

Rev/0625

Technical parameters for heat pump space heaters and heat pump combination heaters

|                                                                                                                                                                                                        |                             |       |      |                                                                                                                                   |                  |        |        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-------|------|-----------------------------------------------------------------------------------------------------------------------------------|------------------|--------|--------|
| Model(s):                                                                                                                                                                                              |                             |       |      | IPHP 019 R290                                                                                                                     |                  |        |        |
| Air-to-water heat pump:                                                                                                                                                                                |                             |       |      | yes                                                                                                                               |                  |        |        |
| Water-to-water heat pump:                                                                                                                                                                              |                             |       |      | no                                                                                                                                |                  |        |        |
| Brine-to-water heat pump:                                                                                                                                                                              |                             |       |      | no                                                                                                                                |                  |        |        |
| Low-temperature heat pump:                                                                                                                                                                             |                             |       |      | yes                                                                                                                               |                  |        |        |
| Equipped with a supplementary heater:                                                                                                                                                                  |                             |       |      | no                                                                                                                                |                  |        |        |
| Heat pump combination heater:                                                                                                                                                                          |                             |       |      | yes                                                                                                                               |                  |        |        |
| Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low- temperature heat pumps, parameters shall be declared for low-temperature application. |                             |       |      |                                                                                                                                   |                  |        |        |
| Parameters shall be declared for average, colder and warmer climate conditions.                                                                                                                        |                             |       |      |                                                                                                                                   |                  |        |        |
| Item                                                                                                                                                                                                   | Symbol                      | Value | Unit | Item                                                                                                                              | Symbol           | Value  | Unit   |
| Rated heat output (*)                                                                                                                                                                                  | Prated                      | 52    | kW   | Seasonal space heating energy efficiency                                                                                          | η sh             | 164.00 | %      |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j                                                                                                    |                             |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T j |                  |        |        |
| T j = − 7 °C                                                                                                                                                                                           | Pdh                         | 45.0  | kW   | T j = − 7 °C                                                                                                                      | COPd or PERd     | 2.73   | – or % |
| T j = + 2 °C                                                                                                                                                                                           | Pdh                         | 27.4  | kW   | T j = + 2 °C                                                                                                                      | COPd or PERd     | 3.90   | – or % |
| T j = + 7 °C                                                                                                                                                                                           | Pdh                         | 21.0  | kW   | T j = + 7 °C                                                                                                                      | COPd or PERd     | 6.01   | – or % |
| T j = + 12 °C                                                                                                                                                                                          | Pdh                         | 22.9  | kW   | T j = + 12 °C                                                                                                                     | COPd or PERd     | 7.84   | – or % |
| T j = bivalent temperature                                                                                                                                                                             | Pdh                         | 45.0  | kW   | T j = bivalent temperature                                                                                                        | COPd or PERd     | 2.73   | – or % |
| T j = operation limit temperature                                                                                                                                                                      | Pdh                         | 41.2  | kW   | T j = operation limit temperature                                                                                                 | COPd or PERd     | 2.47   | – or % |
| For air-to-water heat pumps: T j = − 15 °C (if TOL < − 20 °C)                                                                                                                                          | Pdh                         | 0.0   | kW   | For air-to-water heat pumps: T j = − 15 °C (if TOL < − 20 °C)                                                                     | COPd or PERd     | 0.00   | – or % |
| Bivalent temperature                                                                                                                                                                                   | T biv                       | -7    | °C   | For air-to-water heat pumps: Operation limit temperature                                                                          | TOL              | -10    | °C     |
| Cycling interval capacity for heating                                                                                                                                                                  | Pcyc                        | 0.0   | kW   | Cycling interval efficiency                                                                                                       | COPcyc or PERcyc | 0.00   | – or % |
| Degradation co-efficient (**)                                                                                                                                                                          | Cdh                         | 0.9   | —    | Heating water operating limit temperature                                                                                         | WTOL             | 0      | °C     |
| Power consumption in modes other than active mode                                                                                                                                                      |                             |       |      | Supplementary heater                                                                                                              |                  |        |        |
| Off mode                                                                                                                                                                                               | P OFF                       | 0.00  | kW   | Rated heat output (*)                                                                                                             | Psup             | 0.0    | kW     |
| Thermostat-off mode                                                                                                                                                                                    | P TO                        | 0.51  | kW   | Type of energy input                                                                                                              | Electricity      |        |        |
| Standby mode                                                                                                                                                                                           | P SB                        | 0.12  | kW   |                                                                                                                                   |                  |        |        |
| Crankcase heater mode                                                                                                                                                                                  | P CK                        | 0.00  | kW   |                                                                                                                                   |                  |        |        |
| Other items                                                                                                                                                                                            |                             |       |      | Electricity                                                                                                                       |                  |        |        |
| Capacity control                                                                                                                                                                                       | Variable                    |       |      | For air-to-water heat pumps: Rated air flow rate, outdoors                                                                        | —                | 40308  | m ³/h  |
| Sound power level, indoors/ outdoors                                                                                                                                                                   | LWA                         | 85    | dB   | For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger                                      | —                | 0      | m ³/h  |
| Annual energy consumption                                                                                                                                                                              | QHE                         | 25693 | kWh  |                                                                                                                                   |                  |        |        |
| Declared load profile                                                                                                                                                                                  | Average                     |       |      | Water heating energy efficiency                                                                                                   | η wh             | -      | %      |
| Daily electricity consumption                                                                                                                                                                          | Q elec                      | -     | kWh  | Daily fuel consumption                                                                                                            | Q fuel           | -      | kWh    |
| Annual electricity consumption                                                                                                                                                                         | AEC                         | -     | kWh  | Annual fuel consumption                                                                                                           | AFC              | -      | Gj     |
| Contact details                                                                                                                                                                                        | TRANE 88190 Golbey - France |       |      |                                                                                                                                   |                  |        |        |
| Item                                                                                                                                                                                                   |                             |       |      |                                                                                                                                   |                  |        |        |