

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | | |
|----------------------------|---|----------|------------|
| Summary of | AEROTOP T35 / T35R | Reg. No. | 011-1W0303 |
| Certificate Holder | | | |
| Name | ELCO GmbH | | |
| Address | Hohenzollernstrasse 31 | Zip | 72379 |
| City | Hechingen | Country | Germany |
| Certification Body | DIN CERTCO Gesellschaft für Konformitätsbewertung mbH | | |
| Name of testing laboratory | Wärmepumpen-Testzentrum WPZ | | |
| Subtype title | AEROTOP T35 / T35R | | |
| Heat Pump Type | Outdoor Air/Water | | |
| Refrigerant | R407c | | |
| Mass Of Refrigerant | 9.2 kg | | |
| Certification Date | 04.05.2019 | | |

Model: AEROTOP T35

General Data

| | |
|--------------|-------------|
| Power supply | 3x230V 50Hz |
|--------------|-------------|

Heating

EN 14511-2

| | Low temperature | Medium temperature |
|------------------------|------------------------|------------------------|
| Heat output | 39.60 kW | 37.20 kW |
| El input | 9.66 kW | 12.80 kW |
| COP | 4.10 | 2.90 |
| Indoor water flow rate | 6.81 m ³ /h | 5.33 m ³ /h |

EN 14511-4

| Operating range outdoor exchanger/indoor exchanger lower limit/lower limit | passed |
|--|--------|
| Operating range outdoor exchanger/indoor exchanger upper limit/upper limit | passed |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 68 dB(A) | 68 dB(A) |
| Sound power level outdoor | 70 dB(A) | 70 dB(A) |

EN 14825

| | Low temperature | Medium temperature |
|---------------|-----------------|--------------------|
| η_s | 153 % | 121 % |
| Prated | 25.00 kW | 24.00 kW |
| SCOP | 3.90 | 3.11 |
| Tbiv | -10 °C | -10 °C |
| TOL | -20 °C | -10 °C |
| Pdh Tj = -7°C | 26.19 kW | 24.63 kW |
| COP Tj = -7°C | 3.06 | 2.12 |
| Cdh | 1.00 | 1.00 |
| Pdh Tj = +2°C | 30.85 kW | 29.58 kW |
| COP Tj = +2°C | 3.84 | 2.95 |
| Cdh | 1.00 | 1.00 |
| Pdh Tj = +7°C | 40.56 kW | 39.48 kW |
| COP Tj = +7°C | 4.69 | 4.03 |
| Cdh | 1.00 | 1.00 |

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| | | |
|--|---------------|---------------|
| Pdh Tj = 12°C | 44.63 kW | 44.07 kW |
| COP Tj = 12°C | 5.23 | 4.77 |
| Cdh | 1.00 | 1.00 |
| Pdh Tj = Tbiv | 44.45 kW | 23.40 kW |
| COP Tj = Tbiv | 2.90 | 2.10 |
| Pdh Tj = TOL | 24.50 kW | 23.40 kW |
| COP Tj = TOL | 2.90 | 2.10 |
| Cdh | 1.00 | 1.00 |
| WTOL | 57 °C | 57 °C |
| Poff | 0 W | 0 W |
| PTO | 10 W | 10 W |
| PSB | 10 W | 10 W |
| PCK | 80 W | 80 W |
| Supplementary Heater: Type of energy input | Elektrizit  t | Elektrizit  t |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 12964 kWh | 15691 kWh |

Warmer Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 68 dB(A) | 68 dB(A) |
| Sound power level outdoor | 70 dB(A) | 70 dB(A) |

EN 14825

| | Low temperature | Medium temperature |
|---------------|-----------------|--------------------|
| η_s | 175 % | 123 % |
| Prated | 33.00 kW | 34.00 kW |
| SCOP | 4.45 | 3.15 |
| Tbiv | 2 °C | 2 °C |
| TOL | -20 °C | -10 °C |
| Pdh Tj = +2°C | 30.32 kW | 28.20 kW |
| COP Tj = +2°C | 3.46 | 2.70 |
| Cdh | 1.00 | 1.00 |
| Pdh Tj = +7°C | 40.08 kW | 38.28 kW |
| COP Tj = +7°C | 4.39 | 3.36 |
| Cdh | 1.00 | 1.00 |
| Pdh Tj = 12°C | 44.45 kW | 43.69 kW |
| COP Tj = 12°C | 5.08 | 2.35 |
| Cdh | 1.00 | 1.00 |

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| | | |
|--|---------------|---------------|
| Pdh Tj = Tbiv | 30.32 kW | 28.20 kW |
| COP Tj = Tbiv | 3.46 | 2.70 |
| Pdh Tj = TOL | 30.32 kW | 28.20 kW |
| COP Tj = TOL | 3.46 | 2.70 |
| Cdh | 1.00 | 1.00 |
| WTOL | 57 °C | 57 °C |
| Poff | 0 W | 0 W |
| PTO | 10 W | 10 W |
| PSB | 10 W | 10 W |
| PCK | 80 W | 80 W |
| Supplementary Heater: Type of energy input | Elektrizit  t | Elektrizit  t |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 10017 kWh | 14192 kWh |

Colder Climate

| EN 12102-1 | | |
|---------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 68 dB(A) | 68 dB(A) |
| Sound power level outdoor | 70 dB(A) | 70 dB(A) |

| EN 14825 | | |
|-----------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|---------------|----------|----------|
| η_s | 145 % | 98 % |
| Prated | 26.00 kW | 34.00 kW |
| SCOP | 3.69 | 2.53 |
| Tbiv | -15 °C | -10 °C |
| TOL | -20 °C | -10 °C |
| Pdh Tj = -7°C | 26.53 kW | 25.32 kW |
| COP Tj = -7°C | 3.32 | 2.47 |
| Cdh | 1.00 | 1.00 |
| Pdh Tj = +2°C | 31.17 kW | 30.11 kW |
| COP Tj = +2°C | 4.07 | 3.31 |
| Cdh | 1.00 | 1.00 |
| Pdh Tj = +7°C | 40.80 kW | 39.96 kW |
| COP Tj = +7°C | 4.83 | 4.32 |
| Cdh | 1.00 | 1.00 |
| Pdh Tj = 12°C | 44.63 kW | 44.26 kW |
| COP Tj = 12°C | 5.23 | 4.92 |
| Cdh | 1.00 | 1.00 |
| Pdh Tj = Tbiv | 21.09 kW | 23.90 kW |
| COP Tj = Tbiv | 2.67 | 2.43 |
| Pdh Tj = TOL | 21.05 kW | 23.90 kW |

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| | | |
|--|---------------|---------------|
| COP Tj = TOL | 2.64 | 2.43 |
| Cdh | 1.00 | 1.00 |
| WTOL | 57 °C | 57 °C |
| Poff | 0 W | 0 W |
| PTO | 10 W | 10 W |
| PSB | 10 W | 10 W |
| PCK | 80 W | 80 W |
| Supplementary Heater: Type of energy input | Elektrizit  t | Elektrizit  t |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 17170 kWh | 33619 kWh |
| Pdh Tj = -15  C (if TOL<-20  C) | 0.01 | 0.01 |
| COP Tj = -15  C (if TOL<-20  C) | 0.01 | 0.01 |
| Cdh | 0.90 | 0.90 |

Model: AEROTOP T35R

General Data

| | |
|--------------|-------------|
| Power supply | 3x230V 50Hz |
|--------------|-------------|

Heating

EN 14511-2

| | Low temperature | Medium temperature |
|------------------------|------------------------|------------------------|
| Heat output | 39.60 kW | 37.20 kW |
| El input | 9.66 kW | 12.80 kW |
| COP | 4.10 | 2.90 |
| Indoor water flow rate | 6.81 m ³ /h | 5.33 m ³ /h |

EN 14511-4

| Operating range outdoor exchanger/indoor exchanger lower limit/lower limit | passed |
|--|--------|
| Operating range outdoor exchanger/indoor exchanger upper limit/upper limit | passed |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 68 dB(A) | 68 dB(A) |
| Sound power level outdoor | 70 dB(A) | 70 dB(A) |

EN 14825

| | Low temperature | Medium temperature |
|---------------|-----------------|--------------------|
| η_s | 157 % | 124 % |
| Prated | 25.00 kW | 24.00 kW |
| SCOP | 3.99 | 3.17 |
| Tbiv | -10 °C | -10 °C |
| TOL | -20 °C | -10 °C |
| Pdh Tj = -7°C | 26.19 kW | 24.63 kW |
| COP Tj = -7°C | 3.06 | 2.12 |
| Cdh | 1.00 | 1.00 |
| Pdh Tj = +2°C | 30.85 kW | 29.58 kW |
| COP Tj = +2°C | 3.84 | 2.95 |
| Cdh | 1.00 | 1.00 |
| Pdh Tj = +7°C | 40.56 kW | 39.48 kW |
| COP Tj = +7°C | 4.69 | 4.03 |
| Cdh | 1.00 | 1.00 |

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| | | |
|--|---------------|---------------|
| Pdh Tj = 12°C | 44.63 kW | 44.07 kW |
| COP Tj = 12°C | 5.23 | 4.77 |
| Cdh | 1.00 | 1.00 |
| Pdh Tj = Tbiv | 44.45 kW | 23.40 kW |
| COP Tj = Tbiv | 2.90 | 2.10 |
| Pdh Tj = TOL | 24.50 kW | 23.40 kW |
| COP Tj = TOL | 2.90 | 2.10 |
| Cdh | 1.00 | 1.00 |
| WTOL | 57 °C | 57 °C |
| Poff | 0 W | 0 W |
| PTO | 10 W | 10 W |
| PSB | 10 W | 10 W |
| PCK | 80 W | 80 W |
| Supplementary Heater: Type of energy input | Elektrizit  t | Elektrizit  t |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 12670 kWh | 15397 kWh |

Warmer Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 68 dB(A) | 68 dB(A) |
| Sound power level outdoor | 70 dB(A) | 70 dB(A) |

EN 14825

| | Low temperature | Medium temperature |
|---------------|-----------------|--------------------|
| η_s | 182 % | 126 % |
| Prated | 33.00 kW | 34.00 kW |
| SCOP | 4.62 | 3.23 |
| Tbiv | 2 °C | 2 °C |
| TOL | -20 °C | -10 °C |
| Pdh Tj = +2°C | 30.32 kW | 28.20 kW |
| COP Tj = +2°C | 3.46 | 2.70 |
| Cdh | 1.00 | 1.00 |
| Pdh Tj = +7°C | 40.08 kW | 38.28 kW |
| COP Tj = +7°C | 4.39 | 3.36 |
| Cdh | 1.00 | 1.00 |
| Pdh Tj = 12°C | 44.45 kW | 43.69 kW |
| COP Tj = 12°C | 5.08 | 2.35 |
| Cdh | 1.00 | 1.00 |

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|--|---------------|---------------|
| Pdh Tj = Tbiv | 30.32 kW | 28.20 kW |
| COP Tj = Tbiv | 3.46 | 2.70 |
| Pdh Tj = TOL | 30.32 kW | 28.20 kW |
| COP Tj = TOL | 3.46 | 2.70 |
| Cdh | 1.00 | 1.00 |
| WTOL | 57 °C | 57 °C |
| Poff | 0 W | 0 W |
| PTO | 10 W | 10 W |
| PSB | 10 W | 10 W |
| PCK | 80 W | 80 W |
| Supplementary Heater: Type of energy input | Elektrizit  t | Elektrizit  t |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 9664 kWh | 13839 kWh |

Colder Climate

| EN 12102-1 | | |
|---------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 68 dB(A) | 68 dB(A) |
| Sound power level outdoor | 70 dB(A) | 70 dB(A) |

| EN 14825 | | |
|-----------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|---------------|----------|----------|
| η_s | 146 % | 99 % |
| Prated | 26.00 kW | 34.00 kW |
| SCOP | 7.73 | 2.54 |
| Tbiv | -15 °C | -10 °C |
| TOL | -20 °C | -10 °C |
| Pdh Tj = -7°C | 26.53 kW | 25.32 kW |
| COP Tj = -7°C | 3.32 | 2.47 |
| Cdh | 1.00 | 1.00 |
| Pdh Tj = +2°C | 31.17 kW | 30.11 kW |
| COP Tj = +2°C | 4.07 | 3.31 |
| Cdh | 1.00 | 1.00 |
| Pdh Tj = +7°C | 40.80 kW | 39.96 kW |
| COP Tj = +7°C | 4.83 | 4.32 |
| Cdh | 1.00 | 1.00 |
| Pdh Tj = 12°C | 44.63 kW | 44.26 kW |
| COP Tj = 12°C | 5.23 | 4.92 |
| Cdh | 1.00 | 1.00 |
| Pdh Tj = Tbiv | 21.09 kW | 23.90 kW |
| COP Tj = Tbiv | 2.67 | 2.43 |
| Pdh Tj = TOL | 21.05 kW | 23.90 kW |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|--|--------------|--------------|
| COP Tj = TOL | 2.64 | 2.43 |
| Cdh | 1.00 | 1.00 |
| WTOL | 57 °C | 57 °C |
| Poff | 0 W | 0 W |
| PTO | 10 W | 10 W |
| PSB | 10 W | 10 W |
| PCK | 80 W | 80 W |
| Supplementary Heater: Type of energy input | Elektrizit t | Elektrizit t |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 16994 kWh | 33442 kWh |
| Pdh Tj = -15 C (if TOL<-20 C) | 0.01 | 0.01 |
| COP Tj = -15 C (if TOL<-20 C) | 0.01 | 0.01 |
| Cdh | 0.90 | 0.90 |