

Required details about room heater and combi heater with heat pump to regulation (EU) no. 813/2013 & 811/2013

|   |    | HPA-O 8 CS Plus compact Set 1.1 |      |
|---|----|---------------------------------|------|
|   |    | 204270                          |      |
| Manufacturer  |    | STIEBEL ELTRON                  |      |
| Heat source   |    | Outside air                     |      |
| Combi boiler with heat pump   |    |                                 | x    |
| Rated heating output in colder climates for average temperature applications (Prated)           | kW |                                 | 11   |
| Rated heating output in moderate climates for average temperature applications (Prated)         | kW |                                 | 8    |
| Rated heating output in warmer climates for average temperature applications (Prated)           | kW |                                 | 6    |
| Tj = -7 °C heating output, partial load range in colder climates (Pdh)                          | kW |                                 | 6.6  |
| Tj = -7 °C heating output, partial load range under moderate climatic conditions (Pdh)          | kW |                                 | 5.1  |
| Tj = 2 °C heating output, partial load range in colder climates (Pdh)                           | kW |                                 | 4.0  |
| Tj = 2 °C heating output, partial load range under moderate climatic conditions (Pdh)           | kW |                                 | 4.1  |
| Tj = 2 °C heating output, partial load range in warmer climates (Pdh)                           | kW |                                 | 6.0  |
| Tj = 7 °C heating output, partial load range in colder climates (Pdh)                           | kW |                                 | 2.7  |
| Tj = 7 °C heating output, partial load range under moderate climatic conditions (Pdh)           | kW |                                 | 2.6  |
| Tj = 7 °C heating output, partial load range in warmer climates (Pdh)                           | kW |                                 | 3.9  |
| Tj = 12 °C heating output, partial load range in colder climates (Pdh)                          | kW |                                 | 3.4  |
| Tj = 12 °C heating output, partial load range under moderate climatic conditions (Pdh)          | kW |                                 | 3.3  |
| Tj = 12 °C heating output, partial load range in warmer climates (Pdh)                          | kW |                                 | 3.3  |
| Tj = dual mode temperature in colder climates (Pdh)   | kW |                                 | 6.6  |
| Tj = dual mode temperature under moderate climatic conditions (Pdh)                             | kW |                                 | 6.1  |
| Tj = dual mode temperature in warmer climates (Pdh)   | kW |                                 | 6.0  |
| Tj = operating temperature limit in colder climates (Pdh)                                       | kW |                                 | 1.8  |
| Tj = operating temperature limit under moderate climatic conditions (Pdh)                       | kW |                                 | 5.1  |
| Tj = operating temperature limit in warmer climates (Pdh)                                       | kW |                                 | 6.0  |
| For air/water heat pumps: Tj = -15 °C (if TOL < -20 °C) (Pdh)                                   | kW |                                 | 0.0  |
| Dual mode temperature in colder climates (Tbiv)   | °C |                                 | -7   |
| Dual mode temperature in moderate climates (Tbiv)   | °C |                                 | -5   |
| Dual mode temperature in warmer climates (Tbiv)   | °C |                                 | 2    |
| Seasonal room heating efficiency in colder climates for average temperature applications (ηs)   | %  |                                 | 103  |
| Seasonal room heating efficiency in moderate climates for average temperature applications (ηs) | %  |                                 | 125  |
| Seasonal room heating efficiency in warmer climates for average temperature applications (ηs)   | %  |                                 | 153  |
| Tj = -7 °C COP, partial load range in colder climates (COPd)                                    |    |                                 | 2.40 |
| Tj = -7 °C COP, partial load range under moderate climatic conditions (COPd)                    |    |                                 | 2.00 |
| Tj = 2 °C COP, partial load range in colder climates (COPd)                                     |    |                                 | 3.60 |
| Tj = 2 °C COP, partial load range under moderate climatic conditions (COPd)                     |    |                                 | 3.30 |
| Tj = 2 °C COP, partial load range in warmer climates (COPd)                                     |    |                                 | 2.20 |
| Tj = 7 °C COP, partial load range in colder climates (COPd)                                     |    |                                 | 5.00 |
| Tj = 7 °C COP, partial load range under moderate climatic conditions (COPd)                     |    |                                 | 4.60 |
| Tj = 7 °C COP, partial load range in warmer climates (COPd)                                     |    |                                 | 3.20 |
| Tj = 12 °C COP, partial load range in colder climates (COPd)                                    |    |                                 | 6.20 |
| Tj = 12 °C COP, partial load range under moderate climatic conditions (COPd)                    |    |                                 | 6.0  |
| Tj = 12 °C COP, partial load range in warmer climates (COPd)                                    |    |                                 | 5.70 |
| Tj = dual mode temperature in colder climates (COPd)  |    |                                 | 2.40 |
| Tj = dual mode temperature under moderate climatic conditions (COPd)                            |    |                                 | 2.30 |
| Tj = dual mode temperature in warmer climates (COPd)  |    |                                 | 2.20 |
| Tj = operating temperature limit in colder climates (COPd)                                      |    |                                 | 1.40 |

|   |                   |          |
|---|-------------------|----------|
| Tj = operating temperature limit under moderate climatic conditions (COPd)                |                   | 2.00     |
| Tj = operating temperature limit in warmer climates (COPd)                                |                   | 2.20     |
| For air/water heat pumps: Tj= -15 °C (if TOL < -20 °C) (COPd)                             |                   | 0.00     |
| Operating temperature limit in colder climates (TOL)                                      | °C                | -15      |
| Operating temperature limit in moderate climates (TOL)                                    | °C                | -5       |
| Operating temperature limit in warmer climates (TOL)                                      | °C                | 2        |
| Heating water operating temperature limit in colder climates (WTOL)                       | °C                | 60       |
| Heating water operating temperature limit (WTOL)  | °C                | 60       |
| Heating water operating temperature limit in warmer climates (WTOL)                       | °C                | 60       |
| Power consumption, OFF state (Poff)   | W                 | 17       |
| Power consumption, thermostat OFF state (PTO)   | W                 | 30       |
| Standby power consumption (PSB)   | W                 | 17       |
| Power consumption, operating state, with crankcase heating (PCK)                          | W                 | 5        |
| Booster heater heating output in colder climates (Psup)                                   | kW                | 11.0     |
| Booster heater heating output in moderate climate (Psup)                                  | kW                | 8.0      |
| Booster heater heating output in warmer climates (Psup)                                   | kW                | 0.0      |
| Type of energy supply, booster heater   |                   | electric |
| Power control   |                   | variable |
| Sound power level external  | dB(A)             | 57       |
| Annual energy consumption in colder climates for average temperature applications (QHE)   | kWh/a             | 10193    |
| Annual energy consumption in moderate climates for average temperature applications (QHE) | kWh/a             | 4865     |
| Annual energy consumption in warmer climates for average temperature applications (QHE)   | kWh/a             | 2048     |
| Flow rate, heat source side   | m <sup>3</sup> /h | 2200     |
| Load profile  |                   | L        |
| Daily power consumption (Qelec)   | kWh               | 4.791    |
| Annual power consumption in moderate climates (AEC)                                       | kWh/a             | 1007     |
| Energy efficiency for DHW heating ( $\Gamma_{wh}$ ) under moderate climatic conditions    | %                 | 101,7    |