

This information was generated by the HP KEYMARK database on 18 Dec 2020

|                     |   |          |            |
|---------------------|---|----------|------------|
| Summary of          | WPF 16, WPF 16 cool                                   | Reg. No. | 011-1W0027 |
| Certificate Holder  |   |          |            |
| Name                | STIEBEL ELTRON GmbH & Co KG                           |          |            |
| Address             | Dr. Stiebel Straße 33                                 | Zip      | 37603      |
| City                | Holzminden  | Country  | Germany    |
| Certification Body  | DIN CERTCO Gesellschaft für Konformitätsbewertung mbH |          |            |
| Subtype title       | WPF 16, WPF 16 cool                                   |          |            |
| Heat Pump Type      | Brine/Water   |          |            |
| Refrigerant         | R410a   |          |            |
| Mass Of Refrigerant | 2.35 kg   |          |            |
| Certification Date  | 13.10.2016  |          |            |

## Model: WPF 16, average climates

### General Data

|              |             |
|--------------|-------------|
| Power supply | 3x400V 50Hz |
|--------------|-------------|

### Heating

#### EN 14511-4

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

#### EN 14511-2

|                        | Low temperature        | Medium temperature     |
|------------------------|------------------------|------------------------|
| Heat output            | 17.02 kW               | 15.60 kW               |
| El input               | 3.75 kW                | 4.45 kW                |
| COP                    | 4.54                   | 2.89                   |
| Indoor water flow rate | 2.91 m <sup>3</sup> /h | 2.91 m <sup>3</sup> /h |

### Average Climate

This information was generated by the HP KEYMARK database on 18 Dec 2020

### EN 12102-1

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 55 dB(A)        | 55 dB(A)           |
| Sound power level outdoor | 0 dB(A)         | 0 dB(A)            |

### EN 14825

|               | Low temperature | Medium temperature |
|---------------|-----------------|--------------------|
| $\eta_s$      | 189 %           | 134 %              |
| Prated        | 17.00 kW        | 16.00 kW           |
| SCOP          | 4.93            | 3.54               |
| Tbiv          | -10 °C          | -10 °C             |
| TOL           | -20 °C          | -10 °C             |
| Pdh Tj = -7°C | 17.00 kW        | 15.90 kW           |
| COP Tj = -7°C | 4.59            | 3.01               |
| Pdh Tj = +2°C | 17.20 kW        | 16.30 kW           |
| COP Tj = +2°C | 4.88            | 3.49               |
| Pdh Tj = +7°C | 17.30 kW        | 16.60 kW           |
| COP Tj = +7°C | 5.16            | 3.85               |
| Pdh Tj = 12°C | 17.40 kW        | 16.90 kW           |
| COP Tj = 12°C | 5.48            | 4.27               |
| Pdh Tj = Tbiv | 17.00 kW        | 15.80 kW           |

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|   |                     |                     |
|---|---------------------|---------------------|
| COP $T_j = T_{biv}$   | 4.54                | 2.89                |
| $P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$ | 17.00 kW            | 15.80 kW            |
| COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$       | 4.54                | 2.89                |
| Rated airflow rate  | 0 m <sup>3</sup> /h | 0 m <sup>3</sup> /h |
| $C_{dh}$  | 0.90                | 0.90                |
| WTOL  | 65 °C               | 65 °C               |
| $P_{off}$   | 0 W                 | 0 W                 |
| PTO   | 139 W               | 139 W               |
| PSB   | 9 W                 | 9 W                 |
| PCK   | 0 W                 | 0 W                 |
| Supplementary Heater: Type of energy input                              | electricity         | electricity         |
| Supplementary Heater: PSUP  | 0.00 kW             | 0.00 kW             |
| Annual energy consumption $Q_{he}$                                      | 7128 kWh            | 9198 kWh            |

Warmer Climate

Colder Climate

## Model: WPF 16, all climates

### General Data

|              |             |
|--------------|-------------|
| Power supply | 3x400V 50Hz |
|--------------|-------------|

## Heating

### EN 14511-4

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

### EN 14511-2

|                        |                        |
|------------------------|------------------------|
|                        | <b>Low temperature</b> |
| Heat output            | 17.02 kW               |
| El input               | 3.75 kW                |
| COP                    | 4.54                   |
| Indoor water flow rate | 2.91 m <sup>3</sup> /h |

## Average Climate

This information was generated by the HP KEYMARK database on 18 Dec 2020

### EN 12102-1

|                           | Low temperature |
|---------------------------|-----------------|
| Sound power level indoor  | 55 dB(A)        |
| Sound power level outdoor | 0 dB(A)         |

### EN 14825

|               | Low temperature |
|---------------|-----------------|
| $\eta_s$      | 189 %           |
| Prated        | 17.00 kW        |
| SCOP          | 4.93            |
| Tbiv          | -10 °C          |
| TOL           | -20 °C          |
| Pdh Tj = -7°C | 17.00 kW        |
| COP Tj = -7°C | 4.59            |
| Pdh Tj = +2°C | 17.20 kW        |
| COP Tj = +2°C | 4.88            |
| Pdh Tj = +7°C | 17.30 kW        |
| COP Tj = +7°C | 5.16            |
| Pdh Tj = 12°C | 17.40 kW        |
| COP Tj = 12°C | 5.48            |
| Pdh Tj = Tbiv | 17.00 kW        |

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|   |                     |
|---|---------------------|
| COP $T_j = T_{biv}$   | 4.54                |
| $P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$ | 17.00 kW            |
| COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$       | 4.54                |
| Rated airflow rate  | 0 m <sup>3</sup> /h |
| $C_{dh}$  | 0.90                |
| WTOL  | 65 °C               |
| $P_{off}$   | 0 W                 |
| PTO   | 139 W               |
| PSB   | 9 W                 |
| PCK   | 0 W                 |
| Supplementary Heater: Type of energy input                              | electricity         |
| Supplementary Heater: PSUP  | 0.00 kW             |
| Annual energy consumption $Q_{he}$                                      | 7128 kWh            |

## Warmer Climate

| <b>EN 12102-1</b>         |                        |
|---------------------------|------------------------|
|                           | <b>Low temperature</b> |
| Sound power level indoor  | 55 dB(A)               |
| Sound power level outdoor | 0 dB(A)                |

| <b>EN 14825</b> |                        |
|-----------------|------------------------|
|                 | <b>Low temperature</b> |

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|   |          |
|---|----------|
| $\eta_s$  | 188 %    |
| Prated  | 17.00 kW |
| SCOP  | 4.91     |
| Tbiv  | 2 °C     |
| TOL   | 2 °C     |
| Pdh Tj = -7°C                                       | 0.00 kW  |
| COP Tj = -7°C                                       | 0.00     |
| Pdh Tj = +2°C                                       | 17.00 kW |
| COP Tj = +2°C                                       | 4.54     |
| Pdh Tj = +7°C                                       | 17.20 kW |
| COP Tj = +7°C                                       | 4.81     |
| Pdh Tj = 12°C                                       | 17.40 kW |
| COP Tj = 12°C                                       | 5.26     |
| Pdh Tj = Tbiv                                       | 17.00 kW |
| COP Tj = Tbiv                                       | 4.54     |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 17.00 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.54     |
| Rated airflow rate                                  | 0 m³/h   |
| Cdh   | 0.90     |
| WTOL  | 65 °C    |



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|  |             |
|--|-------------|
| Poff                                       | 0 W         |
| PTO  | 139 W       |
| PSB  | 9 W         |
| PCK  | 0 W         |
| Supplementary Heater: Type of energy input | electricity |
| Supplementary Heater: PSUP                 | 0.00 kW     |
| Annual energy consumption Qhe              | 4635 kWh    |

## Colder Climate

| <b>EN 12102-1</b>         |                        |
|---------------------------|------------------------|
|                           | <b>Low temperature</b> |
| Sound power level indoor  | 55 dB(A)               |
| Sound power level outdoor | 0 dB(A)                |

| <b>EN 14825</b> |                        |
|-----------------|------------------------|
|                 | <b>Low temperature</b> |
| $\eta_s$        | 194 %                  |
| Prated          | 21.00 kW               |
| SCOP            | 5.06                   |
| Tbiv            | -15 °C                 |
| TOL             | -22 °C                 |

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|   |             |
|---|-------------|
| Pdh Tj = -7°C                                       | 17.30 kW    |
| COP Tj = -7°C                                       | 5.02        |
| Pdh Tj = +2°C                                       | 17.30 kW    |
| COP Tj = +2°C                                       | 5.24        |
| Pdh Tj = +7°C                                       | 17.40 kW    |
| COP Tj = +7°C                                       | 5.43        |
| Pdh Tj = 12°C                                       | 17.40 kW    |
| COP Tj = 12°C                                       | 5.46        |
| Pdh Tj = Tbiv                                       | 17.20 kW    |
| COP Tj = Tbiv                                       | 4.92        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 17.20 kW    |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.92        |
| Rated airflow rate                                  | 0 m³/h      |
| Cdh   | 0.90        |
| WTOL  | 65 °C       |
| Poff  | 0 W         |
| PTO   | 139 W       |
| PSB   | 9 W         |
| PCK   | 0 W         |
| Supplementary Heater: Type of energy input          | electricity |
| Supplementary Heater: PSUP                          | 4.07 kW     |
|   |             |

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|   |           |
|---|-----------|
| Annual energy consumption Q <sub>he</sub> | 10274 kWh |
|---|-----------|

## Model: WPF 16 cool, average climates

### General Data

|              |             |
|--------------|-------------|
| Power supply | 3x400V 50Hz |
|--------------|-------------|

### Heating

#### EN 14511-4

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

#### EN 14511-2

|                        | Low temperature        | Medium temperature     |
|------------------------|------------------------|------------------------|
| Heat output            | 17.02 kW               | 15.60 kW               |
| El input               | 3.75 kW                | 4.45 kW                |
| COP                    | 4.54                   | 2.89                   |
| Indoor water flow rate | 2.91 m <sup>3</sup> /h | 2.91 m <sup>3</sup> /h |

### Average Climate

### EN 12102-1

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 55 dB(A)        | 55 dB(A)           |
| Sound power level outdoor | 0 dB(A)         | 0 dB(A)            |

### EN 14825

|               | Low temperature | Medium temperature |
|---------------|-----------------|--------------------|
| $\eta_s$      | 189 %           | 134 %              |
| Prated        | 17.00 kW        | 16.00 kW           |
| SCOP          | 4.93            | 3.54               |
| Tbiv          | -10 °C          | -10 °C             |
| TOL           | -20 °C          | -10 °C             |
| Pdh Tj = -7°C | 17.00 kW        | 15.90 kW           |
| COP Tj = -7°C | 4.59            | 3.01               |
| Pdh Tj = +2°C | 17.20 kW        | 16.30 kW           |
| COP Tj = +2°C | 4.88            | 3.49               |
| Pdh Tj = +7°C | 17.30 kW        | 16.60 kW           |
| COP Tj = +7°C | 5.16            | 3.85               |
| Pdh Tj = 12°C | 17.40 kW        | 16.90 kW           |
| COP Tj = 12°C | 5.48            | 4.27               |
| Pdh Tj = Tbiv | 17.00 kW        | 15.80 kW           |

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|   |                     |                     |
|---|---------------------|---------------------|
| COP $T_j = T_{biv}$   | 4.54                | 2.89                |
| $P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$ | 17.00 kW            | 15.80 kW            |
| COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$       | 4.54                | 2.89                |
| Rated airflow rate  | 0 m <sup>3</sup> /h | 0 m <sup>3</sup> /h |
| $C_{dh}$  | 0.90                | 0.90                |
| WTOL  | 65 °C               | 65 °C               |
| $P_{off}$   | 0 W                 | 0 W                 |
| PTO   | 139 W               | 139 W               |
| PSB   | 9 W                 | 9 W                 |
| PCK   | 0 W                 | 0 W                 |
| Supplementary Heater: Type of energy input                              | electricity         | electricity         |
| Supplementary Heater: PSUP  | 0.00 kW             | 0.00 kW             |
| Annual energy consumption $Q_{he}$                                      | 7128 kWh            | 9198 kWh            |

Warmer Climate

Colder Climate

## Model: WPF 16 cool, all climates

### General Data

|              |             |
|--------------|-------------|
| Power supply | 3x400V 50Hz |
|--------------|-------------|

### Heating

#### EN 14511-4

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

#### EN 14511-2

|                        |                        |
|------------------------|------------------------|
|                        | <b>Low temperature</b> |
| Heat output            | 17.02 kW               |
| El input               | 3.75 kW                |
| COP                    | 4.54                   |
| Indoor water flow rate | 2.91 m <sup>3</sup> /h |

### Average Climate

This information was generated by the HP KEYMARK database on 18 Dec 2020

### EN 12102-1

|                           | Low temperature |
|---------------------------|-----------------|
| Sound power level indoor  | 55 dB(A)        |
| Sound power level outdoor | 0 dB(A)         |

### EN 14825

|               | Low temperature |
|---------------|-----------------|
| $\eta_s$      | 189 %           |
| Prated        | 17.00 kW        |
| SCOP          | 4.93            |
| Tbiv          | -10 °C          |
| TOL           | -20 °C          |
| Pdh Tj = -7°C | 17.00 kW        |
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| Pdh Tj = +2°C | 17.20 kW        |
| COP Tj = +2°C | 4.88            |
| Pdh Tj = +7°C | 17.30 kW        |
| COP Tj = +7°C | 5.16            |
| Pdh Tj = 12°C | 17.40 kW        |
| COP Tj = 12°C | 5.48            |
| Pdh Tj = Tbiv | 17.00 kW        |



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|---|---------------------|
| COP $T_j = T_{biv}$   | 4.54                |
| $P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$ | 17.00 kW            |
| COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$       | 4.54                |
| Rated airflow rate  | 0 m <sup>3</sup> /h |
| $C_{dh}$  | 0.90                |
| WTOL  | 65 °C               |
| $P_{off}$   | 0 W                 |
| PTO   | 139 W               |
| PSB   | 9 W                 |
| PCK   | 0 W                 |
| Supplementary Heater: Type of energy input                              | electricity         |
| Supplementary Heater: PSUP  | 0.00 kW             |
| Annual energy consumption $Q_{he}$                                      | 7128 kWh            |

## Warmer Climate

| <b>EN 12102-1</b>         |                        |
|---------------------------|------------------------|
|                           | <b>Low temperature</b> |
| Sound power level indoor  | 55 dB(A)               |
| Sound power level outdoor | 0 dB(A)                |

| <b>EN 14825</b> |                        |
|-----------------|------------------------|
|                 | <b>Low temperature</b> |

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|   |          |
|---|----------|
| $\eta_s$  | 188 %    |
| Prated  | 17.00 kW |
| SCOP  | 4.91     |
| Tbiv  | 2 °C     |
| TOL   | 2 °C     |
| Pdh Tj = -7°C                                       | 0.00 kW  |
| COP Tj = -7°C                                       | 0.00     |
| Pdh Tj = +2°C                                       | 17.00 kW |
| COP Tj = +2°C                                       | 4.54     |
| Pdh Tj = +7°C                                       | 17.20 kW |
| COP Tj = +7°C                                       | 4.81     |
| Pdh Tj = 12°C                                       | 17.40 kW |
| COP Tj = 12°C                                       | 5.26     |
| Pdh Tj = Tbiv                                       | 17.00 kW |
| COP Tj = Tbiv                                       | 4.54     |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 17.00 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.54     |
| Rated airflow rate                                  | 0 m³/h   |
| Cdh   | 0.90     |
| WTOL  | 65 °C    |

This information was generated by the HP KEYMARK database on 18 Dec 2020

|  |             |
|--|-------------|
| Poff                                       | 0 W         |
| PTO  | 139 W       |
| PSB  | 9 W         |
| PCK  | 0 W         |
| Supplementary Heater: Type of energy input | electricity |
| Supplementary Heater: PSUP                 | 0.00 kW     |
| Annual energy consumption Qhe              | 4635 kWh    |

## Colder Climate

| <b>EN 12102-1</b>         |                        |
|---------------------------|------------------------|
|                           | <b>Low temperature</b> |
| Sound power level indoor  | 55 dB(A)               |
| Sound power level outdoor | 0 dB(A)                |

| <b>EN 14825</b> |                        |
|-----------------|------------------------|
|                 | <b>Low temperature</b> |
| $\eta_s$        | 194 %                  |
| Prated          | 21.00 kW               |
| SCOP            | 5.06                   |
| Tbiv            | -15 °C                 |
| TOL             | -22 °C                 |

This information was generated by the HP KEYMARK database on 18 Dec 2020

|   |             |
|---|-------------|
| Pdh Tj = -7°C                                       | 17.30 kW    |
| COP Tj = -7°C                                       | 5.02        |
| Pdh Tj = +2°C                                       | 17.30 kW    |
| COP Tj = +2°C                                       | 5.24        |
| Pdh Tj = +7°C                                       | 17.40 kW    |
| COP Tj = +7°C                                       | 5.43        |
| Pdh Tj = 12°C                                       | 17.40 kW    |
| COP Tj = 12°C                                       | 5.46        |
| Pdh Tj = Tbiv                                       | 17.20 kW    |
| COP Tj = Tbiv                                       | 4.92        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 17.20 kW    |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.92        |
| Rated airflow rate                                  | 0 m³/h      |
| Cdh   | 0.90        |
| WTOL  | 65 °C       |
| Poff  | 0 W         |
| PTO   | 139 W       |
| PSB   | 9 W         |
| PCK   | 0 W         |
| Supplementary Heater: Type of energy input          | electricity |
| Supplementary Heater: PSUP                          | 4.07 kW     |
|   |             |

This information was generated by the HP KEYMARK database on 18 Dec 2020

|   |           |
|---|-----------|
| Annual energy consumption Q <sub>he</sub> | 10274 kWh |
|---|-----------|