

Templari heat pumps full load and variable load performance data with external air temperature as in columns A, B, C and D in compliance with UNI/TS 11300-4 law

| Heat Pump air/water KITA Mi Cold |                  |      |                  |      |                  |      |
|----------------------------------|------------------|------|------------------|------|------------------|------|
| Full load performance            |                  |      |                  |      |                  |      |
| T (C°) water temp.               | 35               |      | 45               |      | 55               |      |
| T (C°) out temp.                 | Heat output [kW] | COP  | Heat output [kW] | COP  | Heat output [kW] | COP  |
| -20                              | 12,20            | 2,46 | 12,00            | 2,02 | 11,80            | 1,56 |
| -15                              | 13,80            | 2,65 | 13,40            | 2,14 | 13,00            | 1,80 |
| -10                              | 14,50            | 2,71 | 14,40            | 2,42 | 14,20            | 1,88 |
| -7                               | 15,00            | 2,98 | 14,80            | 2,58 | 14,70            | 2,09 |
| 2                                | 15,00            | 4,05 | 15,00            | 3,24 | 15,00            | 2,52 |
| 7                                | 15,00            | 4,93 | 15,00            | 3,72 | 15,00            | 2,75 |
| 12                               | 15,00            | 5,50 | 15,00            | 4,28 | 15,00            | 3,26 |

| Heat Pump air/water KITA Mi Cold |      |      |      |      |
|----------------------------------|------|------|------|------|
| Correction Factor calculation    | A    | B    | C    | D    |
| Out temp. [°C]                   | -7   | 2    | 7    | 12   |
| PLR                              | 88%  | 54%  | 35%  | 15%  |
| Heat output [kW]                 | 15   | 15   | 15   | 15   |
| CR                               | 1,00 | 0,61 | 0,40 | 0,17 |
| COP (full load performance)      | 3,14 | 4,05 | 4,93 | 5,5  |
| COP (partial load performance)   | 3,14 | 5,3  | 5,9  | 6,25 |
| fcop                             | 1,00 | 1,31 | 1,20 | 1,14 |

$T_{design} = -10^{\circ}C$

$T_{H20, out} = 35^{\circ}C$

SCOP [Average\_low temp] 4,84