

# TECHNICAL PRODUCT SUBMITTAL

## AMICUS LAHP-2604WWS BOOST HEAT PUMP

| Heating Data                                     |                   |            |
|--------------------------------------------------|-------------------|------------|
| Heating Capacity (EN14511) <sup>1</sup>          | kW                | 496        |
| Total Power input (EN14511) <sup>1</sup>         | kW                | 102        |
| COP (EN14511) <sup>1</sup>                       | W/W               | 4.86       |
| Nominal flow rate                                | m <sup>3</sup> /h | 68.33      |
| Pressure drop across the heat pump               | kPa               | 11.2       |
| EcoDesign data                                   |                   |            |
| EcoDesign Energy Label Rating                    | LT/HT             | A++/A++    |
| SCOP Low Temperature                             |                   | 6.2        |
| Seasonal Efficiency High temperature             | %                 | 188        |
| General Data                                     |                   |            |
| Refrigerant type                                 |                   | R134A      |
| Compressor Type                                  |                   | Scroll     |
| Number of Compressors                            |                   | 4          |
| Number of Circuits                               |                   | 2          |
| Capacity steps                                   |                   | 4          |
| Minimum capacity step                            | %                 | 25         |
| Electrical Data                                  |                   |            |
| Power supply                                     | V/Ph/Hz           | 400/3+N/50 |
| Maximum input power                              | kW                | 143        |
| Maximum input current standard unit              | A                 | 252        |
| Peak input current standard unit                 | A                 | 499        |
| Peak input current with soft start option fitted | A                 | 375        |
| Fuse rating (delayed)                            | A                 | 315        |
| Fans                                             |                   |            |
| Sound power level                                | dB(A)             | 91         |
| Sound pressure level                             | dB(A)             | 59         |

| Model | Octave band (Hz) |      |      |      |      |      |      |      | Lw    |       | Lp    |
|-------|------------------|------|------|------|------|------|------|------|-------|-------|-------|
|       | 63               | 125  | 250  | 500  | 1K   | 2K   | 4K   | 8K   |       |       |       |
|       | dB               | dB   | dB   | dB   | dB   | dB   | dB   | dB   | Db    | dB(A) | dB(A) |
| 302   | 78.1             | 69.3 | 63.2 | 61.7 | 60.6 | 55.2 | 51.8 | 42.7 | 78.9  | 65    | 49    |
| 402   | 78.1             | 69.3 | 63.2 | 61.7 | 60.6 | 55.2 | 51.8 | 42.7 | 78.9  | 65    | 49    |
| 602   | 83.1             | 74.3 | 68.2 | 66.7 | 65.6 | 60.2 | 56.8 | 47.7 | 83.9  | 70    | 54    |
| 702   | 86.1             | 77.3 | 71.2 | 69.7 | 68.6 | 63.2 | 59.8 | 50.7 | 86.9  | 73    | 57    |
| 902   | 87.1             | 78.3 | 72.2 | 70.7 | 69.6 | 64.2 | 60.8 | 51.7 | 87.9  | 74    | 58    |
| 1202  | 89.1             | 80.3 | 74.2 | 72.7 | 71.6 | 66.2 | 62.8 | 53.7 | 89.9  | 76    | 60    |
| 1402  | 91.1             | 82.3 | 76.2 | 74.7 | 73.6 | 68.2 | 64.8 | 55.7 | 91.9  | 78    | 62    |
| 1804  | 101.1            | 92.3 | 86.2 | 84.7 | 83.6 | 78.2 | 74.8 | 65.7 | 101.9 | 88    | 72    |
| 2304  | 102.1            | 93.3 | 87.2 | 85.7 | 84.6 | 79.2 | 75.8 | 66.7 | 102.9 | 89    | 73    |
| 2604  | 104.1            | 95.3 | 89.2 | 87.7 | 86.6 | 81.2 | 77.8 | 68.7 | 104.9 | 91    | 75    |

Lw: sound power level according to ISO 3744

Lp: sound pressure level at 1 mt from the unit in free field conditions direction factor Q=2 according to ISO 3744

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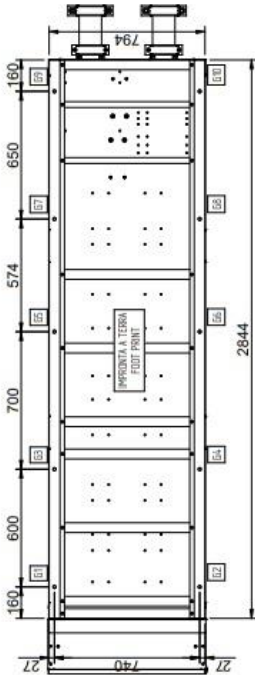
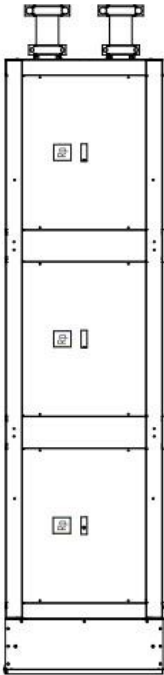
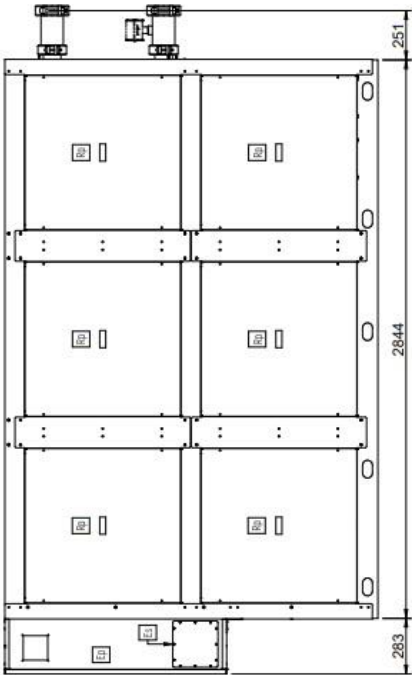
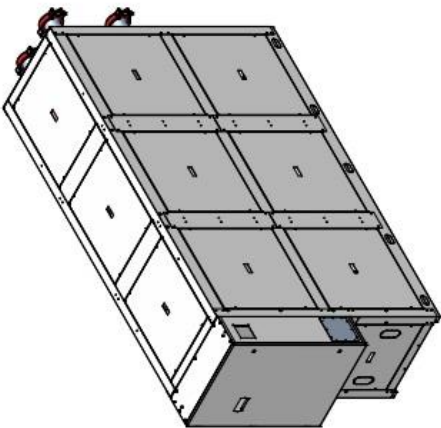
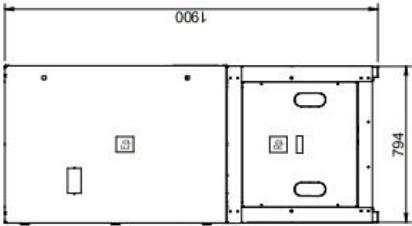
| User   | 65     |            |      | 70     |            |      |
|--------|--------|------------|------|--------|------------|------|
| Source | Output | Absorption | COP  | Output | Absorption | COP  |
| 20     | 334    | 238        | 3.48 | n/a    | n/a        | n/a  |
| 25     | 381    | 283        | 3.88 | 370    | 263        | 3.43 |
| 30     | 435    | 335        | 4.35 | 421    | 311        | 3.83 |
| 35     | 496    | 394        | 4.86 | 479    | 367        | 4.28 |
| 40     | 564    | 460        | 5.37 | 543    | 429        | 4.72 |
| 45     | 641    | 534        | 5.94 | 616    | 500        | 5.26 |
| User   | 75     |            |      | 78     |            |      |
| Source | Output | Absorption | COP  | Output | Absorption | COP  |
| 20     | n/a    | n/a        | n/a  | n/a    | n/a        | n/a  |
| 25     | n/a    | n/a        | n/a  | n/a    | n/a        | n/a  |
| 30     | 407    | 287        | 3.39 | 399    | 272        | 3.14 |
| 35     | 461    | 339        | 3.75 | 452    | 322        | 3.5  |
| 40     | 522    | 398        | 4.18 | 510    | 379        | 3.86 |
| 45     | 591    | 465        | 4.62 | 577    | 443        | 4.31 |

n/a=not allowed heat pump will not work at operating conditions

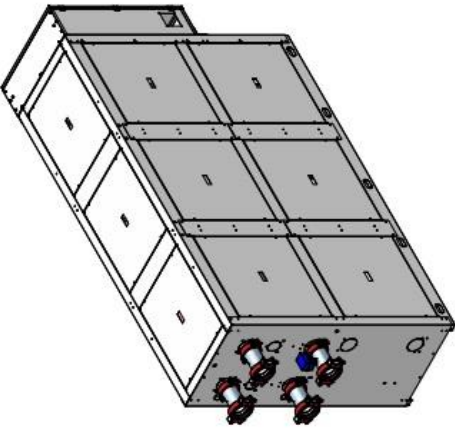
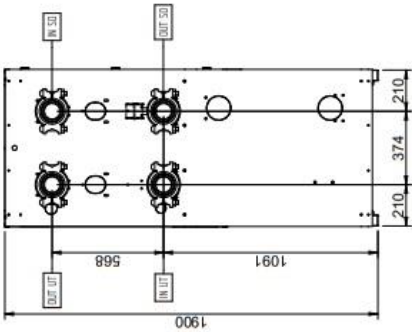
**Amicus air to water heat pumps** must be installed and maintained in line with the Installation Commissioning and Maintenance Instructions which are available on the Literature & Downloads section of [www.lochinvar.ltd.uk](http://www.lochinvar.ltd.uk)

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| WEIGHT OF THE UNIT (Kg)<br>PESO DELL'UNITA' (Kg) |      |
|--------------------------------------------------|------|
| 1804                                             | 2304 |
| G1                                               | 160  |
| G2                                               | 160  |
| G3                                               | 160  |
| G4                                               | 160  |
| G5                                               | 160  |
| G6                                               | 160  |
| G7                                               | 160  |
| G8                                               | 160  |
| G9                                               | 160  |
| G10                                              | 160  |
| TOT                                              | 1600 |



|        |                                                       |                      |
|--------|-------------------------------------------------------|----------------------|
| Rp     | PANNELLO ASPORTABILE - REMOVABLE PANEL                | WHK 1804, 2604 HT LS |
| Ep     | QUADRO ELETTRICO - ELECTRICAL PANEL                   |                      |
| Es     | INGRESSO ALIMENTAZIONE ELETTRICA - POWER SUPPLY INLET |                      |
| IN UT  | INGRESSO ACQUA UTENTE - USER WATER INLET              | Ø 5" VICTAULIC       |
| OUT UT | USCITA ACQUA UTENTE - USER WATER OUTLET               | Ø 5" VICTAULIC       |
| IN SO  | INGRESSO ACQUA SORGENTE - SOURCE WATER INLET          | Ø 5" VICTAULIC       |
| OUT SO | USCITA ACQUA SORGENTE - SOURCE WATER OUTLET           | Ø 5" VICTAULIC       |