

### **TECHNICAL DATA MANUAL**







Before using your unit, please read this manual carefully and keep it for future reference.

| Heat pump space he                                     | eater  | unit    | MLI 18 H0                   | MLI 22 H0 | MLI 26 H0 | MLI 30 H0 |
|--|--|---------|-----------------------------|-----------|-----------|-----------|
| Indoor unit sound po                                   | wer (*)  | [dB(A)] | 1                           | /         | 1         | /         |
| Outdoor unit sound p                                   | oower (*)  | [dB(A)] | 71                          | 73        | 77        | 77        |
| Capacity of the back-up neater integrated in the unit  | Psup back-up heater  | [kW]    | 0                           | 0         | 0         | 0         |
| off peak operation fu<br>Heat pump                     | inction integrated in  | Y/N     | No                          | No        | No        | No        |
| Space heating  | Energy efficiency class 35°C (Low temp. app.)  | -       | A+++                        | A+++      | A+++      | A++       |
| Space heating  | Energy efficiency class 55°C(Medium temp. app.)  | -       | A++                         | A++       | A+        | A+        |
| Average climate (De                                    | sign temperature= -10  | °C)     |                             |           |           |           |
|  | Prated(declared heating capacity) @-10°C   | [kW]    | 18                          | 22        | 25        | 29        |
| Space heating 35°C                                     | Seasonal space heating efficiency(ηs)  | [%]     | 181                         | 178       | 177       | 165       |
|  | Annual energy consumption  | [kWh]   | 8,086                       | 10,180    | 11,489    | 14,165    |
|  | Prated(declared heating capacity) @-10°C   | [kW]    | 18                          | 22        | 26        | 30        |
| pace heating 55°C Seasonal space heating efficiency(ns | Seasonal space heating efficiency(ηs)  | [%]     | 125                         | 126       | 123       | 123       |
|  | Seasonal space heating 55°C Seasonal space heating efficiency(ηs)  Annual energy consumption   | [kWh]   | 11,375                      | 14,390    | 17,204    | 19,316    |
| Part load conditions                                   | space heating average  | climate | low temperature application |           |           |           |
|  | Pdh(declared heating capacity)   | [kW]    | 15.91                       | 19.73     | 22.15     | 21.95     |
| (A) condition (-7°C)                                   | COPd<br>(declared COP)   | -       | 2.85                        | 2.74      | 2.56      | 2.53      |
|  | ter integrated in the unit peace peak operation function integrated in teat pump peace heating as 5°C (Low temp. app.) pace heating as 5°C (Low temp. app.) peace heating beace heating as 5°C (Medium temp. app.) peace heating as 5°C (Medium te | -       | 0.90                        | 0.90      | 0.90      | 0.90      |
|  | Pdh(declared heating capacity)   | [kW]    | 9.67                        | 12.04     | 13.78     | 16.22     |
| (B) condition (2°C)                                    |  | -       | 4.57                        | 4.40      | 4.41      | 4.12      |
|  | Cdh(degradation coefficient)   | -       | 0.90                        | 0.90      | 0.90      | 0.90      |
|  |  | [kW]    | 6.57                        | 8.02      | 9.38      | 10.69     |
| (C) condition (7°C)                                    |  | -       | 5.95                        | 6.24      | 6.43      | 6.21      |
|  | Cdh(degradation coefficient)   | -       | 0.90                        | 0.90      | 0.90      | 0.90      |
|  |  | [kW]    | 3.77                        | 3.81      | 4.11      | 4.59      |
| (D) condition (12°C)                                   |  | -       | 6.97                        | 7.0       | 7.08      | 7.14      |
|  | Cdh(degradation coefficient)   | -       | 0.90                        | 0.90      | 0.90      | 0.90      |

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| Heat pump space he                 | eater                                | unit    | MLI 18 H0                      | MLI 22 H0 | MLI 26 H0 | MLI 30 H0 |
|------------------------------------|--------------------------------------|---------|--------------------------------|-----------|-----------|-----------|
|                                    | Tol (temperature operating limit)    | [°C]    | -10                            | -10       | -10       | -10       |
| (L) Tol(tollipolatalo              | Pdh (declared heating capacity)      | [kW]    | 18.14                          | 20.34     | 20.36     | 20.43     |
| operating limit)                   | COPd (declared COP)                  | -       | 2.49                           | 2.35      | 2.34      | 2.34      |
|                                    | WTOL (Heating water Operation Limit) | [°C]    | 60                             | 60        | 60        | 60        |
|                                    | Tbiv                                 | [°C]    | -7                             | -7        | -7        | -5        |
| (F) Tbivalent temperature          | Pdh (declared heating capacity)      | [kW]    | 15.91                          | 19.73     | 22.15     | 23.57     |
| •                                  | COPd (declared COP)                  | -       | 2.85                           | 2.74      | 2.56      | 2.70      |
| Supplementary capacity at P_design | Psup (@Tdesignh:-10°C)               | [kW]    | 0.00                           | 1.97      | 4.68      | 8.75      |
| Part load conditions               | space heating average                | climate | medium temperature application |           |           |           |
|                                    | Pdh (declared heating capacity)      | [kW]    | 15.64                          | 19.84     | 20.65     | 20.12     |
| (A) condition (-7°C)               | COPd (declared COP)                  | -       | 1.72                           | 1.74      | 1.69      | 1.63      |
|                                    | Cdh(degradation coefficient)         | -       | 0.90                           | 0.90      | 0.90      | 0.90      |
|                                    | Pdh (declared heating capacity)      | [kW]    | 9.62                           | 11.91     | 14.28     | 16.50     |
| (B) condition (2°C)                | COPd (declared COP)                  | -       | 3.30                           | 3.30      | 3.11      | 3.09      |
|                                    | Cdh(degradation coefficient)         | -       | 0.90                           | 0.90      | 0.90      | 0.90      |
|                                    | Pdh (declared heating capacity)      | [kW]    | 6.40                           | 7.99      | 9.30      | 10.51     |
| (C) condition (7°C)                | COPd (declared COP)                  | -       | 4.41                           | 4.62      | 4.72      | 4.73      |
|                                    | Cdh(degradation coefficient)         | -       | 0.90                           | 0.90      | 0.90      | 0.90      |
|                                    | Pdh (declared heating capacity)      | [kW]    | 3.60                           | 3.62      | 3.90      | 4.65      |
| (D) condition (12°C)               | COPd (declared COP)                  | -       | 5.09                           | 5.20      | 5.41      | 5.85      |
|                                    | Cdh(degradation coefficient)         | -       | 0.90                           | 0.90      | 0.90      | 0.90      |
|                                    | Tol (temperature operating limit)    | [°C]    | -10                            | -10       | -10       | -10       |
| (L) Tol(tollipolatulo              | Pdh (declared heating capacity)      | [kW]    | 15.03                          | 13.83     | 13.87     | 13.83     |
| operating limit)                   | COPd (declared COP)                  | -       | 1.17                           | 1.08      | 1.08      | 1.07      |
|                                    | WTOL (Heating water Operation Limit) | [°C]    | 60                             | 60        | 60        | 60        |
|                                    | Tbiv                                 | [°C]    | -7                             | -7        | -6        | -5        |
| (F) Tbivalent temperature          | Pdh (declared heating capacity)      | [kW]    | 15.64                          | 19.84     | 22.13     | 23.98     |
| ·                                  | COPd (declared COP)                  | -       | 1.72                           | 1.74      | 1.88      | 2.02      |
| Supplementary capacity at P_design | Psup (@Tdesignh:-10°C)               | [kW]    | 2.64                           | 8.6       | 12.28     | 15.86     |

| Heat pump space hear               | ter  | unit    | MLI 18 H0                 | MLI 22 H0 | MLI 26 H0 | MLI 30 H0 |
|------------------------------------|--|---------|---------------------------|-----------|-----------|-----------|
| Colder climate (Design to          | •  |         |                           |           |           |           |
|                                    | Prated (declared heating capacity) @ -22°C | [kW]    | 18                        | 21        | 26        | 29        |
| Space heating 35°C                 | Seasonal space heating efficiency (ηs)     | [%]     | 146                       | 146       | 143       | 138       |
|                                    | Annual energy consumption                  | [kWh]   | 11,740                    | 14,179    | 17,421    | 20,390    |
|                                    | Prated (declared heating capacity) @ -22°C | [kW]    | 18                        | 22        | 26        | 30        |
| Space heating 55°C                 | Seasonal space heating efficiency (ηs)     | [%]     | 97                        | 102       | 101       | 100       |
|                                    | Annual energy consumption                  | [kWh]   | 18,156                    | 21,067    | 24,967    | 29,238    |
| Part load conditions sp            | pace heating colder clin                   | nate lo | w temperature application |           |           |           |
|                                    | Pdh (declared heating capacity)            | [kW]    | 14.49                     | 17.46     | 18.95     | 18.61     |
| condition (-15°C)                  | COPd (declared COP)                        | -       | 2.42                      | 2.36      | 2.27      | 2.24      |
|                                    | Cdh(degradation coefficient)               | -       | 0.90                      | 0.90      | 0.90      | 0.90      |
|                                    | Pdh (declared heating capacity)            | [kW]    | 11.21                     | 13.30     | 15.91     | 18.49     |
| (A) condition (-7°C)               | COPd (declared COP)                        | -       | 3.09                      | 3.12      | 3.10      | 3.07      |
|                                    | Cdh(degradation coefficient)               | -       | 0.90                      | 0.90      | 0.90      | 0.90      |
|                                    | Pdh (declared heating capacity)            | [kW]    | 6.64                      | 8.25      | 10.10     | 11.88     |
| (B) condition (2°C)                | COPd (declared COP)                        | -       | 4.50                      | 4.42      | 4.45      | 4.42      |
|                                    | Cdh(degradation coefficient)               | -       | 0.90                      | 0.90      | 0.90      | 0.90      |
|                                    | Pdh (declared heating capacity)            | [kW]    | 4.77                      | 5.45      | 6.30      | 7.53      |
| (C) condition (7°C)                | COPd (declared COP)                        | -       | 5.85                      | 5.87      | 6.06      | 6.15      |
|                                    | Cdh(degradation coefficient)               | -       | 0.90                      | 0.90      | 0.90      | 0.90      |
|                                    | Pdh (declared heating capacity)            | [kW]    | 3.95                      | 3.98      | 4.03      | 4.11      |
| (D) condition (12°C)               | COPd (declared COP)                        | -       | 7.18                      | 7.19      | 7.13      | 6.87      |
|                                    | Cdh(degradation coefficient)               | -       | 0.90                      | 0.90      | 0.90      | 0.90      |
|                                    | Tol (temperature operating limit)          | [°C]    | -22                       | -22       | -22       | -22       |
| (E) Tol(temperature                | Pdh (declared heating capacity)            | [kW]    | 13.14                     | 13.27     | 13.07     | 13.17     |
| operating limit)                   | COPd (declared COP)                        | -       | 1.67                      | 1.69      | 1.67      | 1.67      |
|                                    | WTOL (Heating water<br>Operation Limit)    | [°C]    | 37                        | 37        | 37        | 37        |
|                                    | Tbiv                                       | [°C]    | -15                       | -15       | -12       | -10       |
| (F) Tbivalent temperature          | Pdh (declared heating capacity)            | [kW]    | 14.49                     | 17.46     | 18.97     | 19.93     |
|                                    | COPd (declared COP)                        | -       | 2.42                      | 2.36      | 2.36      | 2.44      |
| Supplementary capacity at P_design | Psup (@Tdesignh:-22°C)                     | [kW]    | 4.62                      | 8.13      | 12.68     | 15.96     |

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| Heat pump space heat               | ter                                      | unit   | MLI 18 H0                     | MLI 22 H0 | MLI 26 H0 | MLI 30 H0 |
|------------------------------------|--|--------|-------------------------------|-----------|-----------|-----------|
| Part load conditions sp            | •  | mate m | edium temperature application |           |           |           |
|                                    | Pdh (declared heating capacity)          | [kW]   | 13.56                         | 13.78     | 13.37     | 13.06     |
| condition (-15°C)                  | COPd (declared COP)                      | -      | 1.21                          | 1.24      | 1.20      | 1.18      |
|                                    | Cdh(degradation coefficient)             | -      | 0.90                          | 0.90      | 0.90      | 0.90      |
|                                    | Pdh (declared heating capacity)          | [kW]   | 11.12                         | 13.53     | 15.90     | 18.40     |
| (A) condition (-7°C)               | COPd (declared COP)                      | -      | 1.98                          | 2.07      | 2.10      | 2.10      |
|                                    | Cdh(degradation coefficient)             | -      | 0.90                          | 0.90      | 0.90      | 0.90      |
|                                    | Pdh (declared heating capacity)          | [kW]   | 6.65                          | 8.61      | 10.17     | 11.23     |
| (B) condition (2°C)                | COPd (declared COP)                      | -      | 3.44                          | 3.70      | 3.58      | 3.51      |
|                                    | Cdh(degradation coefficient)             | -      | 0.90                          | 0.90      | 0.90      | 0.90      |
|                                    | Pdh (declared heating capacity)          | [kW]   | 4.66                          | 5.21      | 6.52      | 7.42      |
| (C) condition (7°C)                | COPd (declared COP)                      | -      | 4.35                          | 4.49      | 4.99      | 5.18      |
|                                    | Cdh(degradation coefficient)             | -      | 0.90                          | 0.90      | 0.90      | 0.90      |
|                                    | Pdh (declared heating capacity)          | [kW]   | 3.74                          | 3.74      | 3.63      | 3.64      |
|                                    | COPd (declared COP)                      | -      | 5.68                          | 5.76      | 5.68      | 5.73      |
|                                    | Cdh(degradation coefficient)             | -      | 0.90                          | 0.90      | 0.90      | 0.90      |
|                                    | Tol (temperature operating limit)        | [°C]   | -15                           | -15       | -15       | -15       |
| (E) Tol(temperature                | Pdh (declared heating capacity)          | [kW]   | 13.56                         | 13.78     | 13.37     | 13.06     |
| operating limit)                   | COPd (declared COP)                      | -      | 1.21                          | 1.24      | 1.20      | 1.18      |
|                                    | WTOL (Heating water<br>Operation Limit)  | [°C]   | 50                            | 50        | 50        | 50        |
|                                    | Tbiv                                     | [°C]   | -7                            | -7        | -7        | -7        |
| (F) Tbivalent temperature          | Pdh (declared heating capacity)          | [kW]   | 11.12                         | 13.53     | 15.90     | 18.40     |
| temperature                        | COPd (declared COP)                      | -      | 1.98                          | 2.07      | 2.10      | 2.10      |
| Supplementary capacity at P_design | Psup (@Tdesignh:-22°C)                   | [kW]   | 18.38                         | 22.36     | 26.27     | 30.41     |
| Warmer climate (Desi               | ·  |        |                               |           |           |           |
|                                    | Prated (declared heating capacity) @ 2°C | [kW]   | 18                            | 22        | 26        | 30        |
| Space heating 35°C                 | Seasonal space heating efficiency (ηs)   | [%]    | 226                           | 234       | 231       | 213       |
|                                    | Annual energy consumption                | [kWh]  | 4,116                         | 4,945     | 5,959     | 7,540     |
|                                    | Prated (declared heating capacity) @ 2°C | [kW]   | 18                            | 22        | 26        | 30        |
| Space heating 55°C                 | Seasonal space heating efficiency (ηs)   | [%]    | 157                           | 161       | 168       | 163       |
|                                    | Annual energy consumption                | [kWh]  | 6,041                         | 7,180     | 8,218     | 9,580     |

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| Heat pump space hea                  | ter  | unit          | MLI 18 H0                 | MLI 22 H0 | MLI 26 H0 | MLI 30 H0 |
|--------------------------------------|--|---------------|---------------------------|-----------|-----------|-----------|
| Part load conditions sp              | pace heating warmer cl   | imate low ter | nperature application     |           |           |           |
|                                      | Pdh (declared heating capacity)  | [kW]          | 17.84                     | 21.81     | 25.50     | 26.29     |
| (B) condition (2°C)                  | COPd (declared COP)  | -             | 3.53                      | 3.31      | 3.0       | 2.94      |
|                                      | Cdh(degradation coefficient)   | -             | 0.90                      | 0.90      | 0.90      | 0.90      |
|                                      | Pdh (declared heating capacity)  | [kW]          | 11.36                     | 14.08     | 16.77     | 19.57     |
| (C) condition (7°C)                  | COPd (declared COP)  | -             | 5.16                      | 5.20      | 5.02      | 4.75      |
|                                      | Cdh(degradation coefficient)   | -             | 0.90                      | 0.90      | 0.90      | 0.90      |
|                                      | Pdh (declared heating capacity)  | [kW]          | 5.45                      | 6.44      | 7.65      | 8.90      |
| (D) condition (12°C)                 | COPd (declared COP)  | -             | 7.01                      | 7.50      | 7.78      | 7.53      |
|                                      | Cdh(degradation coefficient)   | -             | 0.90                      | 0.90      | 0.90      | 0.90      |
|                                      | Tol (temperature operating limit) [  |               | 2                         | 2         | 2         | 2         |
| (E) Tol(temperature operating limit) | Pdh (declared heating capacity)  | [kW]          | 17.84                     | 21.81     | 25.50     | 26.29     |
|                                      | COPd (declared COP)  | -             | 3.53                      | 3.31      | 3.0       | 2.94      |
|                                      | WTOL (Heating water<br>Operation Limit)  | [°C]          | 60                        | 60        | 60        | 60        |
| (E) This calcust                     | Tbiv   | [°C]          | 7                         | 7         | 7         | 7         |
| Pdh (declared heating capacity)      | [kW]   | 11.36         | 14.08                     | 16.77     | 19.57     |           |
|                                      | capacity)   COPd (declared COP)  | -             | 5.16                      | 5.20      | 5.02      | 4.75      |
| Supplementary capacity at P_design   | Psup (@Tdesignh:2°C)   | [kW]          | 0.00                      | 0.09      | 0.58      | 4.15      |
| Part load conditions s               | pace heating warmer cl   | imate mediu   | m temperature application |           |           |           |
|                                      | Pdh (declared heating capacity)  | [kW]          | 18.44                     | 22.12     | 26.50     | 26.41     |
| (B) condition (2°C)                  | Cdh(degradation coefficient) Pdh (declared heating capacity) Pdh (declared COP) Cdh(degradation coefficient) Pdh (declared heating capacity) Pdh (declared heating capacity)  COPd (declared COP) Cdh(degradation coefficient) Tol (temperature erating limit)  Tol(temperature erating limit)  Tbiv Tbivalent nperature Pdh (declared COP) WTOL (Heating wate Operation Limit) Tbiv Pdh (declared heating capacity) COPd (declared COP) Toldesign Psup (@Tdesignh:2°C) Pdh (declared heating capacity) COPd (declared COP) Cdh(degradation coefficient) Pdh (declared heating capacity) COPd (declared COP) Cdh(degradation coefficient) Pdh (declared heating capacity) COPd (declared COP) Cdh(degradation coefficient) Pdh (declared heating capacity) COPd (declared COP) Cdh(degradation coefficient) Pdh (declared heating capacity) COPd (declared COP) Cdh(degradation coefficient) Pdh (declared heating capacity) COPd (declared COP) Cdh(degradation coefficient) Pdh (declared heating capacity) COPd (declared COP) Cdh(degradation coefficient) Pdh (declared COP) Cdh(degradation coefficient) | -             | 2.12                      | 2.12      | 1.99      | 1.99      |
| . ,                                  | Cdh(degradation coefficient)   | -             | 0.90                      | 0.90      | 0.90      | 0.90      |
|                                      | Pdh (declared heating capacity)  | [kW]          | 11.62                     | 14.15     | 16.86     | 19.11     |
| (C) condition (7°C)                  | COPd (declared COP)  | -             | 3.49                      | 3.50      | 3.47      | 3.37      |
|                                      | Cdh(degradation coefficient)   | -             | 0.90                      | 0.90      | 0.90      | 0.90      |
|                                      | Dalla /ala ala na al la a atira a  | [kW]          | 5.35                      | 6.38      | 7.58      | 8.92      |
| (D) condition (12°C)                 |  | -             | 5.09                      | 5.34      | 5.94      | 6.09      |
| ,                                    | Cdh(degradation coefficient)   | -             | 0.90                      | 0.90      | 0.90      | 0.90      |
|                                      |  | [°C]          | 2                         | 2         | 2         | 2         |
| (E) Tol(temperature                  | Pdh (declared heating  | [kW]          | 18.44                     | 22.12     | 26.50     | 26.41     |
| operating innit)                     | COPd (declared COP)  | -             | 2.12                      | 2.12      | 1.99      | 1.99      |
|                                      | WTOL (Heating water Operation Limit)   | [°C]          | 60                        | 60        | 60        | 60        |

| Heat pump space hea                      | ater   | unit                | MLI 18 H0 | MLI 22 H0 | MLI 26 H0 | MLI 30 H0 |
|--|--|---------------------|-----------|-----------|-----------|-----------|
| (F) Tbivalent                            | Tbiv   | [°C]                | 7         | 7         | 7         | 7         |
| temperature                              | Pdh (declared heating capacity)                | [kW]                | 11.62     | 14.15     | 16.86     | 19.11     |
|  | COPd (declared COP)                            | -                   | 3.49      | 3.50      | 3.47      | 3.37      |
| Supplementary capacity at P_design       | Psup (@Tdesignh:2°C)                           | [kW]                | 0.00      | 0.00      | 0.00      | 3.32      |
| Ecodesign technical                      | data   |                     |           |           |           |           |
|  | Air-to-water heat pump                         | Y/N                 | Yes       | Yes       | Yes       | Yes       |
|  | Water-to-water heat pump                       | Y/N                 | No        | No        | No        | No        |
| Product description Low-temperature pump | Brine-to-water heat pump                       | Y/N                 | No        | No        | No        | No        |
|  | Low-temperature heat pump                      | Y/N                 | No        | No        | No        | No        |
|  | Equipped with a supplementary heater           | Y/N                 | No        | No        | No        | Yes       |
|  | Heat pump combination heater                   | Y/N                 | No        | No        | No        | No        |
| Air to water unit                        | Rated airflow (outdoor)                        | [m <sup>3</sup> /h] | 10650     | 10650     | 11200     | 11200     |
| Brine/water to water unit                | Rated water/brine flow (outdoor H/E)           | [m <sup>3</sup> /h] | 1         | 1         | 1         | 1         |
|  | Capacity control                               | -                   | Inverter  | Inverter  | Inverter  | Inverter  |
|  | Poff (Power consumption Off mode)              | [kW]                | 0.018     | 0.018     | 0.018     | 0.018     |
|  | Pto (Power consumption<br>Thermostat off mode) | [kW]                | 0.096     | 0.096     | 0.096     | 0.096     |
| Other                                    | Psb (Power consumption Standby mode)           | [kW]                | 0.018     | 0.018     | 0.018     | 0.018     |
|  | PCK (Power crankcase heater model)             | [kW]                | 0.000     | 0.000     | 0.000     | 0.000     |
|  | Qelec (Daily electricity consumption)          | [kWh]               | 1         | 1         | 1         | 1         |
|  | Qfuel (Daily fuel consumption)                 | [kWh]               | 1         |           |           | 1         |

Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

Product fiche data according to energy label directive 2010/30/EC regulation (EU) 811/2013.

| Model(s):  |                   |               |      | MLI 18 H0   |                    |            |                  |  |  |  |  |
|--|-------------------|---------------|------|---|--------------------|------------|------------------|--|--|--|--|
| Air-to-water heat pump:  |                   |               |      | YES   |                    |            |                  |  |  |  |  |
| Water-to-water heat pump:  |                   |               |      | NO  |                    |            |                  |  |  |  |  |
| Brine-to-water heat pump:  |                   |               | NO   |   |                    |            |                  |  |  |  |  |
| Low-temperature heat pump:   |                   |               |      | NO  |                    |            |                  |  |  |  |  |
| Equipped with a supplementary heate                                      | er:               |               |      | NO  |                    |            |                  |  |  |  |  |
| Heat pump combination heater:  |                   |               |      | NO  |                    |            |                  |  |  |  |  |
| Declared climate condition:  |                   |               |      | AVERAGE   |                    |            |                  |  |  |  |  |
| Parameters are declared for medium-                                      | temperature       | application   |      |   |                    |            |                  |  |  |  |  |
|  |                   |               |      |   |                    |            |                  |  |  |  |  |
| Item   | Symbol            | Value         | Unit | Item  | Symbol             | Value      | Uni              |  |  |  |  |
| Rated heat output (*)  | Prated            | 17.7          | kW   | Seasonal space heating energy efficiency  | ηs                 | 125        | %                |  |  |  |  |
| Declared capacity for heating for part load a and outdoor temperature Tj | at indoor temp    | erature 20 °C | ;    | Declared coefficient of performance or prima indoor temperature 20 °C and outdoor ter |                    |            | ad at            |  |  |  |  |
| Tj = -7℃   | Pdh               | 15.6          | kW   | Tj = -7℃  | COPd               | 1.72       | -                |  |  |  |  |
| Tj = 2℃  | Pdh               | 9.6           | kW   | Tj = 2℃   | COPd               | 3.30       | -                |  |  |  |  |
| Tj = 7℃  | Pdh               | 6.4           | kW   | Tj = 7℃   | COPd               | 4.41       | -                |  |  |  |  |
| Tj = 12℃   | Pdh               | 3.6           | kW   | Tj = 12℃  | COPd               | 5.09       | -                |  |  |  |  |
| Tj = bivalent temperature  | Pdh               | 15.6          | kW   | Tj = bivalent temperature   | COPd               | 1.72       | -                |  |  |  |  |
| Tj = operating limit   | Pdh               | 15.0          | kW   | Tj = operating limit  | COPd               | 1.17       | -                |  |  |  |  |
| For air-to-water heat pumps: Tj = -15 ℃                                  | Pdh               | -             | kW   | For air-to-water heat pumps: Tj = -15 °C  | COPd               | -          | _                |  |  |  |  |
| Bivalent temperature   | Tbiv              | -7            | °C   | For air-to-water heat pumps:<br>Operation limit temperature                           | TOL                | -10        | °C               |  |  |  |  |
| Cycling interval capacity for heating                                    | Pcych             | -             | kW   | Cycling interval efficiency   | COPcyc             | -          | -                |  |  |  |  |
| Degradation co-efficient (**)  | Cdh               | 0.9           |      | Heating water operating limit temperature   | WTOL               | 60         | °C               |  |  |  |  |
| Power consumption in modes other than ac                                 | tive mode         |               |      | Supplementary heater  |                    |            |                  |  |  |  |  |
| Off mode   | Poff              | 0.018         | kW   | Rated heat output (**)  | Psup               | 2.6        | k۷               |  |  |  |  |
| Standby mode   | Psb               | 0.018         | kW   | Rated fleat Odiput ( )  | ΓSup               | 2.0        | I.V              |  |  |  |  |
| Thermostat-off mode  | Pto               | 0.096         | kW   | Type of energy input  |                    | Electrical |                  |  |  |  |  |
| Crankcase heater mode  | Pck               | 0.000         | kW   | 1)pc 2: 2::25,p   |                    | 2.00       |                  |  |  |  |  |
| Other items  |                   |               |      |   |                    |            |                  |  |  |  |  |
| Capacity control   |                   | variable      |      | For air-to-water heat pumps:<br>Rated air flow rate, outdoors                         | -                  | 10650      | n³/l             |  |  |  |  |
| Sound power level, indoors/outdoors                                      | L <sub>WA</sub>   | -/71          | dB   | For water-or brine-to-water heat pumps:<br>Rated brine or water flow rate, outdoor    | -                  | -          | m <sup>3</sup> / |  |  |  |  |
| Annual energy consumption  | Q <sub>HE</sub>   | 11375         | kWh  | heat exchanger  |                    |            |                  |  |  |  |  |
| For heat pump combination heater:  |                   |               |      |   |                    |            |                  |  |  |  |  |
| Declared load profile  |                   | -             |      | Water heating energy efficiency   | $\eta_{\text{wh}}$ | -          | %                |  |  |  |  |
| Daily electricity consumption  | Q <sub>clec</sub> | -             | kWh  | Daily fuel consumption  | Q <sub>fuel</sub>  | -          | kV               |  |  |  |  |
| Annual electricity consumption   | AEC               | -             | kWh  | Annual fuel consumption   | AFC                | -          | G.               |  |  |  |  |
| Contact details  |                   |               |      | 12/a 40010 - Bentivoglio (BO) ITALY   |                    |            |                  |  |  |  |  |

| Model(s):  |                          |                      |                        | MLI 18 H0   |                   |                 |                  |  |  |  |  |
|--|--------------------------|----------------------|------------------------|---|-------------------|-----------------|------------------|--|--|--|--|
| Air-to-water heat pump:  |                          |                      |                        | YES   |                   |                 |                  |  |  |  |  |
| Water-to-water heat pump:  |                          |                      | NO                     |   |                   |                 |                  |  |  |  |  |
| Brine-to-water heat pump:  |                          |                      | NO NO                  |   |                   |                 |                  |  |  |  |  |
| Low-temperature heat pump:   |                          |                      | NO                     |   |                   |                 |                  |  |  |  |  |
| Equipped with a supplementary heater                                     | <br>er:                  |                      |                        | NO  |                   |                 |                  |  |  |  |  |
| Heat pump combination heater:  |                          |                      |                        | NO  |                   |                 |                  |  |  |  |  |
| Declared climate condition:  |                          |                      |                        | COLDER  |                   |                 |                  |  |  |  |  |
| Parameters are declared for medium-                                      | temperature              | application          |                        |   |                   |                 |                  |  |  |  |  |
|  | ·                        |                      |                        |   |                   |                 |                  |  |  |  |  |
| Item   | Symbol                   | Value                | Unit                   | Item  | Symbol            | Value           | Uni              |  |  |  |  |
| Rated heat output (*)  | Prated                   | 18.4                 | kW                     | Seasonal space heating energy efficiency  | ηs                | 97              | %                |  |  |  |  |
| Declared capacity for heating for part load a and outdoor temperature Tj | at indoor temp           | perature 20 °C       | ;                      | Declared coefficient of performance or prima indoor temperature 20 °C and outdoor ter |                   | io for part loa | ad at            |  |  |  |  |
| Tj = -7℃   | Pdh                      | 11.1                 | kW                     | Tj = -7℃  | COPd              | 1.98            | _                |  |  |  |  |
| Tj = 2℃  | Pdh                      | 6.7                  | kW                     | Tj = 2℃   | COPd              | 3.44            | -                |  |  |  |  |
| Tj = 7℃  | Pdh                      | 4.7                  | kW                     | Tj = 7°C  | COPd              | 4.35            | -                |  |  |  |  |
| Tj = 12℃   | Pdh                      | 3.7                  | kW                     | Tj = 12°C   | COPd              | 5.68            |                  |  |  |  |  |
| Tj = bivalent temperature  | Pdh                      | 11.1                 | kW                     | Tj = bivalent temperature   | COPd              | 1.98            | -                |  |  |  |  |
| Tj = operating limit   | Pdh                      | 13.6                 | kW                     | Tj = operating limit  | COPd              | 1.21            | -                |  |  |  |  |
| For air-to-water heat pumps: Tj = -15 °C                                 | Pdh                      | 13.6                 | kW                     | For air-to-water heat pumps: Tj = -15 °C  | COPd              | 1.21            | -                |  |  |  |  |
| Bivalent temperature   | Tbiv                     | -7                   | °C                     | For air-to-water heat pumps:<br>Operation limit temperature                           | TOL               | -15             | °C               |  |  |  |  |
| Cycling interval capacity for heating                                    | Pcych                    | -                    | kW                     | Cycling interval efficiency   | COPcyc            | -               | -                |  |  |  |  |
| Degradation co-efficient (**)  | Cdh                      | 0.9                  |                        | Heating water operating limit temperature   | WTOL              | 50              | °C               |  |  |  |  |
| Power consumption in modes other than ac                                 | ctive mode               |                      |                        | Supplementary heater  |                   |                 |                  |  |  |  |  |
| Off mode   | Poff                     | 0.018                | kW                     | Rated heat output (**)  | Psup              | 19.4            | L//              |  |  |  |  |
| Standby mode   | Psb                      | 0.018                | kW                     | Rated fleat output ( )  | <b>P</b> sup      | 18.4            | kW               |  |  |  |  |
| Thermostat-off mode  | Pto                      | 0.096                | kW                     | Type of energy input  |                   |                 |                  |  |  |  |  |
| Crankcase heater mode  | Pck                      | 0.000                | kW                     | Type of official input  |                   |                 |                  |  |  |  |  |
| Other items  |                          |                      |                        |   |                   |                 | _                |  |  |  |  |
| Capacity control   |                          | variable             |                        | For air-to-water heat pumps:<br>Rated air flow rate, outdoors                         | -                 | 10650           | n³/l             |  |  |  |  |
| Sound power level, indoors/outdoors                                      | L <sub>WA</sub>          | -/71                 | dB                     | For water-or brine-to-water heat pumps:<br>Rated brine or water flow rate, outdoor    | -                 | -               | m <sup>3</sup> / |  |  |  |  |
| Annual energy consumption  | Q <sub>HE</sub>          | 18156                | kWh                    | heat exchanger  |                   |                 |                  |  |  |  |  |
| For heat pump combination heater:  |                          |                      |                        |   |                   |                 |                  |  |  |  |  |
| Declared load profile  |                          | -                    |                        | Water heating energy efficiency   | η <sub>wh</sub>   | -               | %                |  |  |  |  |
| Daily electricity consumption  | Q <sub>clec</sub>        | -                    | kWh                    | Daily fuel consumption  | Q <sub>fuel</sub> | -               | kV               |  |  |  |  |
| Annual electricity consumption   | AEC                      | -                    | kWh                    | Annual fuel consumption   | AFC               | -               | G                |  |  |  |  |
| Contact details  | Galletti S. <sub>I</sub> | <b>p.A.</b> Via L. R | Romagnoli<br>Email: ir | 12/a 40010 - Bentivoglio (BO) ITALY   |                   |                 |                  |  |  |  |  |

| Model(s):  |                          |                      |                        | MLI 18 H0  |                   |                  |                  |  |  |  |  |
|--|--------------------------|----------------------|------------------------|--|-------------------|------------------|------------------|--|--|--|--|
| Air-to-water heat pump:  |                          |                      |                        | YES  |                   |                  |                  |  |  |  |  |
| Water-to-water heat pump:  |                          |                      | NO                     |  |                   |                  |                  |  |  |  |  |
| Brine-to-water heat pump:  |                          |                      | NO                     |  |                   |                  |                  |  |  |  |  |
| Low-temperature heat pump:   |                          |                      |                        | NO   |                   |                  |                  |  |  |  |  |
| Equipped with a supplementary heate                                      | r:                       |                      |                        | NO   |                   |                  |                  |  |  |  |  |
| Heat pump combination heater:  |                          |                      |                        | NO   |                   |                  |                  |  |  |  |  |
| Declared climate condition:  |                          |                      |                        | WARMER   |                   |                  |                  |  |  |  |  |
| Parameters are declared for medium-                                      | temperature              | application          | 1.                     |  |                   |                  |                  |  |  |  |  |
|  |                          |                      |                        |  |                   |                  |                  |  |  |  |  |
| Item   | Symbol                   | Value                | Unit                   | Item   | Symbol            | Value            | Uni              |  |  |  |  |
| Rated heat output (*)  | Prated                   | 18.1                 | kW                     | Seasonal space heating energy efficiency   | ηs                | 157              | %                |  |  |  |  |
| Declared capacity for heating for part load a and outdoor temperature Tj | at indoor temp           | erature 20 °C        | ;                      | Declared coefficient of performance or prima indoor temperature 20 °C and outdoor temperature 20 |                   | tio for part loa | ad at            |  |  |  |  |
| Tj = -7℃   | Pdh                      | -                    | kW                     | Tj = -7℃   | COPd              | -                | -                |  |  |  |  |
| Tj = 2℃  | Pdh                      | 18.4                 | kW                     | Tj = 2℃  | COPd              | 2.12             | -                |  |  |  |  |
| Tj = 7℃  | Pdh                      | 11.6                 | kW                     | Tj = 7℃  | COPd              | 3.49             | -                |  |  |  |  |
| Tj = 12℃   | Pdh                      | 5.4                  | kW                     | Tj = 12℃   | COPd              | 5.09             | -                |  |  |  |  |
| Tj = bivalent temperature  | Pdh                      | 11.6                 | kW                     | Tj = bivalent temperature  | COPd              | 3.49             | -                |  |  |  |  |
| Tj = operating limit   | Pdh                      | 18.4                 | kW                     | Tj = operating limit   | COPd              | 2.12             | -                |  |  |  |  |
| For air-to-water heat pumps: Tj = -15 C                                  | Pdh                      | -                    | kW                     | For air-to-water heat pumps: Tj = -15℃   | COPd              | -                | _                |  |  |  |  |
| Bivalent temperature   | Tbiv                     | 7                    | °C                     | For air-to-water heat pumps:<br>Operation limit temperature  | TOL               | 2                | °C               |  |  |  |  |
| Cycling interval capacity for heating                                    | Pcych                    | -                    | kW                     | Cycling interval efficiency  | COPcyc            | -                | -                |  |  |  |  |
| Degradation co-efficient (**)  | Cdh                      | 0.9                  |                        | Heating water operating limit temperature  | WTOL              | 60               | °C               |  |  |  |  |
| Power consumption in modes other than ac                                 | tive mode                |                      |                        | Supplementary heater   |                   |                  |                  |  |  |  |  |
| Off mode   | Poff                     | 0.018                | kW                     | Rated heat output (**)   | P <sub>sup</sub>  | 0.0              | k۷               |  |  |  |  |
| Standby mode   | Psb                      | 0.018                | kW                     | Rateu neat output ( )  | F Sup             | 0.0              | I.V              |  |  |  |  |
| Thermostat-off mode  | Pto                      | 0.096                | kW                     | Type of energy input   |                   |                  |                  |  |  |  |  |
| Crankcase heater mode  | Pck                      | 0.000                | kW                     | 1)40 0. 00.9,  |                   |                  |                  |  |  |  |  |
| Other items  |                          |                      |                        |  |                   |                  |                  |  |  |  |  |
| Capacity control   |                          | variable             |                        | For air-to-water heat pumps:<br>Rated air flow rate, outdoors  | -                 | 10650            | n³∕              |  |  |  |  |
| Sound power level, indoors/outdoors                                      | Lwa                      | -/71                 | dB                     | For water-or brine-to-water heat pumps:<br>Rated brine or water flow rate, outdoor   | -                 | -                | m <sup>3</sup> / |  |  |  |  |
| Annual energy consumption  | Q <sub>HE</sub>          | 6041                 | kWh                    | heat exchanger   |                   |                  |                  |  |  |  |  |
| For heat pump combination heater:  |                          |                      |                        |  |                   |                  |                  |  |  |  |  |
| Declared load profile  |                          | -                    |                        | Water heating energy efficiency  | η <sub>wh</sub>   | -                | %                |  |  |  |  |
| Daily electricity consumption  | Q <sub>clec</sub>        | -                    | kWh                    | Daily fuel consumption   | Q <sub>fuel</sub> | -                | kV               |  |  |  |  |
| Annual electricity consumption   | AEC                      | -                    | kWh                    | Annual fuel consumption  | AFC               | -                | G.               |  |  |  |  |
| Contact details  | Galletti S. <sub>I</sub> | <b>5.A.</b> Via L. F | Romagnoli<br>Email: ir | 12/a 40010 - Bentivoglio (BO) ITALY  |                   |                  |                  |  |  |  |  |

|  |                   | Tech           | nical | parameters   |                   |            |                   |  |  |  |  |
|--|-------------------|----------------|-------|--|-------------------|------------|-------------------|--|--|--|--|
| Model(s):  |                   |                |       | MLI 22 H0  |                   |            |                   |  |  |  |  |
| Air-to-water heat pump:  |                   |                |       | YES  |                   |            |                   |  |  |  |  |
| Water-to-water heat pump:  |                   |                | NO    |  |                   |            |                   |  |  |  |  |
| Brine-to-water heat pump:  |                   |                | NO    |  |                   |            |                   |  |  |  |  |
| Low-temperature heat pump:   |                   |                |       | NO   |                   |            |                   |  |  |  |  |
| Equipped with a supplementary heate                                      | r:                |                |       | NO   |                   |            |                   |  |  |  |  |
| Heat pump combination heater:  |                   |                |       | NO   |                   |            |                   |  |  |  |  |
| Declared climate condition:  |                   |                |       | AVERAGE  |                   |            |                   |  |  |  |  |
| Parameters are declared for medium-                                      | temperature       | e application. |       |  |                   |            |                   |  |  |  |  |
| Item   | Symbol            | Value          | Unit  | Item   | Symbol            | Value      | Uni               |  |  |  |  |
| Rated heat output (*)  | Prated            | 22.4           | kW    | Seasonal space heating energy efficiency   | ηs                | 126        | %                 |  |  |  |  |
| Declared capacity for heating for part load a and outdoor temperature Tj | at indoor temp    | perature 20 °C |       | Declared coefficient of performance or primindoor temperature 20 °C and outdoor telegrature 20 °C and outdoor 20 ° |                   |            | ad at             |  |  |  |  |
| Tj = -7℃   | Pdh               | 19.8           | kW    | Tj = -7℃   | COPd              | 1.74       | -                 |  |  |  |  |
| Tj = 2°C   | Pdh               | 11.9           | kW    | Tj = 2℃  | COPd              | 3.30       | -                 |  |  |  |  |
| Tj = 7℃  | Pdh               | 8.0            | kW    | Tj = 7℃  | COPd              | 4.62       | -                 |  |  |  |  |
| Tj = 12°C  | Pdh               | 3.6            | kW    | Tj = 12℃   | COPd              | 5.20       | -                 |  |  |  |  |
| Tj = bivalent temperature  | Pdh               | 19.8           | kW    | Tj = bivalent temperature  | COPd              | 1.74       | -                 |  |  |  |  |
| Tj = operating limit   | Pdh               | 13.8           | kW    | Tj = operating limit   | COPd              | 1.08       | -                 |  |  |  |  |
| For air-to-water heat pumps: Tj = -15℃                                   | Pdh               | -              | kW    | For air-to-water heat pumps: Tj = -15 °C   | COPd              | -          | -                 |  |  |  |  |
| Bivalent temperature   | Tbiv              | -7             | °C    | For air-to-water heat pumps:<br>Operation limit temperature  | TOL               | -10        | °C                |  |  |  |  |
| Cycling interval capacity for heating                                    | Pcych             | -              | kW    | Cycling interval efficiency  | COPcyc            | -          | -                 |  |  |  |  |
| Degradation co-efficient (**)  | Cdh               | 0.9            |       | Heating water operating limit temperature  | WTOL              | 60         | °C                |  |  |  |  |
| Power consumption in modes other than ac                                 | tive mode         |                |       | Supplementary heater   |                   |            |                   |  |  |  |  |
| Off mode   | Poff              | 0.018          | kW    | Dated hard subside (**)  | _                 |            |                   |  |  |  |  |
| Standby mode   | Psb               | 0.018          | kW    | Rated heat output (**)   | P <sub>sup</sub>  | 8.6        | kW                |  |  |  |  |
| Thermostat-off mode  | Pto               | 0.096          | kW    | Type of energy input   |                   | Electrical |                   |  |  |  |  |
| Crankcase heater mode  | Pck               | 0.000          | kW    | Type of energy input   |                   | Liectrical |                   |  |  |  |  |
| Other items  |                   |                |       |  |                   |            |                   |  |  |  |  |
| Capacity control   |                   | variable       |       | For air-to-water heat pumps:<br>Rated air flow rate, outdoors  | -                 | 10650      | n³∕h              |  |  |  |  |
| Sound power level, indoors/outdoors                                      | L <sub>WA</sub>   | -/73           | dB    | For water-or brine-to-water heat pumps:<br>Rated brine or water flow rate, outdoor   | -                 | -          | m <sup>3</sup> /h |  |  |  |  |
| Annual energy consumption  | Q <sub>HE</sub>   | 14390          | kWh   | heat exchanger   |                   |            | L_                |  |  |  |  |
| For heat pump combination heater:  |                   |                |       |  |                   |            |                   |  |  |  |  |
| Declared load profile  |                   | -              |       | Water heating energy efficiency  | $\eta_{wh}$       | -          | %                 |  |  |  |  |
| Daily electricity consumption  | Q <sub>clec</sub> | -              | kWh   | Daily fuel consumption   | Q <sub>fuel</sub> | -          | kW                |  |  |  |  |
| Annual electricity consumption   | AEC               | -              | kWh   | Annual fuel consumption  | AFC               | -          | GJ                |  |  |  |  |
| Contact details  |                   |                |       | i 12/a 40010 - Bentivoglio (BO) ITALY  |                   |            |                   |  |  |  |  |

<sup>(\*)</sup> For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

|  |                   |   |      | parameters   |                   |       |     |  |  |  |  |
|--|-------------------|---|------|--|-------------------|-------|-----|--|--|--|--|
| Model(s):  |                   |   |      | MLI 22 H0  |                   |       |     |  |  |  |  |
| Air-to-water heat pump:  |                   |   | YES  |  |                   |       |     |  |  |  |  |
| Water-to-water heat pump:  |                   |   |      | NO   |                   |       |     |  |  |  |  |
| Brine-to-water heat pump:  |                   |   |      | NO   |                   |       |     |  |  |  |  |
| Low-temperature heat pump:   |                   |   |      | NO   |                   |       |     |  |  |  |  |
| Equipped with a supplementary heate                                      |                   |   | NO   |  |                   |       |     |  |  |  |  |
| Heat pump combination heater:  |                   |   |      | NO   |                   |       |     |  |  |  |  |
| Declared climate condition:  |                   |   |      | COLDER   |                   |       |     |  |  |  |  |
| Parameters are declared for medium-t                                     | emperature        | application   | 1.   |  |                   |       |     |  |  |  |  |
|  |                   |   |      |  |                   |       |     |  |  |  |  |
| Item   | Symbol            | Value   | Unit | Item   | Symbol            | Value | Ur  |  |  |  |  |
| Rated heat output (*)  | Prated            | 22.4  | kW   | Seasonal space heating energy efficiency   | ηs                | 102   | %   |  |  |  |  |
| Declared capacity for heating for part load a and outdoor temperature Tj | it indoor temp    | indoor temperature 20 °C and outdoor temperature Tj |      |  |                   |       |     |  |  |  |  |
| Tj = -7°C  | Pdh               | 13.5  | kW   | Tj = -7℃   | COPd              | 2.07  | -   |  |  |  |  |
| Tj = 2℃  | Pdh               | 8.6   | kW   | Tj = 2°C   | COPd              | 3.70  | -   |  |  |  |  |
| Tj = 7℃  | Pdh               | 5.2   | kW   | Tj = 7℃  | COPd              | 4.49  | -   |  |  |  |  |
| Tj = 12℃   | Pdh               | 3.7   | kW   | Tj = 12℃   | COPd              | 5.76  | -   |  |  |  |  |
| Tj = bivalent temperature  | Pdh               | 13.5  | kW   | Tj = bivalent temperature  | COPd              | 2.07  | -   |  |  |  |  |
| Tj = operating limit   | Pdh               | 13.8  | kW   | Tj = operating limit   | COPd              | 1.24  |     |  |  |  |  |
| For air-to-water heat pumps: Tj = -15℃                                   | Pdh               | 13.8  | kW   | For air-to-water heat pumps: Tj = -15 °C   | COPd              | 1.24  |     |  |  |  |  |
| Bivalent temperature   | Tbiv              | -7  | °C   | For air-to-water heat pumps:<br>Operation limit temperature                        | TOL               | -15   | °C  |  |  |  |  |
| Cycling interval capacity for heating                                    | Pcych             | -   | kW   | Cycling interval efficiency  | COPcyc            | -     |     |  |  |  |  |
| Degradation co-efficient (**)  | Cdh               | 0.9   |      | Heating water operating limit temperature  | WTOL              | 50    | °(  |  |  |  |  |
| Power consumption in modes other than ac                                 | tive mode         |   |      | Supplementary heater   |                   |       |     |  |  |  |  |
| Off mode   | Poff              | 0.018   | kW   | Detad hoot output (**)   | D:                | 22.4  | 14  |  |  |  |  |
| Standby mode   | Psb               | 0.018   | kW   | Rated heat output (**)   | P <sub>sup</sub>  | 22.4  | k۷  |  |  |  |  |
| Thermostat-off mode  | Pto               | 0.096   | kW   | Type of energy input   |                   |       |     |  |  |  |  |
| Crankcase heater mode  | Pck               | 0.000   | kW   | туре от епетду пірас   |                   |       |     |  |  |  |  |
| Other items  |                   |   |      |  |                   |       |     |  |  |  |  |
| Capacity control   |                   | variable  |      | For air-to-water heat pumps:<br>Rated air flow rate, outdoors                      | -                 | 10650 | rêγ |  |  |  |  |
| Sound power level, indoors/outdoors                                      | L <sub>WA</sub>   | -/73  | dB   | For water-or brine-to-water heat pumps:<br>Rated brine or water flow rate, outdoor | _                 | -     | m³, |  |  |  |  |
| Annual energy consumption  | Q <sub>HE</sub>   | 21067   | kWh  | heat exchanger   |                   |       |     |  |  |  |  |
| For heat pump combination heater:  |                   |   |      |  |                   |       |     |  |  |  |  |
| Declared load profile  |                   | -   |      | Water heating energy efficiency  | ηwh               | -     | ٩   |  |  |  |  |
| Daily electricity consumption  | Q <sub>clec</sub> | -   | kWh  | Daily fuel consumption   | Q <sub>fuel</sub> | -     | k۱  |  |  |  |  |
| Annual electricity consumption   | AEC               | -   | kWh  | Annual fuel consumption  | AFC               | -     | G   |  |  |  |  |

<sup>(\*)</sup> For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

|  |                          |  |        | parameters   |                   |       |                   |  |  |  |  |  |
|--|--------------------------|--|--------|--|-------------------|-------|-------------------|--|--|--|--|--|
| Model(s):  |                          |  |        | MLI 22 H0  |                   |       |                   |  |  |  |  |  |
| Air-to-water heat pump:  |                          |  |        | YES  |                   |       |                   |  |  |  |  |  |
| Water-to-water heat pump:  |                          |  | NO     |  |                   |       |                   |  |  |  |  |  |
| Brine-to-water heat pump:  |                          |  | NO     |  |                   |       |                   |  |  |  |  |  |
| Low-temperature heat pump:   |                          |  | NO     |  |                   |       |                   |  |  |  |  |  |
| Equipped with a supplementary heate  |                          |  | NO     |  |                   |       |                   |  |  |  |  |  |
| Heat pump combination heater:  |                          |  |        | NO   |                   |       |                   |  |  |  |  |  |
| Declared climate condition:  |                          |  | WARMER |  |                   |       |                   |  |  |  |  |  |
| Parameters are declared for medium-  | temperature              | e application  |        |  |                   |       |                   |  |  |  |  |  |
| To the second se | 0                        | Value  | Unit   | House.   | Symbol            | Value | 11.2              |  |  |  |  |  |
| Item   | Symbol                   | Value<br>22.0  | kW     | Item   |                   |       | Unit<br>%         |  |  |  |  |  |
| Rated heat output (*)  Declared capacity for heating for part load a and outdoor temperature Tj  | Prated<br>at indoor temp | and the state of t |        |  |                   |       |                   |  |  |  |  |  |
| Tj = -7°C  | Pdh                      | -  | kW     | Tj = -7℃   | COPd              | -     | -                 |  |  |  |  |  |
| Tj = 2°C   | Pdh                      | 22.1   | kW     | Tj = 2℃  | COPd              | 2.12  | -                 |  |  |  |  |  |
| Tj = 7℃  | Pdh                      | 14.1   | kW     | Tj = 7℃  | COPd              | 3.50  | -                 |  |  |  |  |  |
| Tj = 12°C  | Pdh                      | 6.4  | kW     | Tj = 12℃   | COPd              | 5.34  | -                 |  |  |  |  |  |
| Tj = bivalent temperature  | Pdh                      | 14.1   | kW     | Tj = bivalent temperature  | COPd              | 3.50  | -                 |  |  |  |  |  |
| Tj = operating limit   | Pdh                      | 22.1   | kW     | Tj = operating limit   | COPd              | 2.12  | -                 |  |  |  |  |  |
| For air-to-water heat pumps: Tj = -15 °C   | Pdh                      | -  | kW     | For air-to-water heat pumps: Tj = -15 C  | COPd              | -     | -                 |  |  |  |  |  |
| Bivalent temperature   | Tbiv                     | 7  | °C     | For air-to-water heat pumps:<br>Operation limit temperature                        | TOL               | 2     | °C                |  |  |  |  |  |
| Cycling interval capacity for heating  | Pcych                    | -  | kW     | Cycling interval efficiency  | COPcyc            | -     | -                 |  |  |  |  |  |
| Degradation co-efficient (**)  | Cdh                      | 0.9  |        | Heating water operating limit temperature  | WTOL              | 60    | °C                |  |  |  |  |  |
| Power consumption in modes other than ac   | tive mode                |  |        | Supplementary heater   |                   |       |                   |  |  |  |  |  |
| Off mode   | Poff                     | 0.018  | kW     | Rated heat output (**)   | Psup              | 0.0   | kW                |  |  |  |  |  |
| Standby mode   | Psb                      | 0.018  | kW     | Nated Heat Output ( )  | 1 Sup             | 0.0   | KVV               |  |  |  |  |  |
| Thermostat-off mode  | Pto                      | 0.096  | kW     | Type of energy input   |                   | _     |                   |  |  |  |  |  |
| Crankcase heater mode  | Pck                      | 0.000  | kW     | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,  |                   |       |                   |  |  |  |  |  |
| Other items  |                          |  |        |  |                   |       |                   |  |  |  |  |  |
| Capacity control   |                          | variable   |        | For air-to-water heat pumps:<br>Rated air flow rate, outdoors                      | -                 | 10650 | r <del>P</del> ∕h |  |  |  |  |  |
| Sound power level, indoors/outdoors  | L <sub>WA</sub>          | -/73   | dB     | For water-or brine-to-water heat pumps:<br>Rated brine or water flow rate, outdoor | -                 | -     | m³/h              |  |  |  |  |  |
| Annual energy consumption  | Q <sub>HE</sub>          | 7180   | kWh    | heat exchanger   |                   |       |                   |  |  |  |  |  |
| For heat pump combination heater:  |                          |  |        |  |                   |       |                   |  |  |  |  |  |
| Declared load profile  |                          | -  |        | Water heating energy efficiency  | ηwh               | -     | %                 |  |  |  |  |  |
| Daily electricity consumption  | Q <sub>clec</sub>        | -  | kWh    | Daily fuel consumption   | Q <sub>fuel</sub> | -     | kWh               |  |  |  |  |  |
| Annual electricity consumption   | AEC                      | -  | kWh    | Annual fuel consumption  | AFC               | -     | GJ                |  |  |  |  |  |
| Contact details  |                          |  |        | li 12/a 40010 - Bentivoglio (BO) ITALY   |                   |       | _                 |  |  |  |  |  |

<sup>(\*)</sup> For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

| Model(s):  |                   |             |      | MLI 26 H0   |                   |                  |                   |  |  |
|--|-------------------|-------------|------|---|-------------------|------------------|-------------------|--|--|
| Air-to-water heat pump:  |                   |             |      | YES   |                   |                  |                   |  |  |
| Water-to-water heat pump:  |                   |             |      | NO  |                   |                  |                   |  |  |
| Brine-to-water heat pump:  |                   |             |      | NO  |                   |                  |                   |  |  |
| Low-temperature heat pump:   |                   |             |      | NO  |                   |                  |                   |  |  |
| Equipped with a supplementary heater                                     | r:                |             |      | NO  |                   |                  |                   |  |  |
| Heat pump combination heater:  |                   |             |      | NO<br>AVERAGE   |                   |                  |                   |  |  |
| Declared climate condition:  |                   |             |      | AVERAGE   |                   |                  |                   |  |  |
| Parameters are declared for medium-to-                                   | emperature        | application | •    |   |                   |                  |                   |  |  |
| ltom   | Symbol            | Value       | Unit | Item  | Symbol            | Value            | Un                |  |  |
| Item  Rated heat output (*)  | Symbol<br>Prated  | 26.1        | kW   | Seasonal space heating energy efficiency  | ηs                | 123              | Uni<br>%          |  |  |
| Declared capacity for heating for part load a and outdoor temperature Tj |                   |             | _    | Declared coefficient of performance or primindoor temperature 20 °C and outdoor tel | ary energy ra     | tio for part loa |                   |  |  |
| Tj = -7℃   | Pdh               | 20.6        | kW   | Tj = -7°C   | COPd              | 1.69             | -                 |  |  |
| Tj = 2℃  | Pdh               | 14.3        | kW   | Tj = 2℃   | COPd              | 3.11             | -                 |  |  |
| Tj = 7℃  | Pdh               | 9.3         | kW   | Tj = 7℃   | COPd              | 4.72             | -                 |  |  |
| Tj = 12℃   | Pdh               | 3.9         | kW   | Tj = 12℃  | COPd              | 5.41             | -                 |  |  |
| Tj = bivalent temperature  | Pdh               | 22.1        | kW   | Tj = bivalent temperature   | COPd              | 1.88             | -                 |  |  |
| Tj = operating limit   | Pdh               | 13.8        | kW   | Tj = operating limit  | COPd              | 1.08             | -                 |  |  |
| For air-to-water heat pumps: Tj = -15 °C                                 | Pdh               | -           | kW   | For air-to-water heat pumps: Tj = -15 °C  | COPd              | -                | -                 |  |  |
| Bivalent temperature   | Tbiv              | -6          | °C   | For air-to-water heat pumps: Operation limit temperature                            | TOL               | -10              | °C                |  |  |
| Cycling interval capacity for heating                                    | Pcych             | -           | kW   | Cycling interval efficiency   | COPcyc            | -                | -                 |  |  |
| Degradation co-efficient (**)  | Cdh               | 0.9         |      | Heating water operating limit temperature   | WTOL              | 60               | °C                |  |  |
| Power consumption in modes other than act                                | tive mode         |             |      | Supplementary heater  |                   |                  |                   |  |  |
| Off mode   | Poff              | 0.018       | kW   | Dated heat output (**)  | Б                 | 40.0             |                   |  |  |
| Standby mode   | Psb               | 0.018       | kW   | Rated heat output (**)  | Psup              | 12.3             | kW                |  |  |
| Thermostat-off mode  | Pto               | 0.096       | kW   | Type of energy input  |                   | Electrical       |                   |  |  |
| Crankcase heater mode  | Pck               | 0.000       | kW   | Type of chorgy input  |                   | Licotrical       |                   |  |  |
| Other items  |                   |             |      |   |                   |                  |                   |  |  |
| Capacity control   |                   | variable    |      | For air-to-water heat pumps:<br>Rated air flow rate, outdoors                       | -                 | 11200            | rê/h              |  |  |
| Sound power level, indoors/outdoors                                      | L <sub>WA</sub>   | -/75        | dB   | For water-or brine-to-water heat pumps:<br>Rated brine or water flow rate, outdoor  | -                 | -                | m <sup>3</sup> /l |  |  |
| Annual energy consumption  | $Q_{HE}$          | 17204       | kWh  | heat exchanger  |                   |                  |                   |  |  |
| For heat pump combination heater:  |                   |             |      |   |                   |                  |                   |  |  |
| Declared load profile  |                   | -           |      | Water heating energy efficiency   | Пwh               | -                | %                 |  |  |
| Daily electricity consumption  | Q <sub>clec</sub> | -           | kWh  | Daily fuel consumption  | Q <sub>fuel</sub> | -                | kW                |  |  |
| Annual electricity consumption   | AEC               | -           | kWh  | Annual fuel consumption   | AFC               | -                | G.                |  |  |

<sup>(\*)</sup> For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

| Model(s):                                     |                   |  |      | MLI 26 H0  |                   |       |                |
|---|-------------------|--|------|--|-------------------|-------|----------------|
| Air-to-water heat pump:                       |                   |  |      | YES  |                   |       |                |
| Water-to-water heat pump:                     |                   |  |      | NO   |                   |       |                |
| Brine-to-water heat pump:                     | ater heat pump:   |  |      |  |                   |       |                |
| Low-temperature heat pump:                    | eat pump:         |  |      |  |                   |       |                |
| Equipped with a supplementary heater          | er:               |  |      | NO   |                   |       |                |
| Heat pump combination heater:                 |                   |  |      | NO   |                   |       |                |
| Declared climate condition:                   |                   |  |      | COLDER   |                   |       |                |
| Parameters are declared for medium-           | temperature       | application  | I-   |  |                   |       |                |
|   | tomporatare       | дриоспол   |      |  |                   |       |                |
| Item  | Symbol            | Value  | Unit | Item   | Symbol            | Value | Ur             |
| Rated heat output (*)                         | Prated            | 26.3   | kW   | Seasonal space heating energy efficiency   | ηs                | 101   | %              |
| Declared capacity for heating for part load a | at indoor temp    | perature 20 °C   | ;    | Declared coefficient of performance or primindoor temperature 20 °C and outdoor 20 ° |                   |       | ad at          |
| Tj = -7℃                                      | Pdh               | 15.9   | kW   | Tj = -7℃   | COPd              | 2.10  | -              |
| Tj = 2℃                                       | Pdh               | 10.2   | kW   | Tj = 2℃  | COPd              | 3.58  | -              |
| Tj = 7℃                                       | Pdh               | 6.5  | kW   | Tj = 7℃  | COPd              | 4.99  | -              |
| Tj = 12℃                                      | Pdh               | 3.6  | kW   | Tj = 12℃   | COPd              | 5.68  | -              |
| Tj = bivalent temperature                     | Pdh               | 15.9   | kW   | Tj = bivalent temperature  | COPd              | 2.10  | -              |
| Tj = operating limit                          | Pdh               | 13.4   | kW   | Tj = operating limit   | COPd              | 1.20  |                |
| For air-to-water heat pumps: Tj = -15 °C      | Pdh               | 13.4   | kW   | For air-to-water heat pumps: Tj = -15 °C   | COPd              | 1.20  |                |
| Bivalent temperature                          | Tbiv              | -7 °C For air-to-water heat pumps: Operation limit temperature |      | TOL  | -15               | °(    |                |
| Cycling interval capacity for heating         | Pcych             | -  | kW   | Cycling interval efficiency  | COPcyc            | -     |                |
| Degradation co-efficient (**)                 | Cdh               | 0.9  |      | Heating water operating limit temperature  | WTOL              | 50    | ٥              |
| Power consumption in modes other than ac      | ctive mode        |  |      | Supplementary heater   |                   |       |                |
| Off mode                                      | Poff              | 0.018  | kW   | D-t-d bt-syt-syt/**\   | Б                 |       | l              |
| Standby mode                                  | Psb               | 0.018  | kW   | Rated heat output (**)   | P <sub>sup</sub>  | 26.3  | k۱             |
| Thermostat-off mode                           | Pto               | 0.096  | kW   | Type of energy input   |                   |       |                |
| Crankcase heater mode                         | Pck               | 0.000  | kW   | Type of energy input   |                   | _     |                |
| Other items                                   |                   |  |      |  |                   |       |                |
| Capacity control                              |                   | variable   |      | For air-to-water heat pumps:<br>Rated air flow rate, outdoors  | -                 | 11200 | rÂ             |
| Sound power level, indoors/outdoors           | L <sub>WA</sub>   | -/75   | dB   | For water-or brine-to-water heat pumps:<br>Rated brine or water flow rate, outdoor   | -                 | •     | m <sup>3</sup> |
| Annual energy consumption                     | Q <sub>HE</sub>   | 24967  | kWh  | heat exchanger   |                   |       |                |
| For heat pump combination heater:             |                   |  |      |  |                   |       |                |
| Declared load profile                         |                   | -  |      | Water heating energy efficiency  | Ŋwh               | -     | ,              |
| Daily electricity consumption                 | Q <sub>clec</sub> | -  | kWh  | Daily fuel consumption   | Q <sub>fuel</sub> | -     | k۱             |
| Annual electricity consumption                | AEC               | -  | kWh  | Annual fuel consumption  | AFC               | -     | C              |
| Contact details                               |                   |  |      | i 12/a 40010 - Bentivoglio (BO) ITALY  |                   |       |                |

| Model(s):  |                   |                |   | MLI 26 H0  |                   |                  |       |
|--|-------------------|----------------|---|--|-------------------|------------------|-------|
| Air-to-water heat pump:  |                   |                |   | YES  |                   |                  |       |
| Water-to-water heat pump:  |                   |                |   |  |                   |                  |       |
| Brine-to-water heat pump:  |                   |                |   | NO   |                   |                  |       |
| Low-temperature heat pump:   |                   |                |   | NO   |                   |                  |       |
| Equipped with a supplementary heater                                   | er:               |                |   | NO   |                   |                  |       |
| Heat pump combination heater:  |                   |                |   | NO   |                   |                  |       |
| Declared climate condition:  |                   |                |   | WARMER   |                   |                  |       |
| Parameters are declared for medium-                                    | temperature       | application    | l.  |  |                   |                  |       |
| Item   | Symbol            | Value          | Unit  | Item   | Symbol            | Value            | Un    |
| Rated heat output (*)  | Prated            | 26.2           | kW  | Seasonal space heating energy efficiency   | ηs                | 168              | %     |
| Declared capacity for heating for part load and outdoor temperature Tj | at indoor temp    | perature 20 °C | ;   | Declared coefficient of performance or prima indoor temperature 20 °C and outdoor temperature 20 |                   | tio for part loa | ad at |
| Tj = -7℃   | Pdh               | -              | kW  | Tj = -7℃   | COPd              | -                | -     |
| Tj = 2°C   | Pdh               | 26.5           | kW  | Tj = 2℃  | COPd              | 1.99             | -     |
| Tj = 7℃  | Pdh               | 16.9           | kW  | Tj = 7°C   | COPd              | 3.47             | -     |
| Tj = 12℃   | Pdh               | 7.6            | kW  | Tj = 12℃   | COPd              | 5.94             | -     |
| Tj = bivalent temperature  | Pdh               | 16.9           | kW  | Tj = bivalent temperature  | COPd              | 3.47             | -     |
| Tj = operating limit   | Pdh               | 26.5           | kW  | Tj = operating limit   | COPd              | 1.99             | -     |
| For air-to-water heat pumps: Tj = -15 °C                               | Pdh               | -              | kW For air-to-water heat pumps: Tj = -15 °C                   |  | COPd              | -                | -     |
| Bivalent temperature   | Tbiv              | 7              | 7 °C For air-to-water heat pumps: Operation limit temperature |  |                   | 2                | °C    |
| Cycling interval capacity for heating                                  | Pcych             | -              | kW  | Cycling interval efficiency  | COPcyc            | -                | -     |
| Degradation co-efficient (**)  | Cdh               | 0.9            |   | Heating water operating limit temperature  | WTOL              | 60               | °C    |
| Power consumption in modes other than a                                | ctive mode        |                |   | Supplementary heater   |                   |                  |       |
| Off mode   | Poff              | 0.018          | kW  | Rated heat output (**)   | Psup              | 0.0              | kW    |
| Standby mode   | Psb               | 0.018          | kW  | ration hour output ( )   | 1 Зар             | 0.0              | KVV   |
| Thermostat-off mode  | Pto               | 0.096          | kW  | Type of energy input   |                   | _                |       |
| Crankcase heater mode  | Pck               | 0.000          | kW  |  |                   |                  |       |
| Other items  |                   |                |   |  |                   |                  |       |
| Capacity control   |                   | variable       |   | For air-to-water heat pumps:<br>Rated air flow rate, outdoors  | -                 | 11200            | rê√h  |
| Sound power level, indoors/outdoors                                    | L <sub>WA</sub>   | -/75           | dB  | For water-or brine-to-water heat pumps:<br>Rated brine or water flow rate, outdoor   | -                 | -                | m³/l  |
| Annual energy consumption  | Q <sub>HE</sub>   | 8218           | kWh   | heat exchanger   |                   |                  |       |
| For heat pump combination heater:                                      |                   |                |   |  |                   |                  |       |
| Declared load profile  |                   | -              |   | Water heating energy efficiency  | $\eta_{wh}$       | -                | %     |
| Daily electricity consumption  | Q <sub>clec</sub> | -              | kWh   | Daily fuel consumption   | Q <sub>fuel</sub> | -                | kW    |
| Annual electricity consumption   | AEC               | -              | kWh   | Annual fuel consumption  | AFC               | -                | G.    |
| Contact details  |                   |                |   | 12/a 40010 - Bentivoglio (BO) ITALY  |                   |                  |       |

| ••                               |                   |                |      |  |                   |                  |                   |  |  |  |
|--|-------------------|----------------|------|--|-------------------|------------------|-------------------|--|--|--|
| Model(s):  |                   |                |      | MLI 30 H0  |                   |                  |                   |  |  |  |
| Air-to-water heat pump:  |                   |                |      | YES  |                   |                  |                   |  |  |  |
| Water-to-water heat pump:  |                   |                |      | NO   |                   |                  |                   |  |  |  |
| Brine-to-water heat pump:  |                   | NO             |      |  |                   |                  |                   |  |  |  |
| Low-temperature heat pump:   |                   |                |      | NO   |                   |                  |                   |  |  |  |
| Equipped with a supplementary heater                                   | er:               |                |      | NO   |                   |                  |                   |  |  |  |
| Heat pump combination heater:  |                   |                |      | NO   |                   |                  |                   |  |  |  |
| Declared climate condition:  |                   |                |      | AVERAGE  |                   |                  |                   |  |  |  |
| Parameters are declared for medium-                                    | temperature       | application.   | -    |  |                   |                  |                   |  |  |  |
| Item   | Symbol            | Value          | Unit | Item   | Symbol            | Value            | Uni               |  |  |  |
| Rated heat output (*)  | Prated            | 29.7           | kW   | Seasonal space heating energy efficiency   | ηs                | 123              | %                 |  |  |  |
| Declared capacity for heating for part load and outdoor temperature Tj |                   | perature 20 °C |      | Declared coefficient of performance or primi indoor temperature 20 °C and outdoor temperature 20 | ary energy ra     | tio for part loa | ad at             |  |  |  |
| Tj = -7℃   | Pdh               | 20.1           | kW   | Tj = -7°C  | COPd              | 1.63             | -                 |  |  |  |
| Tj = 2°C   | Pdh               | 16.5           | kW   | Tj = 2℃  | COPd              | 3.09             | -                 |  |  |  |
| Tj = 7°C   | Pdh               | 10.5           | kW   | Tj = 7℃  | COPd              | 4.73             | -                 |  |  |  |
| Tj = 12℃   | Pdh               | 4.7            | kW   | Tj = 12℃   | COPd              | 5.85             | -                 |  |  |  |
| Tj = bivalent temperature  | Pdh               | 24.0           | kW   | Tj = bivalent temperature  | COPd              | 2.02             | -                 |  |  |  |
| Tj = operating limit   | Pdh               | 13.8           | kW   | Tj = operating limit   | COPd              | 1.07             | -                 |  |  |  |
| For air-to-water heat pumps: Tj = -15 °C                               | Pdh               | -              | kW   | For air-to-water heat pumps: Tj = -15 °C   | COPd              | -                | -                 |  |  |  |
| Bivalent temperature   | Tbiv              | -5             | ℃    | For air-to-water heat pumps: Operation limit temperature   | TOL               | -10              | °C                |  |  |  |
| Cycling interval capacity for heating                                  | Pcych             | -              | kW   | Cycling interval efficiency  | COPcyc            | -                | -                 |  |  |  |
| Degradation co-efficient (**)  | Cdh               | 0.9            |      | Heating water operating limit temperature  | WTOL              | 60               | °C                |  |  |  |
| Power consumption in modes other than ac                               | ctive mode        |                |      | Supplementary heater   |                   |                  |                   |  |  |  |
| Off mode   | Poff              | 0.018          | kW   | Detect head autout (**)  |                   | 45.0             |                   |  |  |  |
| Standby mode   | Psb               | 0.018          | kW   | Rated heat output (**)   | Psup              | 15.9             | kW                |  |  |  |
| Thermostat-off mode  | Pto               | 0.096          | kW   | Type of energy input   | F1                |                  |                   |  |  |  |
| Crankcase heater mode  | Pck               | 0.000          | kW   | Type of energy input   | Ele               | rical Heating    | ]                 |  |  |  |
| Other items  |                   |                |      |  |                   |                  |                   |  |  |  |
| Capacity control   |                   | variable       |      | For air-to-water heat pumps:<br>Rated air flow rate, outdoors  | -                 | 11200            | m <sup>3</sup> /  |  |  |  |
| Sound power level, indoors/outdoors                                    | L <sub>WA</sub>   | -/77           | dB   | For water-or brine-to-water heat pumps:<br>Rated brine or water flow rate, outdoor   | -                 | -                | m <sup>3</sup> /h |  |  |  |
| Annual energy consumption  | Q <sub>HE</sub>   | 19316          | kWh  | heat exchanger   |                   |                  |                   |  |  |  |
| For heat pump combination heater:                                      |                   |                |      |  |                   |                  |                   |  |  |  |
| Declared load profile  |                   | -              |      | Water heating energy efficiency  | η <sub>wh</sub>   | -                | %                 |  |  |  |
| Daily electricity consumption  | Q <sub>clec</sub> | -              | kWh  | Daily fuel consumption   | Q <sub>fuel</sub> | -                | kW                |  |  |  |
| Annual electricity consumption   | AEC               | -              | kWh  | Annual fuel consumption  | AFC               | -                | Gu                |  |  |  |
| ,  |                   |                |      |  |                   |                  |                   |  |  |  |

<sup>(\*)</sup> For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

|   |  | Toch           | nical                        | parameters   |                   |               |       |  |  |
|---|--|----------------|------------------------------|--|-------------------|---------------|-------|--|--|
|   |  | recn           | micai                        | -  |                   |               |       |  |  |
| Model(s):   |  |                |                              | MLI 30 H0  |                   |               |       |  |  |
| Air-to-water heat pump:   |  |                |                              | YES  |                   |               |       |  |  |
| Water-to-water heat pump:   |  |                |                              | NO   |                   |               |       |  |  |
| Brine-to-water heat pump:   |  |                |                              | NO   |                   |               |       |  |  |
| Low-temperature heat pump:  |  |                |                              | NO   |                   |               |       |  |  |
| Equipped with a supplementary heater  | r:                                     | NO             |                              |  |                   |               |       |  |  |
| Heat pump combination heater:   |  |                |                              | NO   |                   |               |       |  |  |
| Declared climate condition:   |  |                |                              | COLDER   |                   |               |       |  |  |
| Parameters are declared for medium-t  | ed for medium-temperature application. |                |                              |  |                   |               |       |  |  |
| n.  | 0 1                                    | Value          | Unit                         | Non  | Symbol            | Value         | 11.2  |  |  |
| Item  | Symbol                                 | Value          |                              | Item (C)   | -                 |               | Unit  |  |  |
| Rated heat output (*)   | Prated                                 | 30.4           | kW                           | Seasonal space heating energy efficiency   | ηs                | 100           | %     |  |  |
| Declared capacity for heating for part load a<br>and outdoor temperature Tj | t indoor temp                          | perature 20 °C | ,                            | Declared coefficient of performance or primindoor temperature 20 °C and outdoor tele |                   |               | id at |  |  |
| Tj = -7℃  | Pdh                                    | 18.4           | kW                           | Tj = -7℃   | COPd              | 2.10          | -     |  |  |
| Tj = 2℃   | Pdh                                    | 11.2           | kW                           | Tj = 2℃  | COPd              | 3.51          | -     |  |  |
| Tj = 7℃   | Pdh                                    | 7.4            | kW                           | Tj = 7℃  | COPd              | 5.18          | -     |  |  |
| Tj = 12℃  | Pdh                                    | 3.6            | kW                           | Tj = 12℃   | COPd              | 5.73          | -     |  |  |
| Tj = bivalent temperature   | Pdh                                    | 18.4           | kW                           | Tj = bivalent temperature  | COPd              | 2.10          | -     |  |  |
| Tj = operating limit  | Pdh                                    | 13.1           | 13.1 kW Tj = operating limit |  |                   |               | -     |  |  |
| For air-to-water heat pumps: Tj = -15 $^{\circ}$                            | Pdh                                    | 13.1           | kW                           | For air-to-water heat pumps: Tj = -15℃   | COPd              | 1.18          | -     |  |  |
| Bivalent temperature  | Tbiv                                   | -7             | °C                           | For air-to-water heat pumps:<br>Operation limit temperature                          | TOL               | -15           | °C    |  |  |
| Cycling interval capacity for heating                                       | Pcych                                  | -              | kW                           | Cycling interval efficiency  | COPcyc            | -             | -     |  |  |
| Degradation co-efficient (**)   | Cdh                                    | 0.9            |                              | Heating water operating limit temperature  | WTOL              | 50            | °C    |  |  |
| Power consumption in modes other than act                                   | tive mode                              |                |                              | Supplementary heater   |                   | <u> </u>      |       |  |  |
| Off mode  | Poff                                   | 0.018          | kW                           |  |                   |               |       |  |  |
| Standby mode  | Psb                                    | 0.018          | kW                           | Rated heat output (**)   | Psup              | 30.4          | kW    |  |  |
| Thermostat-off mode   | Pto                                    | 0.096          | kW                           | Tors of an army inner  |                   |               | •     |  |  |
| Crankcase heater mode   | Pck                                    | 0.000          | kW                           | Type of energy input   | Ele               | rical Heating |       |  |  |
| Other items   |  |                |                              |  |                   |               |       |  |  |
| Capacity control  |  | variable       |                              | For air-to-water heat pumps:<br>Rated air flow rate, outdoors                        | -                 | 11200         | m³/h  |  |  |
| Sound power level, indoors/outdoors   | L <sub>WA</sub>                        | -/77           | dB                           | For water-or brine-to-water heat pumps:<br>Rated brine or water flow rate, outdoor   | -                 | -             | m³/h  |  |  |
| Annual energy consumption   | Q <sub>HE</sub>                        | 29238          | kWh                          | heat exchanger   |                   |               |       |  |  |
| For heat pump combination heater:   |  |                |                              |  |                   |               |       |  |  |
| Declared load profile   |  | -              |                              | Water heating energy efficiency  | η <sub>wh</sub>   | -             | %     |  |  |
| Daily electricity consumption   | Q <sub>clec</sub>                      | -              | kWh                          | Daily fuel consumption   | Q <sub>fuel</sub> | -             | kWh   |  |  |
| Annual electricity consumption  | AEC                                    | -              | kWh                          | Annual fuel consumption  | AFC               | -             | GJ    |  |  |
| Contact details   |  |                |                              | ii 12/a 40010 - Bentivoglio (BO) ITALY   |                   |               |       |  |  |

<sup>(\*)</sup> For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

| Model(s):  |                   |                |   | MLI 30 H0  |                   |               |                  |  |  |  |
|--|-------------------|----------------|---|--|-------------------|---------------|------------------|--|--|--|
| Air-to-water heat pump:  |                   |                |   | YES  |                   |               |                  |  |  |  |
| Water-to-water heat pump:  |                   |                |   | NO   |                   |               |                  |  |  |  |
| Brine-to-water heat pump:  |                   |                |   | NO   |                   |               |                  |  |  |  |
| Low-temperature heat pump:   |                   |                |   | NO   |                   |               |                  |  |  |  |
| Equipped with a supplementary heat                                     | er:               | NO             |   |  |                   |               |                  |  |  |  |
| Heat pump combination heater:  |                   |                |   | NO   |                   |               |                  |  |  |  |
| Declared climate condition:  |                   |                |   | WARMER   |                   |               |                  |  |  |  |
| Parameters are declared for medium                                     | -temperature      | application    | ١.  |  |                   |               |                  |  |  |  |
|  |                   |                |   |  |                   |               |                  |  |  |  |
| Item   | Symbol            | Value          | Unit  | Item   | Symbol            | Value         | Uni              |  |  |  |
| Rated heat output (*)  | Prated            | 29.7           | kW  | Seasonal space heating energy efficiency   | ηs                | 163           | %                |  |  |  |
| Declared capacity for heating for part load and outdoor temperature Tj | at indoor temp    | perature 20 °C |   | Declared coefficient of performance or primindoor temperature 20 °C and outdoor tell |                   |               | ad at            |  |  |  |
| Tj = -7℃   | Pdh               | -              | kW  | Tj = -7℃   | COPd              | -             | -                |  |  |  |
| Tj = 2°C   | Pdh               | 26.4           | kW  | Tj = 2°C   | COPd              | 1.99          | -                |  |  |  |
| Tj = 7℃  | Pdh               | 19.1           | kW  | Tj = 7℃  | COPd              | 3.37          | -                |  |  |  |
| Tj = 12℃   | Pdh               | 8.9            | kW  | Tj = 12℃   | COPd              | 6.09          | -                |  |  |  |
| Tj = bivalent temperature  | Pdh               | 19.1           | kW  | Tj = bivalent temperature  | COPd              | 3.37          | -                |  |  |  |
| Tj = operating limit   | Pdh               | 26.4           | 26.4 kW Tj = operating limit                  |  |                   | 1.99          | -                |  |  |  |
| For air-to-water heat pumps: Tj = -15 $^{\circ}$ C                     | Pdh               | -              | - kW For air-to-water heat pumps: Tj = -15 °C |  | COPd              | -             | -                |  |  |  |
| Bivalent temperature   | Tbiv              | 7              | °C  | For air-to-water heat pumps:<br>Operation limit temperature                          | TOL               | 2             | °C               |  |  |  |
| Cycling interval capacity for heating                                  | Pcych             | -              | kW  | Cycling interval efficiency  | COPcyc            | -             | -                |  |  |  |
| Degradation co-efficient (**)  | Cdh               | 0.9            |   | Heating water operating limit temperature  | WTOL              | 60            | °C               |  |  |  |
| Power consumption in modes other than a                                | ctive mode        |                |   | Supplementary heater   |                   |               |                  |  |  |  |
| Off mode   | Poff              | 0.018          | kW  | B  | _                 |               |                  |  |  |  |
| Standby mode   | Psb               | 0.018          | kW  | Rated heat output (**)   | Psup              | 3.3           | kW               |  |  |  |
| Thermostat-off mode  | Pto               | 0.096          | kW  | Type of energy input   |                   |               |                  |  |  |  |
| Crankcase heater mode  | Pck               | 0.000          | kW  | Type of energy input   | Ele               | rical Heating | ]                |  |  |  |
| Other items  |                   |                |   |  |                   |               |                  |  |  |  |
| Capacity control   |                   | variable       |   | For air-to-water heat pumps:<br>Rated air flow rate, outdoors                        | -                 | 11200         | m <sup>3</sup> / |  |  |  |
| Sound power level, indoors/outdoors                                    | L <sub>WA</sub>   | -/77           | dB  | For water-or brine-to-water heat pumps:<br>Rated brine or water flow rate, outdoor   | -                 | -             | m³/h             |  |  |  |
| Annual energy consumption  | Q <sub>HE</sub>   | 9580           | kWh   | heat exchanger   |                   |               |                  |  |  |  |
| For heat pump combination heater:                                      |                   |                |   |  |                   |               |                  |  |  |  |
| Declared load profile  |                   | -              |   | Water heating energy efficiency  | η <sub>wh</sub>   | -             | %                |  |  |  |
| Daily electricity consumption  | Q <sub>clec</sub> | -              | kWh   | Daily fuel consumption   | Q <sub>fuel</sub> | -             | kW               |  |  |  |
| Annual electricity consumption   | AEC               | -              | kWh   | Annual fuel consumption  | AFC               | -             | GJ               |  |  |  |

<sup>(\*)</sup> For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

| Model(s):                                    |                      |                  | MLI 18 H0                            |   |                  |                 |       |  |  |  |
|--|----------------------|------------------|--------------------------------------|---|------------------|-----------------|-------|--|--|--|
| Outdoor side heat e                          | xchanger of o        | chiller:         | Air to water                         |   |                  |                 |       |  |  |  |
| Indoor side heat exc                         | changer chille       | r:               | Water                                |   |                  |                 |       |  |  |  |
| Type:  |                      |                  | Compressor driven vapour compression |   |                  |                 |       |  |  |  |
| Driver of compresso                          | or:                  |                  | Electric moto                        | r   |                  |                 |       |  |  |  |
| Item   | Symbol               | Value            | Unit                                 | Item  | Symbol           | Value           | Unit  |  |  |  |
| Rated cooling capacity                       | P <sub>rated,c</sub> | 16.6             | kW                                   | Seasonal space cooling energy efficiency            | η <sub>s,c</sub> | 185             | %     |  |  |  |
| Declared cooling catemperature Tj            | apacity for pa       | rt load at giver | outdoor                              | Declared energy effort                              |                  | or part load at | given |  |  |  |
| Tj=+35°C                                     | P <sub>dc</sub>      | 16.6             | kW                                   | Tj=+35°℃  | EERd             | 3.06            | -     |  |  |  |
| Tj=+30°C                                     | P <sub>dc</sub>      | 11.9             | kW                                   | Tj=+30°C  | EERd             | 4.13            | -     |  |  |  |
| Tj=+25℃                                      | P <sub>dc</sub>      | 7.6              | kW                                   | Tj=+25℃   | EERd             | 5.59            | -     |  |  |  |
| Tj=+20℃                                      | P <sub>dc</sub>      | 3.5              | kW                                   | Tj=+20℃   | EERd             | 5.55            | -     |  |  |  |
| Degradation co-efficient for chillers (*)    | C <sub>dc</sub>      | 0.9              | -                                    |   |                  |                 |       |  |  |  |
| ,  |                      | Power cons       | sumption in mo                       | des other than "active r                            | mode"            |                 |       |  |  |  |
| Off mode                                     | P <sub>OFF</sub>     | 0.017            | kW                                   | Crankcase heater mode                               | P <sub>CK</sub>  | 0.000           | kW    |  |  |  |
| Thermosat-off mode                           | P <sub>TO</sub>      | 0.084            | kW                                   | Standby mode  | P <sub>SB</sub>  | 0.017           | kW    |  |  |  |
| <u> </u>                                     |                      |                  | Othe                                 | er items  |                  |                 |       |  |  |  |
| Capacity control                             |                      | variable         |                                      | For air-to-water comfort chillers:                  |                  | 0400            | 3/l-  |  |  |  |
| Sound power level, indoors / outdoors        | L <sub>WA</sub>      | -/71             | dB                                   | air flow rate,<br>outdoor measured                  | -                | 8100            | m³/h  |  |  |  |
| Emissions of nitroger oxides (if applicable) | NO <sub>×</sub> (**) | -                | mg/kWh<br>input GCV                  | For water / brine-to-water chillers: Rated brine or | _                |                 | m³/h  |  |  |  |
| GWP of the refrigerant                       | -                    | 675              | kg CO <sub>2 eq</sub> (100years)     | water flow rate, outdoor side heat exchanger        |                  |                 | /!!   |  |  |  |
| Standard rating con                          | ditions used         | Low tempera      | ature applicatio                     | n   |                  |                 |       |  |  |  |
| Contact details                              |                      |                  | Via L. Romagnoli<br>3908111 Email:   | i 12/a 40010 - Bentivogli<br>info@galletti.it       | o (BO) ITALY     |                 |       |  |  |  |
| (*) If Cdc is not dete<br>(**) From 26 Septe |                      | easurement th    | en the default                       | degradation coefficient                             | of chillers sha  | all be 0,9.     |       |  |  |  |

| Model(s):                                    |                      |                  | MLI 18 H0                            |   |                  |                 |       |  |  |  |
|--|----------------------|------------------|--------------------------------------|---|------------------|-----------------|-------|--|--|--|
| Outdoor side heat e                          | xchanger of o        | chiller:         | Air to water                         |   |                  |                 |       |  |  |  |
| Indoor side heat exc                         | changer chille       | r:               | Water                                |   |                  |                 |       |  |  |  |
| Type:  |                      |                  | Compressor driven vapour compression |   |                  |                 |       |  |  |  |
| Driver of compresso                          | or:                  |                  | Electric moto                        | r   |                  |                 |       |  |  |  |
| Item   | Symbol               | Value            | Unit                                 | Item  | Symbol           | Value           | Unit  |  |  |  |
| Rated cooling capacity                       | P <sub>rated,c</sub> | 18.4             | kW                                   | Seasonal space cooling energy efficiency            | η <sub>s,c</sub> | 216             | %     |  |  |  |
| Declared cooling catemperature Tj            | apacity for pa       | rt load at giver | outdoor                              | Declared energy effort                              |                  | or part load at | given |  |  |  |
| Tj=+35°C                                     | P <sub>dc</sub>      | 18.4             | kW                                   | Tj=+35°℃  | EERd             | 4.44            | -     |  |  |  |
| Tj=+30°C                                     | P <sub>dc</sub>      | 13.3             | kW                                   | Tj=+30°C  | EERd             | 5.26            | -     |  |  |  |
| Tj=+25℃                                      | P <sub>dc</sub>      | 8.5              | kW                                   | Tj=+25℃   | EERd             | 6.68            | -     |  |  |  |
| Tj=+20℃                                      | P <sub>dc</sub>      | 3.3              | kW                                   | Tj=+20℃   | EERd             | 5.15            | -     |  |  |  |
| Degradation co-efficient for chillers (*)    | C <sub>dc</sub>      | 0.9              | -                                    |   |                  |                 |       |  |  |  |
| ,  |                      | Power cons       | sumption in mo                       | des other than "active r                            | mode"            |                 |       |  |  |  |
| Off mode                                     | P <sub>OFF</sub>     | 0.017            | kW                                   | Crankcase heater mode                               | P <sub>CK</sub>  | 0.000           | kW    |  |  |  |
| Thermosat-off mode                           | P <sub>TO</sub>      | 0.084            | kW                                   | Standby mode  | P <sub>SB</sub>  | 0.017           | kW    |  |  |  |
| ·  |                      |                  | Othe                                 | er items  |                  |                 |       |  |  |  |
| Capacity control                             |                      | variable         |                                      | For air-to-water comfort chillers:                  |                  | 9400            | ∞3/h  |  |  |  |
| Sound power level, indoors / outdoors        | L <sub>WA</sub>      | -/71             | dB                                   | air flow rate,<br>outdoor measured                  | -                | 8100            | m³/h  |  |  |  |
| Emissions of nitroger oxides (if applicable) | NO <sub>×</sub> (**) | -                | mg/kWh<br>input GCV                  | For water / brine-to-water chillers: Rated brine or | _                |                 | m³/h  |  |  |  |
| GWP of the refrigerant                       | -                    | 675              | kg CO <sub>2 eq</sub> (100years)     | water flow rate, outdoor side heat exchanger        |                  |                 | /!!   |  |  |  |
| Standard rating con                          | ditions used         | Medium tem       | perature applic                      | cation  |                  |                 |       |  |  |  |
| Contact details                              |                      |                  | Via L. Romagnoli<br>3908111 Email:   | i 12/a 40010 - Bentivogli<br>info@galletti.it       | o (BO) ITALY     |                 |       |  |  |  |
| (*) If Cdc is not dete<br>(**) From 26 Septe |                      | easurement th    | en the default                       | degradation coefficient                             | of chillers sha  | all be 0,9.     |       |  |  |  |

| Model(s):                                    |                      |                  | MLI 22 H0                        | MLI 22 H0   |                    |                 |                   |  |  |  |
|--|----------------------|------------------|----------------------------------|---|--------------------|-----------------|-------------------|--|--|--|
| Outdoor side heat e                          | exchanger of o       | chiller:         | Air to water                     |   |                    |                 |                   |  |  |  |
| Indoor side heat ex                          | changer chille       | er:              | Water                            |   |                    |                 |                   |  |  |  |
| Туре:  |                      |                  | Compressor of                    | driven vapour compres                               | sion               |                 |                   |  |  |  |
| Driver of compresso                          | or:                  |                  | Electric motor                   | ,   |                    |                 |                   |  |  |  |
| Item   | Symbol               | Value            | Unit                             | ltem  | Symbol             | Value           | Unit              |  |  |  |
| Rated cooling capacity                       | P <sub>rated,c</sub> | 20.6             | kW                               | Seasonal space cooling energy efficiency            | η <sub>s,c</sub>   | 185             | %                 |  |  |  |
| Declared cooling c temperature Tj            | apacity for pa       | rt load at giver | outdoor                          | Declared energy effoutdoor temperatur               | ficiency ratio for | or part load at | given             |  |  |  |
| Tj=+35℃                                      | P <sub>dc</sub>      | 20.6             | kW                               | Tj=+35℃   | EERd               | 2.89            | -                 |  |  |  |
| Tj=+30°C                                     | P <sub>dc</sub>      | 14.9             | kW                               | Tj=+30°C  | EERd               | 3.95            | -                 |  |  |  |
| Tj=+25°℃                                     | P <sub>dc</sub>      | 9.3              | kW                               | Tj=+25℃   | EERd               | 5.37            | -                 |  |  |  |
| Tj=+20℃                                      | P <sub>dc</sub>      | 4.3              | kW                               | Tj=+20℃   | EERd               | 6.19            | -                 |  |  |  |
| Degradation co-efficient for chillers (*)    | C <sub>dc</sub>      | 0.9              | -                                |   |                    |                 |                   |  |  |  |
|  |                      | Power cons       | sumption in mod                  | les other than "active r                            | mode"              |                 |                   |  |  |  |
| Off mode                                     | P <sub>OFF</sub>     | 0.017            | kW                               | Crankcase heater mode                               | P <sub>CK</sub>    | 0.000           | kW                |  |  |  |
| Thermosat-off mode                           | P <sub>TO</sub>      | 0.084            | kW                               | Standby mode  | P <sub>SB</sub>    | 0.017           | kW                |  |  |  |
|  |                      |                  | Othe                             | r items   |                    |                 |                   |  |  |  |
| Capacity control                             |                      | variable         |                                  | For air-to-water comfort chillers:                  |                    | 0050            | 3.0               |  |  |  |
| Sound power level, indoors / outdoors        | $L_WA$               | -/73             | dB                               | air flow rate,<br>outdoor measured                  | -                  | 8950            | m <sup>3</sup> /h |  |  |  |
| Emissions of nitroger oxides (if applicable) | NO <sub>x</sub> (**) | -                | mg/kWh<br>input GCV              | For water / brine-to-water chillers: Rated brine or | _                  |                 | m³/h              |  |  |  |
| GWP of the refrigerant                       | -                    | 675              | kg CO <sub>2 eq</sub> (100years) | water flow rate, outdoor side heat exchanger        | <u>-</u>           |                 | 111 /11           |  |  |  |
| 0  | ditions used         | Low tempera      | ature application                | 1   |                    |                 |                   |  |  |  |
| Standard rating con                          |                      |                  |                                  |   |                    |                 |                   |  |  |  |

| Model(s):  |                      |                  | MLI 22 H0                            |   |                  |                 |                   |  |  |  |
|--|----------------------|------------------|--------------------------------------|---|------------------|-----------------|-------------------|--|--|--|
| Outdoor side heat e  | exchanger of c       | hiller:          | Air to water                         |   |                  |                 |                   |  |  |  |
| Indoor side heat exc   | changer chille       | r:               | Water                                |   |                  |                 |                   |  |  |  |
| Туре:  |                      |                  | Compressor driven vapour compression |   |                  |                 |                   |  |  |  |
| Driver of compresso  | or:                  |                  | Electric moto                        | r   |                  |                 |                   |  |  |  |
| Item   | Symbol               | Value            | Unit                                 | ltem  | Symbol           | Value           | Unit              |  |  |  |
| Rated cooling capacity   | P <sub>rated,c</sub> | 22.8             | kW                                   | Seasonal space cooling energy efficiency            | η <sub>s,c</sub> | 224             | %                 |  |  |  |
| Declared cooling cooli | apacity for pa       | rt load at given | outdoor                              | Declared energy eff                                 |                  | or part load at | given             |  |  |  |
| Tj=+35℃  | P <sub>dc</sub>      | 22.8             | kW                                   | Tj=+35℃   | EERd             | 4.25            | -                 |  |  |  |
| Tj=+30°C   | P <sub>dc</sub>      | 16.3             | kW                                   | Tj=+30℃   | EERd             | 5.16            | -                 |  |  |  |
| Tj=+25℃  | P <sub>dc</sub>      | 10.2             | kW                                   | Tj=+25°C  | EERd             | 6.45            | -                 |  |  |  |
| Tj=+20°C   | P <sub>dc</sub>      | 4.6              | kW                                   | Tj=+20°C  | EERd             | 6.38            | -                 |  |  |  |
| Degradation co-efficient for chillers (*)  | C <sub>dc</sub>      | 0.9              | -                                    |   |                  |                 |                   |  |  |  |
|  |                      | Power cons       | sumption in mo                       | des other than "active r                            | mode"            |                 |                   |  |  |  |
| Off mode   | P <sub>OFF</sub>     | 0.017            | kW                                   | Crankcase heater mode                               | P <sub>CK</sub>  | 0.000           | kW                |  |  |  |
| Thermosat-off mode   | P <sub>TO</sub>      | 0.084            | kW                                   | Standby mode  | P <sub>SB</sub>  | 0.017           | kW                |  |  |  |
|  |                      |                  | Othe                                 | er items  |                  |                 |                   |  |  |  |
| Capacity control   |                      | variable         |                                      | For air-to-water comfort chillers:                  |                  | 0050            | 2.0               |  |  |  |
| Sound power level, indoors / outdoors  | L <sub>WA</sub>      | -/73             | dB                                   | air flow rate,<br>outdoor measured                  | -                | 8950            | m <sup>3</sup> /h |  |  |  |
| Emissions of nitroger oxides (if applicable)   | NO <sub>x</sub> (**) | -                | mg/kWh<br>input GCV                  | For water / brine-to-water chillers: Rated brine or | _                |                 | m³/h              |  |  |  |
| GWP of the refrigerant   | -                    | 675              | kg CO <sub>2 eq</sub> (100years)     | water flow rate, outdoor side heat exchanger        |                  |                 |                   |  |  |  |
| Standard rating con  | ditions used         | Medium tem       | perature applic                      | cation  |                  |                 |                   |  |  |  |
| Contact details  |                      |                  | Via L. Romagnoli<br>3908111 Email:   | i 12/a 40010 - Bentivoglio<br>info@galletti.it      | o (BO) ITALY     |                 |                   |  |  |  |
| (*) If Cdc is not deto<br>(**) From 26 Sept  |                      | easurement th    | en the default                       | degradation coefficient                             | of chillers sha  | all be 0,9.     |                   |  |  |  |

| Model(s):                                    |                      |                  | MLI 26 H0                            |   |                  |                 |          |  |  |  |  |
|--|----------------------|------------------|--------------------------------------|---|------------------|-----------------|----------|--|--|--|--|
| Outdoor side heat e                          | xchanger of c        | chiller:         | Air to water                         |   |                  |                 |          |  |  |  |  |
| Indoor side heat exc                         | changer chille       | r:               | Water                                | Water   |                  |                 |          |  |  |  |  |
| Type:  |                      |                  | Compressor                           | driven vapour compres                               | sion             |                 |          |  |  |  |  |
| Driver of compresso                          | or:                  |                  | Electric motor                       | r   |                  |                 |          |  |  |  |  |
| Item   | Symbol               | Value            | Unit                                 | ltem  | Symbol           | Value           | Unit     |  |  |  |  |
| Rated cooling capacity                       | P <sub>rated,c</sub> | 25.5             | kW                                   | Seasonal space cooling energy efficiency            | η <sub>s,c</sub> | 183             | %        |  |  |  |  |
| Declared cooling catemperature Tj            | apacity for pa       | rt load at given | outdoor                              | Declared energy effoutdoor temperatur               |                  | or part load at | given    |  |  |  |  |
| Tj=+35℃                                      | P <sub>dc</sub>      | 25.5             | kW                                   | Tj=+35°C  | EERd             | 2.63            | -        |  |  |  |  |
| Tj=+30°C                                     | P <sub>dc</sub>      | 18.5             | kW                                   | Tj=+30°C  | EERd             | 3.79            | -        |  |  |  |  |
| Tj=+25°C                                     | P <sub>dc</sub>      | 11.8             | kW                                   | Tj=+25°℃  | EERd             | 5.19            | -        |  |  |  |  |
| Tj=+20°℃                                     | P <sub>dc</sub> 5.6  |                  |                                      | Tj=+20°C  | EERd             | 6.84            | -        |  |  |  |  |
| Degradation co-efficient                     |                      | 2.2              |                                      |   |                  |                 |          |  |  |  |  |
| for chillers (*)                             | C <sub>dc</sub>      | 0.9              | -                                    |   |                  |                 |          |  |  |  |  |
|  |                      | Power cons       | umption in mod                       | des other than "active r                            | node"            |                 |          |  |  |  |  |
| Off mode                                     | P <sub>OFF</sub>     | 0.017            | kW                                   | Crankcase heater mode                               | P <sub>CK</sub>  | 0.000           | kW       |  |  |  |  |
| Thermosat-off mode                           | P <sub>TO</sub>      | 0.084            | kW                                   | Standby mode  | P <sub>SB</sub>  | 0.017           | kW       |  |  |  |  |
|  |                      |                  | Othe                                 | r items   |                  |                 |          |  |  |  |  |
| Capacity control                             |                      | variable         |                                      | For air-to-water comfort chillers:                  | _                | 9750            | m³/h     |  |  |  |  |
| Sound power level, indoors / outdoors        | L <sub>WA</sub>      | -/75             | dB                                   | air flow rate,<br>outdoor measured                  | -<br>            | 9750            | 111711   |  |  |  |  |
| Emissions of nitroger oxides (if applicable) | NO <sub>×</sub> (**) | -                | mg/kWh<br>input GCV                  | For water / brine-to-water chillers: Rated brine or | _                |                 | m³/h     |  |  |  |  |
| GWP of the refrigerant - 675                 |                      |                  | kg CO <sub>2 eq</sub> (100years)     | water flow rate, outdoor side heat exchanger        | <u>-</u>         |                 | 111. 711 |  |  |  |  |
| Standard rating con-                         | ditions used         | Low tempera      | ature application                    | n   |                  |                 |          |  |  |  |  |
| Contact details                              |                      |                  | Via L. Romagnoli<br>8908111 Email: i | 12/a 40010 - Bentivogli<br>info@galletti.it         | o (BO) ITALY     |                 |          |  |  |  |  |
| (*) If Cdc is not dete<br>(**) From 26 Septe |                      | easurement th    | en the default o                     | degradation coefficient                             | of chillers sha  | all be 0,9.     |          |  |  |  |  |

| Model(s):  |                      |                  | MLI 26 H0                            |   |                  |                 |                   |  |  |  |
|--|----------------------|------------------|--------------------------------------|---|------------------|-----------------|-------------------|--|--|--|
| Outdoor side heat e  | exchanger of c       | chiller:         | Air to water                         |   |                  |                 |                   |  |  |  |
| Indoor side heat exc   | changer chille       | r:               | Water                                |   |                  |                 |                   |  |  |  |
| Туре:  |                      |                  | Compressor driven vapour compression |   |                  |                 |                   |  |  |  |
| Driver of compresso  | or:                  |                  | Electric moto                        | or  |                  |                 |                   |  |  |  |
| Item   | Symbol               | Value            | Unit                                 | Item  | Symbol           | Value           | Unit              |  |  |  |
| Rated cooling capacity   | P <sub>rated,c</sub> | 26.8             | kW                                   | Seasonal space cooling energy efficiency            | η <sub>s,c</sub> | 226             | %                 |  |  |  |
| Declared cooling cooli | apacity for pa       | rt load at given | outdoor                              | Declared energy effort                              |                  | or part load at | given             |  |  |  |
| Tj=+35℃  | P <sub>dc</sub>      | 26.8             | kW                                   | Tj=+35℃   | EERd             | 4.04            | -                 |  |  |  |
| Tj=+30°C   | P <sub>dc</sub>      | 19.4             | kW                                   | Tj=+30℃   | EERd             | 5.21            | -                 |  |  |  |
| Tj=+25℃  | P <sub>dc</sub>      | 12.1             | kW                                   | Tj=+25℃   | EERd             | 6.23            | -                 |  |  |  |
| Tj=+20°C   | P <sub>dc</sub>      | 5.9              | kW                                   | Tj=+20°C  | EERd             | 6.94            | -                 |  |  |  |
| Degradation co-efficient for chillers (*)  | C <sub>dc</sub>      | 0.9              | -                                    |   |                  |                 |                   |  |  |  |
|  |                      | Power cons       | sumption in mo                       | des other than "active r                            | mode"            |                 |                   |  |  |  |
| Off mode   | P <sub>OFF</sub>     | 0.017            | kW                                   | Crankcase heater mode                               | P <sub>CK</sub>  | 0.000           | kW                |  |  |  |
| Thermosat-off mode   | P <sub>TO</sub>      | 0.084            | kW                                   | Standby mode  | P <sub>SB</sub>  | 0.017           | kW                |  |  |  |
|  |                      |                  | Othe                                 | er items  |                  |                 |                   |  |  |  |
| Capacity control   |                      | variable         |                                      | For air-to-water comfort chillers:                  |                  | 0750            | 3.0               |  |  |  |
| Sound power level, indoors / outdoors  | L <sub>WA</sub>      | -/75             | dB                                   | air flow rate,<br>outdoor measured                  | -                | 9750            | m <sup>3</sup> /h |  |  |  |
| Emissions of nitroger oxides (if applicable)   | NO <sub>x</sub> (**) | -                | mg/kWh<br>input GCV                  | For water / brine-to-water chillers: Rated brine or | _                |                 | m³/h              |  |  |  |
| GWP of the refrigerant   | -                    | 675              | kg CO <sub>2 eq</sub> (100years)     | water flow rate, outdoor side heat exchanger        | <u>-</u>         |                 |                   |  |  |  |
| Standard rating con  | ditions used         | Medium tem       | perature applic                      | cation  |                  |                 |                   |  |  |  |
| Contact details  |                      |                  | Via L. Romagnoli<br>3908111 Email:   | i 12/a 40010 - Bentivogli<br>info@galletti.it       | o (BO) ITALY     |                 |                   |  |  |  |
| (*) If Cdc is not deto<br>(**) From 26 Sept  |                      | easurement th    | en the default                       | degradation coefficient                             | of chillers sha  | all be 0,9.     |                   |  |  |  |

| Model(s):  |                      | MLI 30 H0        |                                      |   |                  |                   |         |  |
|--|----------------------|------------------|--------------------------------------|---|------------------|-------------------|---------|--|
| Outdoor side heat exchanger of chiller:                                      |                      |                  | Air to water                         |   |                  |                   |         |  |
| Indoor side heat exchanger chiller:  |                      |                  | Water                                |   |                  |                   |         |  |
| Type:  |                      |                  | Compressor driven vapour compression |   |                  |                   |         |  |
| Driver of compressor:  |                      |                  | Electric motor                       |   |                  |                   |         |  |
| Item   | Symbol               | Value            | Unit                                 | Item  | Symbol           | Value             | Unit    |  |
| Rated cooling capacity   | P <sub>rated,c</sub> | 29.5             | kW                                   | Seasonal space cooling energy efficiency            | η <sub>s,c</sub> | 177               | %       |  |
| Declared cooling catemperature Tj  | apacity for pa       | rt load at giver | outdoor                              | Declared energy effort                              |                  | or part load at ( | given   |  |
| Tj=+35°C   | P <sub>dc</sub>      | 29.5             | kW                                   | Tj=+35°℃  | EERd             | 2.29              | -       |  |
| Tj=+30°C   | P <sub>dc</sub>      | 21.2             | kW                                   | Tj=+30°C  | EERd             | 3.62              | -       |  |
| Tj=+25℃  | P <sub>dc</sub>      | 13.5             | kW                                   | Tj=+25℃   | EERd             | 5.06              | -       |  |
| Tj=+20℃  | P <sub>dc</sub>      | 6.0              | kW                                   | Tj=+20℃   | EERd             | 6.75              | -       |  |
| Degradation co-efficient for chillers (*)                                    | C <sub>dc</sub>      | 0.9              | -                                    |   |                  |                   |         |  |
|  |                      | Power cons       | sumption in mo                       | des other than "active r                            | mode"            |                   |         |  |
| Off mode   | P <sub>OFF</sub>     | 0.017            | kW                                   | Crankcase heater mode                               | P <sub>CK</sub>  | 0.000             | kW      |  |
| Thermosat-off mode   | P <sub>TO</sub>      | 0.084            | kW                                   | Standby mode  | P <sub>SB</sub>  | 0.017             | kW      |  |
| ·  |                      |                  | Othe                                 | er items  |                  |                   |         |  |
| Capacity control   |                      | variable         |                                      | For air-to-water comfort chillers:                  |                  | 10650             | m³/h    |  |
| Sound power level, indoors / outdoors  | L <sub>WA</sub>      | -/77             | dB                                   | air flow rate,<br>outdoor measured                  | -                |                   |         |  |
| Emissions of nitroger oxides (if applicable)                                 | NO <sub>x</sub> (**) | -                | mg/kWh<br>input GCV                  | For water / brine-to-water chillers: Rated brine or | _                |                   | m³/h    |  |
| GWP of the refrigerant   | -                    | 675              | kg CO <sub>2 eq</sub> (100years)     | water flow rate, outdoor side heat exchanger        | -                |                   | 1117/11 |  |
| Standard rating conditions used   Low tempera                                |                      |                  | rature application                   |   |                  |                   |         |  |
| Contact details  Galletti S.p.A. Via L. Romagnol Tel: +39 051 8908111 Email: |                      |                  |                                      |   | o (BO) ITALY     |                   |         |  |
| (*) If Cdc is not dete<br>(**) From 26 Septe                                 |                      | easurement th    | en the default                       | degradation coefficient                             | of chillers sha  | all be 0,9.       |         |  |

| Model(s):                                    |                      | MLI 30 H0        |   |   |                 |                   |         |  |  |
|--|----------------------|------------------|---|---|-----------------|-------------------|---------|--|--|
| Outdoor side heat exchanger of chiller:      |                      |                  | Air to water  |   |                 |                   |         |  |  |
| Indoor side heat exchanger chiller:          |                      |                  | Water   |   |                 |                   |         |  |  |
| Type:  |                      |                  | Compressor driven vapour compression  |   |                 |                   |         |  |  |
| Driver of compressor:                        |                      |                  | Electric moto   | Electric motor                                      |                 |                   |         |  |  |
| Item   | Symbol               | Value            | Unit  | Item  | Symbol          | Value             | Unit    |  |  |
| Rated cooling capacity                       | P <sub>rated,c</sub> | 30.8             | kW  | Seasonal space cooling energy efficiency            | $\eta_{s,c}$    | 225               | %       |  |  |
| Declared cooling catemperature Tj            | apacity for pa       | rt load at given | outdoor   | Declared energy eff                                 |                 | or part load at ( | given   |  |  |
| Tj=+35℃                                      | P <sub>dc</sub>      | 30.8             | kW  | Tj=+35℃   | EERd            | 3.79              | -       |  |  |
| Tj=+30°C                                     | P <sub>dc</sub>      | 22.1             | kW  | Tj=+30℃   | EERd            | 5.06              | -       |  |  |
| Tj=+25°C                                     | P <sub>dc</sub>      | 13.9             | kW  | Tj=+25°℃  | EERd            | 6.33              | -       |  |  |
| Tj=+20°C                                     | P <sub>dc</sub>      | 6.3              | kW  | Tj=+20℃   | EERd            | 7.01              | -       |  |  |
| Degradation co-efficient for chillers (*)    | C <sub>dc</sub>      | 0.9              | -   |   |                 |                   |         |  |  |
| ,  |                      | Power cons       | sumption in mo  | des other than "active r                            | mode"           |                   |         |  |  |
| Off mode                                     | P <sub>OFF</sub>     | 0.017            | kW  | Crankcase heater mode                               | P <sub>CK</sub> | 0.000             | kW      |  |  |
| Thermosat-off mode                           | P <sub>TO</sub>      | 0.084            | kW  | Standby mode  | P <sub>SB</sub> | 0.017             | kW      |  |  |
|  |                      |                  | Othe  | er items  |                 |                   |         |  |  |
| Capacity control                             |                      | variable         |   | For air-to-water comfort chillers:                  |                 | 10650             | m³/h    |  |  |
| Sound power level, indoors / outdoors        | L <sub>WA</sub>      | -/77             | dB  | air flow rate,<br>outdoor measured                  |                 |                   |         |  |  |
| Emissions of nitroger oxides (if applicable) | NO <sub>x</sub> (**) | -                | mg/kWh<br>input GCV   | For water / brine-to-water chillers: Rated brine or | _               |                   | m³/h    |  |  |
| GWP of the refrigerant                       | -                    | 675              | kg CO <sub>2 eq</sub> (100years)  | water flow rate, outdoor side heat exchanger        | -               |                   | 1117/11 |  |  |
| Standard rating conditions used Medium tem   |                      |                  | nperature application   |   |                 |                   |         |  |  |
|  |                      |                  | via L. Romagnoli 12/a 40010 - Bentivoglio (BO) ITALY<br>3908111 Email: info@galletti.it |   |                 |                   |         |  |  |
| (*) If Cdc is not dete<br>(**) From 26 Septe |                      | easurement th    | en the default  | degradation coefficient                             | of chillers sha | all be 0,9.       |         |  |  |

|           | Mode                |       |       | Heatir | ng    |       | Coc   | Cooling |  |
|-----------|---------------------|-------|-------|--------|-------|-------|-------|---------|--|
| Model     | Ambient temperature | 7/6   |       |        | 2/1   | -7/-8 | 35    | /24     |  |
|           | Water temperature   | 30-35 | 40-45 | 47-55  | 30-35 | 30-35 | 23-18 | 12-7    |  |
|           | Capacity /W         | 18000 | 18000 | 18000  | 18000 | 18000 | 18500 | 17000   |  |
| MLI 18 H0 | Power input /W      | 3830  | 5143  | 6545   | 5325  | 6667  | 3895  | 5574    |  |
|           | COP / EER           | 4.70  | 3.50  | 2.75   | 3.38  | 2.70  | 4.75  | 3.05    |  |
|           | Capacity /W         | 22000 | 22000 | 22000  | 22000 | 21000 | 23000 | 21000   |  |
| MLI 22 H0 | Power input /W      | 5000  | 6471  | 8302   | 7097  | 8077  | 5000  | 7119    |  |
|           | COP / EER           | 4.40  | 3.40  | 2.65   | 3.10  | 2.60  | 4.60  | 2.95    |  |
|           | Capacity /W         | 26000 | 26000 | 26000  | 24000 | 22000 | 27000 | 26000   |  |
| MLI 26 H0 | Power input /W      | 6373  | 8387  | 10612  | 8333  | 8800  | 6279  | 9630    |  |
|           | COP / EER           | 4.08  | 3.10  | 2.45   | 2.88  | 2.50  | 4.30  | 2.70    |  |
|           | Capacity /W         | 30100 | 30000 | 30000  | 26000 | 23000 | 31000 | 29500   |  |
| MLI 30 H0 | Power input /W      | 7698  | 10345 | 13043  | 9286  | 9388  | 7750  | 11569   |  |
|           | COP / EER           | 3.91  | 2.90  | 2.30   | 2.80  | 2.45  | 4.00  | 2.55    |  |

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