

## Subtype HPA-O 13 Premium, HPA-O 13 C Premium

|                     |   |
|---------------------|---|
| Certificate Holder  | STIEBEL ELTRON GmbH & Co KG                           |
| Address             | Dr. Stiebel Straße 33                                 |
| ZIP                 | 37603   |
| City                | Holzminden  |
| Country             | DE  |
| Certification Body  | DIN CERTCO Gesellschaft für Konformitätsbewertung mbH |
| Subtype title       | HPA-O 13 Premium, HPA-O 13 C Premium                  |
| Registration number | 011-1W0232  |
| Heat Pump Type      | Outdoor Air/Water                                     |
| Refrigerant         | R410A   |
| Mass of Refrigerant | 4.7 kg  |
| Certification Date  | 08.01.2018  |

## Model HPA-O 13 Premium

|                                     |                                |
|-------------------------------------|--------------------------------|
| Model name                          | HPA-O 13 Premium               |
| Application                         | Heating (medium temp)          |
| Units                               | Outdoor                        |
| Climate zone (for heating)          | Warmer Climate, Colder Climate |
| Reversibility                       | Yes                            |
| Cooling mode application (optional) | n/a                            |
| Any additional heat sources         | n/a                            |

## General data

|                  |             |
|------------------|-------------|
| Power supply     | 3x400V 50Hz |
| Off-peak product | n/a         |

## Outdoor Air/Water

### EN 14511-4 | Heating

|  |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

### EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 55 dB(A)        | 55 dB(A)           |

### EN 14825 | Average Climate

|                 | Low temperature | Medium temperature |
|-----------------|-----------------|--------------------|
| $\eta_s$        | 182 %           | 141 %              |
| Prated          | 15.00 kW        | 15.00 kW           |
| SCOP            | 4.63            | 3.59               |
| Tbiv            | -5 °C           | -5 °C              |
| TOL             | -20 °C          | -20 °C             |
| Pdh Tj = -7°C   | 12.80 kW        | 13.20 kW           |
| COP Tj = -7°C   | 2.98            | 2.48               |
| Cdh Tj = -7 °C  | 1.000           | 1.000              |
| Pdh Tj = +2°C   | 8.30 kW         | 8.40 kW            |
| COP Tj = +2°C   | 4.72            | 3.51               |
| Cdh Tj = +2 °C  | 1.000           | 1.000              |
| Pdh Tj = +7°C   | 8.00 kW         | 7.80 kW            |
| COP Tj = +7°C   | 6.16            | 4.61               |
| Cdh Tj = +7 °C  | 1.000           | 1.000              |
| Pdh Tj = 12°C   | 9.10 kW         | 9.00 kW            |
| COP Tj = 12°C   | 8.11            | 6.66               |
| Cdh Tj = +12 °C | 1.000           | 1.000              |
| Pdh Tj = Tbiv   | 11.80 kW        | 12.50 kW           |
| COP Tj = Tbiv   | 3.16            | 2.59               |

|   |             |             |
|---|-------------|-------------|
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.60 kW    | 13.40 kW    |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.87        | 2.28        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh |             |             |
| WTOL  | 65 °C       | 65 °C       |
| Poff  | 10 W        | 10 W        |
| PTO   | 10 W        | 10 W        |
| PSB   | 10 W        | 10 W        |
| PCK   | 38 W        | 38 W        |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 2.40 kW     | 1.60 kW     |
| Annual energy consumption Qhe                       | 6689 kWh    | 8620 kWh    |

#### EN 14825 | Colder Climate

|   | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| $\eta_s$  | 159 %           | 130 %              |
| Prated  | 21.00 kW        | 22.00 kW           |
| SCOP  | 4.05            | 3.33               |
| Tbiv  | -10 °C          | -10 °C             |
| TOL   | -20 °C          | -20 °C             |
| Pdh Tj = -7°C                                       | 12.60 kW        | 13.30 kW           |
| COP Tj = -7°C                                       | 3.13            | 2.67               |
| Cdh Tj = -7 °C                                      | 1.00            | 1.00               |
| Pdh Tj = +2°C                                       | 8.30 kW         | 8.30 kW            |
| COP Tj = +2°C                                       | 5.15            | 3.92               |
| Cdh Tj = +2 °C                                      | 1.00            | 1.00               |
| Pdh Tj = +7°C                                       | 8.00 kW         | 7.90 kW            |
| COP Tj = +7°C                                       | 6.57            | 5.12               |
| Cdh Tj = +7 °C                                      | 1.00            | 1.00               |
| Pdh Tj = 12°C                                       | 9.10 kW         | 9.00 kW            |
| COP Tj = 12°C                                       | 8.11            | 6.95               |
| Cdh Tj = +12 °C                                     | 1.00            | 1.00               |
| Pdh Tj = Tbiv                                       | 14.10 kW        | 15.20 kW           |
| COP Tj = Tbiv                                       | 2.90            | 2.53               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 16.70 kW        | 18.30 kW           |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.66            | 2.37               |
| WTOL  | 65 °C           | 65 °C              |
| Poff  | 10 W            | 10 W               |
| PTO   | 10 W            | 10 W               |
| PSB   | 10 W            | 10 W               |
| PCK   | 38 W            | 38 W               |

|  |             |             |
|--|-------------|-------------|
| Supplementary Heater: Type of energy input     | Electricity | Electricity |
| Supplementary Heater: PSUP                     | 20.59 kW    | 22.15 kW    |
| Annual energy consumption Q <sub>he</sub>      | 12796 kWh   | 16285 kWh   |
| P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL | 16.70       | 18.30       |
| COP T <sub>j</sub> = -15°C (if TOL             | 2.66        | 2.37        |
| C <sub>dh</sub> T <sub>j</sub> = -15 °C        | 1.00        | 1.00        |

#### EN 14825 | Warmer Climate

|   | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η <sub>s</sub>  | 219 %           | 163 %              |
| Prated  | 8.00 kW         | 8.00 kW            |
| SCOP  | 5.54            | 4.14               |
| T <sub>biv</sub>  | 2 °C            | 2 °C               |
| TOL   | 2 °C            | 2 °C               |
| P <sub>dh</sub> T <sub>j</sub> = +2°C   | 8.30 kW         | 8.40 kW            |
| COP T <sub>j</sub> = +2°C   | 4.14            | 2.74               |
| C <sub>dh</sub> T <sub>j</sub> = +2 °C  | 1.00            | 1.00               |
| P <sub>dh</sub> T <sub>j</sub> = +7°C   | 7.90 kW         | 7.50 kW            |
| COP T <sub>j</sub> = +7°C   | 5.47            | 3.64               |
| C <sub>dh</sub> T <sub>j</sub> = +7 °C  | 1.00            | 1.00               |
| P <sub>dh</sub> T <sub>j</sub> = 12°C   | 9.10 kW         | 9.00 kW            |
| COP T <sub>j</sub> = 12°C   | 7.72            | 6.11               |
| C <sub>dh</sub> T <sub>j</sub> = +12 °C   | 1.00            | 1.00               |
| P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>   | 8.30 kW         | 8.40 kW            |
| COP T <sub>j</sub> = T <sub>biv</sub>   | 4.14            | 2.74               |
| P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub> | 16.90 kW        | 18.80 kW           |
| COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>                         | 2.61            | 2.31               |
| WTOL  | 65 °C           | 65 °C              |
| P <sub>off</sub>  | 10 W            | 10 W               |
| PTO   | 10 W            | 10 W               |
| PSB   | 10 W            | 10 W               |
| PCK   | 38 W            | 38 W               |
| Supplementary Heater: Type of energy input  | Electricity     | Electricity        |
| Supplementary Heater: PSUP  | 0.00 kW         | 0.00 kW            |
| Annual energy consumption Q <sub>he</sub>   | 1930 kWh        | 2581 kWh           |

## Model HPA-O 13 C Premium

|                                     |                                |
|-------------------------------------|--------------------------------|
| Model name                          | HPA-O 13 C Premium             |
| Application                         | Heating (medium temp)          |
| Units                               | Outdoor                        |
| Climate zone (for heating)          | Warmer Climate, Colder Climate |
| Reversibility                       | Yes                            |
| Cooling mode application (optional) | n/a                            |
| Any additional heat sources         | n/a                            |

## General data

|                  |             |
|------------------|-------------|
| Power supply     | 3x400V 50Hz |
| Off-peak product | n/a         |

## Outdoor Air/Water

### EN 14511-4 | Heating

|  |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

### EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 55 dB(A)        | 55 dB(A)           |

### EN 14825 | Average Climate

|                 | Low temperature | Medium temperature |
|-----------------|-----------------|--------------------|
| $\eta_s$        | 187 %           | 144 %              |
| Prated          | 15.00 kW        | 15.00 kW           |
| SCOP            | 4.76            | 3.67               |
| Tbiv            | -5 °C           | -5 °C              |
| TOL             | -20 °C          | -20 °C             |
| Pdh Tj = -7°C   | 12.80 kW        | 13.20 kW           |
| COP Tj = -7°C   | 2.98            | 2.48               |
| Cdh Tj = -7 °C  | 1.000           | 1.000              |
| Pdh Tj = +2°C   | 8.30 kW         | 8.40 kW            |
| COP Tj = +2°C   | 4.72            | 3.51               |
| Cdh Tj = +2 °C  | 1.000           | 1.000              |
| Pdh Tj = +7°C   | 8.00 kW         | 7.80 kW            |
| COP Tj = +7°C   | 6.16            | 4.61               |
| Cdh Tj = +7 °C  | 1.000           | 1.000              |
| Pdh Tj = 12°C   | 9.10 kW         | 9.00 kW            |
| COP Tj = 12°C   | 8.11            | 6.66               |
| Cdh Tj = +12 °C | 1.000           | 1.000              |
| Pdh Tj = Tbiv   | 11.80 kW        | 12.50 kW           |
| COP Tj = Tbiv   | 3.16            | 2.59               |

|   |             |             |
|---|-------------|-------------|
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.60 kW    | 13.40 kW    |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.87        | 2.28        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh |             |             |
| WTOL  | 65 °C       | 65 °C       |
| Poff  | 10 W        | 10 W        |
| PTO   | 10 W        | 10 W        |
| PSB   | 10 W        | 10 W        |
| PCK   | 38 W        | 38 W        |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 2.40 kW     | 1.60 kW     |
| Annual energy consumption Qhe                       | 6513 kWh    | 8444 kWh    |

### EN 14825 | Colder Climate

|   | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| ηs  | 160 %           | 131 %              |
| Prated  | 21.00 kW        | 22.00 kW           |
| SCOP  | 4.08            | 3.35               |
| Tbiv  | -10 °C          | -10 °C             |
| TOL   | -20 °C          | -20 °C             |
| Pdh Tj = -7°C                                       | 12.60 kW        | 13.30 kW           |
| COP Tj = -7°C                                       | 3.13            | 2.67               |
| Cdh Tj = -7 °C                                      | 1.00            | 1.00               |
| Pdh Tj = +2°C                                       | 8.30 kW         | 8.30 kW            |
| COP Tj = +2°C                                       | 5.15            | 3.92               |
| Cdh Tj = +2 °C                                      | 1.00            | 1.00               |
| Pdh Tj = +7°C                                       | 8.00 kW         | 7.90 kW            |
| COP Tj = +7°C                                       | 6.57            | 5.12               |
| Cdh Tj = +7 °C                                      | 1.00            | 1.00               |
| Pdh Tj = 12°C                                       | 9.10 kW         | 9.00 kW            |
| COP Tj = 12°C                                       | 8.11            | 6.95               |
| Cdh Tj = +12 °C                                     | 1.00            | 1.00               |
| Pdh Tj = Tbiv                                       | 14.10 kW        | 15.20 kW           |
| COP Tj = Tbiv                                       | 2.90            | 2.53               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 16.70 kW        | 18.30 kW           |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.66            | 2.37               |
| WTOL  | 65 °C           | 65 °C              |
| Poff  | 10 W            | 10 W               |
| PTO   | 10 W            | 10 W               |
| PSB   | 10 W            | 10 W               |
| PCK   | 38 W            | 38 W               |

|  |             |             |
|--|-------------|-------------|
| Supplementary Heater: Type of energy input     | Electricity | Electricity |
| Supplementary Heater: PSUP                     | 20.59 kW    | 22.15 kW    |
| Annual energy consumption Q <sub>he</sub>      | 12690 kWh   | 16179 kWh   |
| P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL | 16.70       | 18.30       |
| COP T <sub>j</sub> = -15°C (if TOL             | 2.66        | 2.37        |
| C <sub>dh</sub> T <sub>j</sub> = -15 °C        | 1.00        | 1.00        |

#### EN 14825 | Warmer Climate

|   | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η <sub>s</sub>  | 246 %           | 177 %              |
| Prated  | 8.00 kW         | 8.00 kW            |
| SCOP  | 6.22            | 4.51               |
| T <sub>biv</sub>  | 2 °C            | 2 °C               |
| TOL   | 2 °C            | 2 °C               |
| P <sub>dh</sub> T <sub>j</sub> = +2°C   | 8.30 kW         | 8.40 kW            |
| COP T <sub>j</sub> = +2°C   | 4.14            | 2.74               |
| C <sub>dh</sub> T <sub>j</sub> = +2 °C  | 1.00            | 1.00               |
| P <sub>dh</sub> T <sub>j</sub> = +7°C   | 7.90 kW         | 7.50 kW            |
| COP T <sub>j</sub> = +7°C   | 5.47            | 3.64               |
| C <sub>dh</sub> T <sub>j</sub> = +7 °C  | 1.00            | 1.00               |
| P <sub>dh</sub> T <sub>j</sub> = 12°C   | 9.10 kW         | 9.00 kW            |
| COP T <sub>j</sub> = 12°C   | 7.72            | 6.11               |
| C <sub>dh</sub> T <sub>j</sub> = +12 °C   | 1.00            | 1.00               |
| P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>   | 8.30 kW         | 8.40 kW            |
| COP T <sub>j</sub> = T <sub>biv</sub>   | 4.14            | 2.74               |
| P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub> | 16.90 kW        | 18.80 kW           |
| COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>                         | 2.61            | 2.31               |
| WTOL  | 65 °C           | 65 °C              |
| P <sub>off</sub>  | 10 W            | 10 W               |
| PTO   | 10 W            | 10 W               |
| PSB   | 10 W            | 10 W               |
| PCK   | 38 W            | 38 W               |
| Supplementary Heater: Type of energy input  | Electricity     | Electricity        |
| Supplementary Heater: PSUP  | 0.00 kW         | 0.00 kW            |
| Annual energy consumption Q <sub>he</sub>   | 1718 kWh        | 2369 kWh           |