.

ΔT GMLW – exterior temperature to FLT = max. 55 K; We strongly recommend the 'cover for split exterior components' accessory to protect the fan against environmental influences such as rain, snow, leaves etc. Insulate the pipework of cooling systems against condensation. Ensure that the hydraulic safety and pressure systems are appropriately sized to ensure operational safety, particularly for defrosting or cooling operations. Inspect on an annual basis in accordance with official standards.

As an approximation: System filling pressure during heating and cooling operation [bar] = MEV inlet pressure + 0.5 [bar]

# HORIZONTAL-SPLIT-SPLIT-EVAPORATOR

## HORIZONTAL-SPLIT-EVAPORATOR VHS-M MILLENNIUM® EDITION



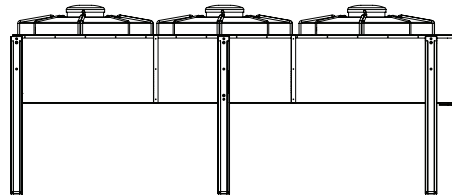
Heat source air  
for high-efficiency heat pumps

| Model                                  | VHS-M 5     | VHS-M 9           | VHS-M 14          |
|--|-------------|-------------------|-------------------|
| Dimensions LxWxH [mm] (without a roof) |             | 1080 x 1290 x 960 |                   |
| Included with the heat pump            | GMLW 5 plus | GMLW 9 plus / 9   | GMLW 14 plus / 14 |

### Technical data:

|                                     |       |                  |             |         |             |         |             |
|-------------------------------------|-------|------------------|-------------|---------|-------------|---------|-------------|
| Weight                              | [kg]  | 93               |             | 93      |             | 93      |             |
| Material of evaporator package      |       | copper/aluminium |             |         |             |         |             |
| Axial EC fan-fully-modulating 230 V | [nr]  | 1                |             | 1       |             | 1       |             |
| Power consumption                   | [W]   | 23               |             | 40      |             | 68      |             |
| Operational mode*                   |       | nominal          | silent mode | nominal | silent mode | nominal | silent mode |
| Sound pressure**                    | [dBA] | 20               | 11          | 24      | 12          | 26      | 14          |
| Sound power level                   | [dBA] | 48               | 39          | 52      | 40          | 54      | 42          |

## VHS - THREE-WAY SPLIT



| Model                       | VHS 65             |
|-----------------------------|--------------------|
| Dimensions LxWxH [mm]       | 1149 x 2965 x 1288 |
| Included with the heat pump | OLWP 65 plus       |

### Technical data:

|                                     |       |                  |             |
|-------------------------------------|-------|------------------|-------------|
| Weight                              | [kg]  | 348              |             |
| Material of evaporator package      |       | copper/aluminium |             |
| Axial EC fan-fully-modulating 230 V | [nr]  | 3                |             |
| Power consumption                   | [W]   | 1440             |             |
| Operational mode*                   |       | nominal          | silent mode |
| Sound pressure**                    | [dBA] | 50               | 41          |
| Sound power level                   | [dBA] | 78               | 69          |

## HORIZONTAL-SPLIT-EVAPORATOR VHS-M MILLENNIUM® EDITION



VHS-M 19

VHS-M 25

VHS-M 35

1080 x 2220 x 960

GMLW 19 plus

GMLW 25 plus

GMLW 35 plus

136

175

180

copper/aluminium

2

2

2

111

201

337

nominal

silent mode

nominal

silent mode

nominal

silent mode

26

16

30

20

33

26

54

44

58

48

61

54

### Accessories optional for Split-Evaporator VHS-M Millennium® Edition:

| Accessories   | Nr.    | Models    | Price/Pc.   |
|---|--------|-----------|-------------|
| Cover for split evaporator<br>Height of evaporator<br>Upper edge 300 mm | 916392 | see below | <b>78,-</b> |

| Models        | "Cover for split evaporator" required quantity |
|---------------|--|
| VHS-M 5 – 14  | 1 Pc.  |
| VHS-M 19 – 35 | 2 Pc.  |

Roof for Split evaporator VHS 65 not available.

| Accessories   | Nr.    | Models   | Price/Pc.   |
|---|--------|--|-------------|
| Vertical cladding for connecting pipework to the VHS-M evaporator | 915567 | GMLW 5 plus, 9 plus / 9, 14 plus / 14, 19 plus | <b>93,-</b> |

## SOUND REDUCTION BY MEANS OF FLÜSTER-MANAGEMENT

For Split evaporator VHS-M Millennium® Edition



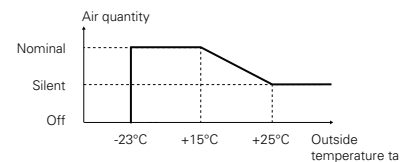
Thanks to the new, unique and patented Flüster-Management, the noise emission of the OCHSNER VHS-M evaporator is reduced to an absolute minimum. Thus, they are hardly heard any more, even during operation. OCHSNER supplies two versions:

### Silent Mode

In silent mode, the speed of the fan is reduced, dependent on the outside air temperature, by a fixed proportional function. This is to ensure that, for example, in the summer in hot water or pool heater operation, the already extremely low noise emission is reduced once again. This feature is supplied as standard by OCHSNER.

### Silent Mode VHS-M

Heating  
Hot Water  
Poolheating



\* Note on operation: The Silent Mode operation is activated automatically by the OTE control upwards of an outside temperature of  $t_a \geq 25^\circ\text{C}$ . The step-by-step reduction of the flow rate begins at  $15^\circ\text{C}$ .

### Super Silent Mode (from 3rd quarter 2014).

The OCHSNER Super Silent Mode will be supplied together with the Touch Room terminal: Newly developed control algorithms minimize the fan speed depending on the operating conditions. This dynamic function also has a positive effect on running time, service life and efficiency of the heat pump.

\*\* Distance 10 m

Delivery class III - max. 4-8 weeks, order-based manufacture

Sound pressure level data refer to full operation at a distance of 10 m with free field.

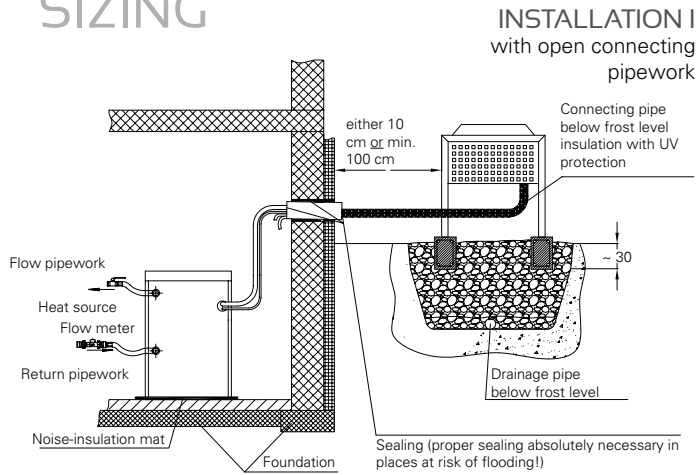
Guidelines for sound pressure and sound output level +/- 3 dB(A)

$\Delta t$  GMLW plus – outside temperature to FLT = max. 75 K

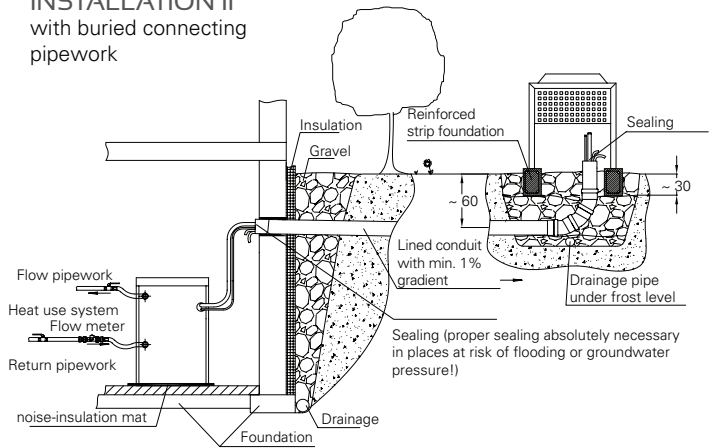
We strongly recommend the 'cover for split evaporator' accessory to protect the fan against environmental influences such as rain, snow, leaves etc.

Prices in €, excl. VAT

# SIZING



## INSTALLATION II with buried connecting pipework



## EVAPORATOR INSTALLATION

The following points must be considered when installing the evaporator:

- » Installation between two walls or in corners leads to an increase in the noise output level.
- » Do not install the evaporator adjacent to bedrooms or other sensitive areas
- » Plants and planted areas (e.g. lawns, shrubbery) can reduce noise levels. Noise levels in enclosed rooms are dependent on room volume and reverberation period.
- » When installing a split evaporator, particular care must be taken to ensure that it is accessible at all times of the year (suitable precautions must be taken particularly when in the case of roof-mounted evaporators)

## HOT-WATER HEATING

### Required capacity for hot-water heating (P<sub>ww</sub>)

via Golf plus heat pump, depending on building heat capacity (Q<sub>H</sub>):

| Building heat capacity       | Required hot-water heating capacity |
|------------------------------|-------------------------------------|
| P <sub>H</sub> ≥ 10 kW       | P <sub>ww</sub> = 0,25 kW / Person  |
| P <sub>H</sub> 4,0 bis 10 kW | P <sub>ww</sub> = min. 3,0 kW       |
| P <sub>H</sub> ≤ 4,0 kW      | P <sub>ww</sub> = min. 4,0 kW       |

The P<sub>ww</sub> values given are benchmark values. Exact calculation according to DIN 4708-2 is necessary! In the event of low heating capacity, disproportionate hot-water capacity is required for reasons of comfort/synchronicity!

### Connecting pipework to evaporator

Connecting pipework to the evaporator (suction and fluid pipes) and the fan power supply must be laid in a lined conduit and heat-insulated according to regulations (defrosting function). A downward gradient is required in pipework for the purposes of condensation drainage (follow instruction manual). Connection to the evaporator must be installed by OCHSNER customer service or an authorised OCHSNER customer service partner. The conduit must be a smooth pipe of Ø min. 150 mm and have a large bend radius (over 1 m). 90° bends are not permitted.

### Noise emission

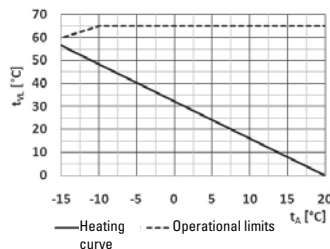
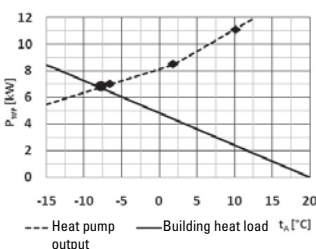
Noise is constantly emitted from the appliance. The emission level is expressed in terms of the sound pressure level as measured from a certain distance. This depends on local conditions. In accordance with VDI 2058, the following values may not be exceeded when one's neighbour's window is open (day/night sound pressure level):

- » Commercial/residential areas 60 dB(A) / 45 dB(A)
- » General residential areas 55 dB(A) / 40 dB(A)
- » Exclusively residential areas 50 dB(A) / 35 dB(A)

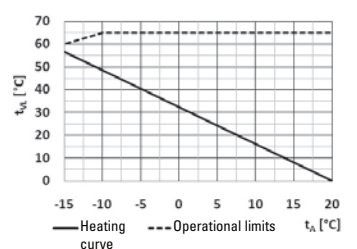
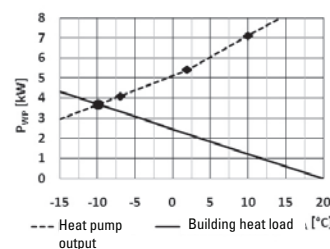
OCHSNER split evaporators fall significantly below these values and are regarded as the quietest appliances on the market. The sound pressure level of a heat pump with a free field at 1 m distance is c. 8 dB under the sound power level. Here, the sound pressure level decreases by ca. 2 dB(A) per meter. Information contained in the TA-Lärm (noise) and guidelines for noise generated by heat pumps must be taken into consideration.

## SPECIMEN PLANS according to the principles of OCHSNER systempartner training S 7

| NEW BUILDING                            |  |
|---|--|
| $P_{WP} \geq P_H + P_{WW} + P_{Sperr}$  |  |
| » Selection of heat pump size           |  |
| » Manual sizing – NEW BUILDING          |  |
| » Hot-water heating with Golf heat pump |  |
| Building heat load                      | P <sub>H</sub> 3,5 kW                              |
| Required capacity for hot-water heating | P <sub>WW</sub> min. 4,0 kW                        |
| Surcharge for black-out periods         | P <sub>Sperr</sub> 20 % (P <sub>H</sub> ) = 0,7 kW |
| <b>Total</b>                            | <b>P<sub>WP</sub> 8,2 kW ~ 8,5 kW</b>              |
| Flow temperature (under-floor heating)  | t <sub>VL</sub> 35°C                               |
| <b>Selected heat pump:</b>              | <b>Air/Water GMLW 9 plus</b>                       |
|   | <b>P<sub>HWP</sub> 8,5 kW for A2/W35</b>           |

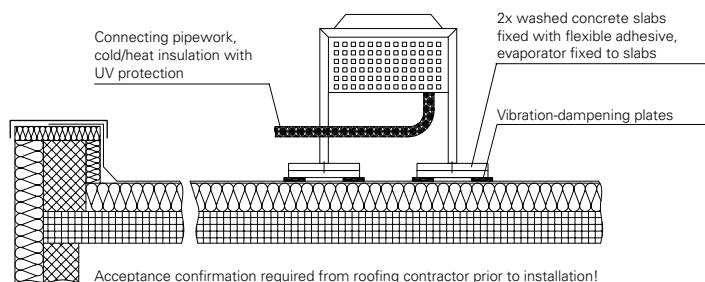


| NEW BUILDING   |  |
|--|--|
| $P_{WP} \geq P_H + P_{Sperr}$                                |  |
| » Selection of heat pump size                                |  |
| » Manual sizing – NEW BUILDING                               |  |
| » Hot-water heating with domestic hot-water heat pump Europa |  |
| Building heat load   | P <sub>H</sub> 3,5 kW                              |
| Required capacity for hot-water heating                      | P <sub>WW</sub> –                                  |
| Surcharge for black-out periods                              | P <sub>Sperr</sub> 20 % (P <sub>H</sub> ) = 0,7 kW |
| <b>Total</b>   | <b>P<sub>WP</sub> 4,2 kW</b>                       |
| Flow temperature (under-floor heating)                       | t <sub>VL</sub> 35°C                               |
| <b>Selected heat pump:</b>                                   | <b>Air/Water GMLW 5 plus</b>                       |
|  | <b>P<sub>HWP</sub> 5,1 kW for A2/W35</b>           |



### INSTALLATION III

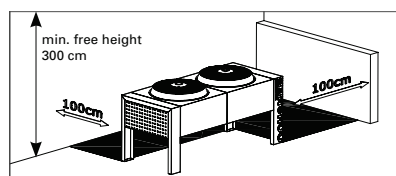
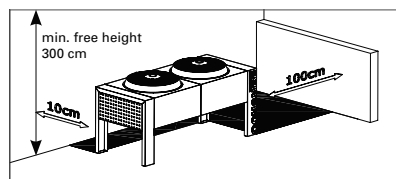
Flat roof



#### Maximum connection length and height difference

|                   |          |               |
|-------------------|----------|---------------|
| GMLW 5 – GMLW 25  | L ≤ 20 m | H max. ≤ 10 m |
| GMLW 35 – OLWP 65 | L ≤ 16 m | H max. ≤ 5 m  |

#### Minimum clearances:



- » Longitudinal clearance to wall: 10 cm or min. 100 cm
- » Lateral clearance to walls: 100 cm
- » Clearance between 2 evaporators VHS-M, LLV: 100 cm on all sides
- » Clearance between 2 evaporators VHS-M: 300 cm on all sides
- » Free exhaust height above evaporator: 300 cm

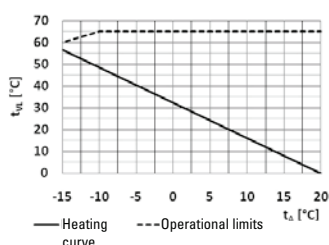
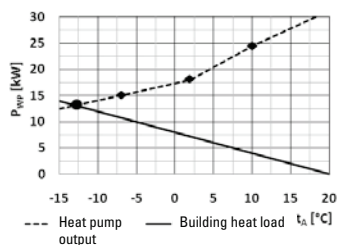
#### $P_{WP} \geq P_H + P_{WW} + P_{Sperr}$ EXISTING BUILDINGS

- » Selection of heat pump size
- » Manual sizing – EXISTING BUILDINGS
- » Hot-water heating with Golf heat pump

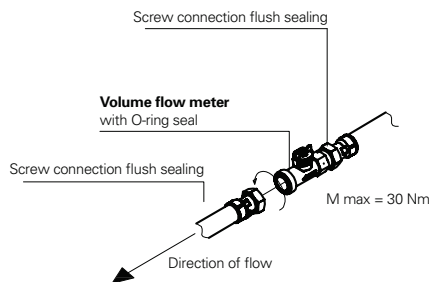
|  |                            |                         |
|--|----------------------------|-------------------------|
| Building heat load   | $P_H$                      | 10,5 kW                 |
| Required capacity for hot-water heating (0.25 kW / Person x 4 persons) | $P_{WW}$                   | 1 kW                    |
| Surcharge for black-out periods  | $P_{Sperr}$                | 20 % ( $P_H$ ) = 2,1 kW |
| <b>Total</b>   | <b><math>P_{WP}</math></b> | <b>13,6 kW ~ 14 kW</b>  |
| Flow temperature (radiators or compact radiators)                      | $t_{VL}$                   | 55°C                    |

#### Heat pump selected: Air/Water GMLW 19 plus

|           |                           |
|-----------|---------------------------|
| $P_{HWP}$ | <b>15,9 kW for A2/W50</b> |
|-----------|---------------------------|



### VOLUME FLOW METER



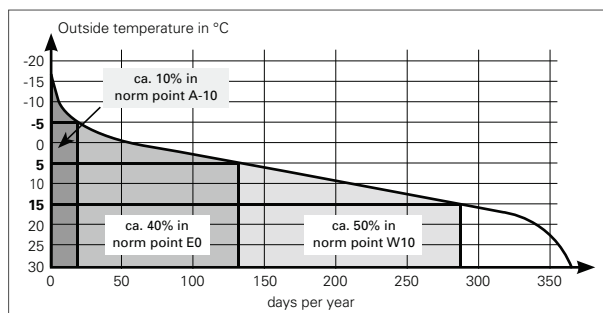
#### Operational limits:

| Max. model temperature 55 °C                    | Max. model temperature 65 °C            |
|---|---|
| <b>GMLW 9 + 14</b><br><b>OLWI / OLWA 9 – 18</b> | <b>GMLW plus</b><br><b>OLWP 65 plus</b> |
|   |   |

| Model   | GMLW OLWI / OLWA                                  | GMLW plus OLWP plus   |
|---|---|---|
| max. heat-pump flow temperature / outside air temperature | L -5 / W 55°C<br>L -10 / W 50°C<br>L -15 / W 40°C | L -10 / W 65°C<br>L -15 / W 60°C<br>L -20 / W 55°C                      |
| Under-floor heating (-15°C / 35°C)                        | YES   | YES   |
| Radiators (-15°C / 55°C)                                  | NO  | YES   |
| Radiators (-15°C / 65°C)                                  | NO  | YES if auxiliary heating is sized according to 100% of heating capacity |
| Hot water   | NO  | YES   |

| Application                     | Output auxiliary heater  |
|---------------------------------|--|
| Bivalent <b>parallel</b>        | Sized according to calculated value (offer program), but with minimum 50% of building heating capacity |
| Bivalent <b>partly parallel</b> | Sized to 100% of building heat load  |
| Bivalent <b>alternative</b>     | Sized to 100% of building heat load  |

#### Ordered annual load curve (= no. of days on which outside temperature falls below a defined value).



- $P_H$  Building heating load in kW
- $P_{WW}$  Required hot-water heating output in kW
- $P_{Sperr}$  Black-out surcharge in kW

Note: A GMLW plus series heat pump is required for year-round hot-water heating at a temperature level between 55 and 60°C. To protect against Legionella (60°C) we recommend the additional installation of an E-rod in the storage tank.  
 \* For hot-water heating using the GMLV series!  
 \*\* Second heat generator is sized to 100% of heating capacity. Special release on request.



# ECO AIR/WATER

Air/water heat pumps  
Entry-level solution for heating and  
cooling with Inverter Technology

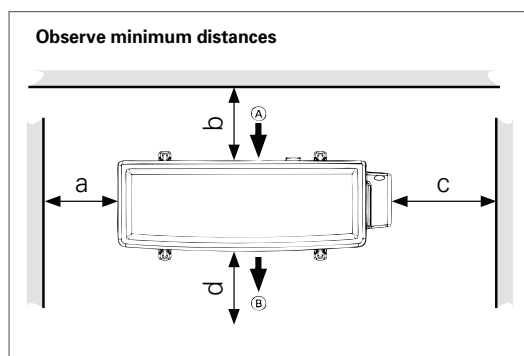


tv max. 65°C

| Series   | HEATING – HEATING/COOLING |                  |                |                               |
|--|---------------------------|------------------|----------------|-------------------------------|
| Dimensions outdoor unit (HxWxD)  | [mm]                      | 1040 x 865 x 340 |                | 1255 x 900 x 340              |
| Dimensions indoor unit (HxWxD)   | [mm]                      | 1150 x 400 x 650 |                | 1150 x 400 x 650              |
| <b>Model</b>   |                           | <b>ELW 8</b>     |                | <b>ELW 12*</b>                |
| Order number / delivery class  |                           | 285050 / II      |                | 285100 / II                   |
| <b>Price</b> incl. accessories (see right side)<br>incl. Vertical-Split evaporator |                           | <b>7.235,-</b>   |                | <b>10.349,-</b>               |
| <b>Maximum sizing rating***</b>  |                           | <b>11 kW</b>     |                | <b>13 kW</b>                  |
| <b>Energy efficiency class</b> / nominal rating                                    |                           | 35°C <b>A++</b>  | 55°C <b>A+</b> | 35°C <b>A+</b> 55°C <b>A+</b> |
| <b>Energy efficiency class</b> / max. rating                                       |                           | 35°C <b>A+</b>   | 55°C <b>A</b>  | 35°C <b>A+</b> 55°C <b>A+</b> |

## Technical data:

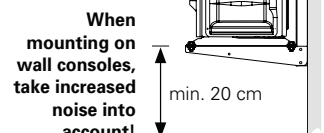
|   |           |                                 |                                 |
|---|-----------|---------------------------------|---------------------------------|
| Weight outdoor unit                     | [kg]      | 66                              | 110                             |
| Weight indoor unit                      | [kg]      | 70                              | 75                              |
| Hydraulic connection                    | [Inch]    | 1"                              | 1"                              |
| Phases/nominal voltage/frequency        | [-~/V/Hz] | 1/230/50                        | 1/230/50                        |
| Fuse (trip characteristic 'C')          | [A]       | 16                              | 25                              |
| Refrigerant                             |           | R410A                           | R410A                           |
| Refrigerant quantity                    | [kg]      | 2,15                            | 2,95                            |
| Condenser                               |           | stainless steel PHE Mat. 1.4301 | stainless steel PHE Mat. 1.4301 |
| Temperature difference                  | [K]       | 5                               | 5                               |
| Flow rate                               | [m³/h]    | 1,43                            | 1,9                             |
| Residual discharge head                 | [mbar]    | 430                             | 230                             |
| <b>Compressor</b>                       |           |                                 |                                 |
| Number                                  | [Pc.]     | 1                               | 1                               |
| Type                                    |           | Rolling piston                  | Scroll                          |
| Power control / inverter technology     |           | continuously variable           | continuously variable           |
| Max. Operating current                  | [A]       | 16                              | 25                              |
| Start-up current (charge DC-capacitors) | [A]       | <35                             | <30                             |
| Air quantity nominal flow               | [m³/h]    | 4590                            | 8420                            |
| Ventilator Number                       |           | 1                               | 2                               |
| Outdoor module                          | **[dBA]   | 34/62**                         | 43/71**                         |



| Minimum distances | ELW 8   | ELW 12  |
|-------------------|---------|---------|
| a                 | > 20 cm | > 20 cm |
| b                 | > 10 cm | > 20 cm |
| c                 | > 70 cm | > 70 cm |
| d                 | > 1,5 m | > 2 m   |

### Max. connection length + height difference

| ELW 8 | ELW12 | L ≤ 20 m | H ≤ 15 m |
|-------|-------|----------|----------|
|-------|-------|----------|----------|



## Note on power supply ELW in particular for Austria

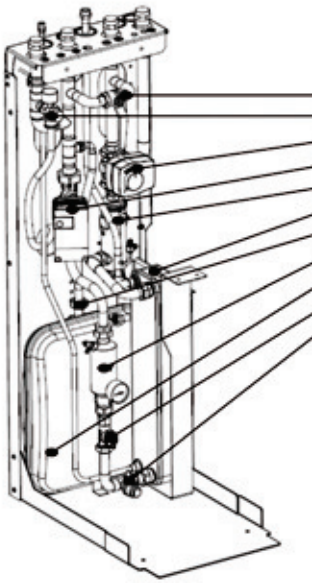
The ELW is equipped with a single-phase inverter > 1.3 kVA. According to the technical connection conditions for connection to public supply systems with operating voltages up to 1000 volts (TAEV) Part III and the technical and organisational rules for operators and users of networks (TOR) Part D1, the operation of these devices is only permitted with the written consent of the network operator.

The TAEV is valid in the whole of Austrian territory, the compliance with the limiting values are, however handled with differing degrees of strictness by the individual energy supply companies. The consent of the system operator is dependent on the location of the installation and the network operator's capacity, and in most cases will be treated in positive fashion.

We recommend obtaining the approval of the grid operator via a licensed electrical engineer before ordering an ELW.

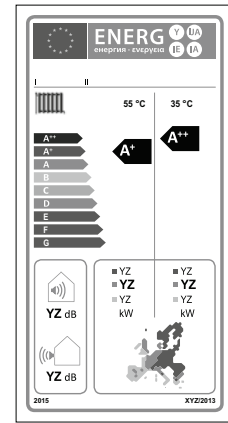
The authorisation by the grid operator of the operation at the intended location is to be confirmed by ticking the appropriate box on the auxiliary data sheet ELW (see auxiliary sheet issued ELW-ADB).

### ELW-Inside unit with complete equipment



- intelligent bypass for highest de-icing and operational safety
- safety valve with manometer
- 3-way switch valve for hot water and/or de-icing safety
- high-efficiency energy saving circulation pump
- electric auxiliary heater 8.8 kW
- plate heat exchanger / condenser
- service valve for expansion vessel
- deaerator
- expansion vessel 12 litre
- flow meter for safety monitoring and heat quantity measurement heating / cooling / hot water heating as standard
- refilling valve

**ELW 8:** (not for ELW 12)  
 - heating operation possible without buffer tank from norm heat load > 4 kW  
 - direct hot water heating for smooth-pipe register from 1m<sup>2</sup> in compliance with the nominal flow rate



Sample label



### Technical data:

| HEATING                           |      | ELW 8      | ELW 12     |
|-----------------------------------|------|------------|------------|
| <b>Standard point L10/W35</b>     |      |            |            |
| Heating capacity                  | [kW] | 1,9 – 11,2 | 7 – 18,5   |
| Heating rating range EN14511      | [kW] | 8          | 14,3       |
| Power consumption total EN14511   | [kW] | 1,7        | 3          |
| COP EN14511                       |      | 4,7        | 4,8        |
| <b>Operating point L7/W35</b>     |      |            |            |
| Heating capacity                  | [kW] | 1,9 – 10,2 | 7 – 16,5   |
| Heating rating range EN14511      | [kW] | 7          | 12,8       |
| Power consumption total EN14511   | [kW] | 1,6        | 2,9        |
| COP EN14511                       |      | 4,4        | 4,4        |
| <b>Standard point L2/W35</b>      |      |            |            |
| Heating capacity                  | [kW] | 1,3 – 8,5  | 4,9 – 13   |
| Heating rating range EN14511      | [kW] | 5,5        | 9,7        |
| Power consumption total EN14511   | [kW] | 1,5        | 2,8        |
| COP EN14511                       |      | 3,7        | 3,5        |
| <b>Standard point L-7/W35</b>     |      |            |            |
| Heating capacity                  | [kW] | 1,2 – 6,8  | 3,8 – 10,4 |
| Heating rating range EN14511      | [kW] | 4,2        | 7,7        |
| Power consumption total EN14511   | [kW] | 1,4        | 2,8        |
| COP EN14511                       |      | 3          | 2,8        |
| <b>Operating point L-10/W35</b>   |      |            |            |
| Heating capacity                  | [kW] | 1 – 6,2    | 3,5 – 9,7  |
| Heating rating range EN14511      | [kW] | 3,7        | 7,1        |
| Power consumption total EN14511   | [kW] | 1,3        | 2,7        |
| COP EN14511                       |      | 2,9        | 2,6        |
| <b>Operating point L2/W50</b>     |      |            |            |
| Heating capacity                  | [kW] | 1,3 – 7,3  | 4,4 – 12   |
| Heating rating range EN14511      | [kW] | 5,4        | 9,4        |
| Power consumption total EN14511   | [kW] | 2,5        | 3,8        |
| COP EN14511                       |      | 2,2        | 2,5        |
| <b>COOLING</b>                    |      |            |            |
| <b>Operating point L35/W18</b>    |      |            |            |
| Cooling rating range              | [kW] | 1,8 – 11,1 | 6,1 – 14,9 |
| Nominal cooling rating            | [kW] | 7,9        | 11,8       |
| Nominal total power consumption   | [kW] | 2,6        | 4,3        |
| EER at nominal rating             |      | 3          | 2,8        |
| <b>Operating point L35/W12</b>    |      |            |            |
| Cooling rating range              | [kW] | 1,6 – 10   | 5,5 – 13,4 |
| Nominal cooling rating            | [kW] | 7          | 10,4       |
| Nominal total power consumption   | [kW] | 2,5        | 4,1        |
| EER at nominal rating             |      | 2,8        | 2,5        |
| <b>Operating point L35/W7****</b> |      |            |            |
| Cooling rating range              | [kW] | 1,4 – 9,1  | 5 – 12,1   |
| Nominal cooling rating            | [kW] | 6,2        | 9,3        |
| Nominal total power consumption   | [kW] | 2,4        | 3,9        |
| EER at nominal rating             |      | 2,6        | 2,4        |

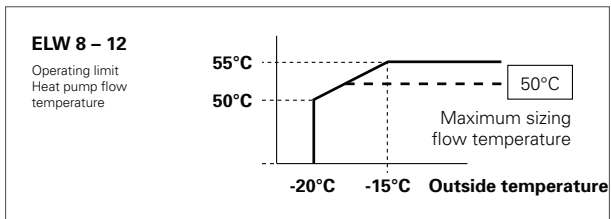
### Accessories contained in the heat pump indoor unit:

- OTE plus interior climate manager
- Flow meter unit heating system DN 32 1 1/4"
- High-efficiency energy saving circulation internal pump heating system
- Hot water heating possible using internal 3-way valve
- E-heating rod 8.8 kW

### Optional accessories:

| Accessory   | Nr.    | Models         | Price     |
|---|--------|----------------|-----------|
| Hydraulic shut-off set 4-fold   | 290538 | ELW 8 + ELW 12 | 169,-     |
| Commissioning lump-sum (see notes Pages 62-63, does not include connection pipework laying) net | 801111 | ELW 8 + ELW 12 | 611,-     |
| Connection pipework 5-20 m  | 990953 | ELW 8 + ELW 12 | 59,-/lftm |
| Surcharge heating/cooling with FB 6102 RH with graphic display                                  | 980170 | ELW 8 + ELW 12 | 264,-     |
| Surcharge heating/cooling with room terminal with Touch Display                                 | 980171 | ELW 8 + ELW 12 | 823,-     |
| Damping base and floor consoles   | 912633 | ELW 8 + ELW 12 | 201,-     |
| Wall-mounting console for ELW   | 912720 | ELW 8 + ELW 12 | 202,-     |

### Operating limits:



Delivery class II - max. 4 weeks, order-based manufacture

Important notes on the general information on Pages 22-23, 30-31; 56-57 and the operation and installation manual of the ELW series: Due to the power regulation of the compressor, the ELW can be operated without a buffer tank. When using individual room regulation, less than 100 litres of heating system filling water and heating/cooling operation with Smart Grid connection, a buffer tank of 30 to 50 litre/kW is necessary, depending on the type of operation. All heating system pipework sizes are to be sized and installed according to the nominal flow rates. Observe the operating limits according to the diagram. The pipework of systems with a cooling function must be suitably insulated against condensation. We recommend free-field installation (not close to walls) in order to minimise noise emission. Installing parallel to a wall increases noise reflection. Possible aid by installation at right-angles to the wall. Ensure that the hydraulic safety and pressure systems are appropriately sized to ensure operational safety, particularly for defrosting or cooling operations. Inspect on an annual basis in accordance with official standards. As an approximation: System filling pressure during heating and cooling operation [bar] = MEV inlet pressure + 0.5 [bar]

\* Maximum sizing rating is equivalent to the P-design specification of the Ecodesign – Directive and takes into account the heat pump rating + proportionate E-rod. According to the graphic „Sorted Annual Load Curve“ (page 31) an E-rod proportion of up to 3% can be assumed with an appropriate design sizing for medium climate conditions.

\*\* Sound pressure level under free field conditions/sound output level at max. nominal rotational speed

\*\*\*\* Heat pump separating tank 200l required

Prices in €, excl. VAT.