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Login

| Summary of | AEROTOP T32 / T32R | Reg. No. | 011-1W0302 | |
|---------------------|---|----------|------------|--|
| Certificate Holder | Certificate Holder | | | |
| Name | ELCO GmbH | | | |
| Address | Hohenzollernstrasse 31 | Zip | 72379 | |
| City | Hechingen | Country | Germany | |
| Certification Body | DIN CERTCO Gesellschaft für Konformitätsbewertung mbH | | | |
| Subtype title | AEROTOP T32 / T32R | | | |
| Heat Pump Type | Outdoor Air/Water | | | |
| Refrigerant | R407c | | | |
| Mass of Refrigerant | 9.2 kg | | | |
| Certification Date | 04.05.2019 | | | |



Model: AEROTOP T32

| Configure model | | |
|-------------------------------------|---------------------------------|--|
| Model name | AEROTOP T32 | |
| Application | Heating (medium temp) | |
| Units | Indoor + Outdoor | |
| Climate Zone | Colder Climate + Warmer Climate | |
| Reversibility | No | |
| Cooling mode application (optional) | n/a | |

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

Heating

| 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 | |

| EN 14511-2 | | | |
|------------------------------------|----------|----------|--|
| Low temperature Medium temperature | | | |
| Heat output | 38.00 kW | 37.00 kW | |
| El input | 8.84 kW | 13.70 kW | |
| СОР | 4.30 | 2.70 | |

Warmer Climate



| EN 12102-1 | | | |
|---------------------------|-----------------|--------------------|--|
| | Low temperature | Medium temperature | |
| Sound power level indoor | 63 dB(A) | 63 dB(A) | |
| Sound power level outdoor | 67 dB(A) | 67 dB(A) | |

| EN 14825 | | |
|-----------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| η_{s} | 187 % | 122 % |
| Prated | 24.00 kW | 33.00 kW |
| SCOP | 4.74 | 3.13 |
| Tbiv | 2 °C | 2 °C |
| TOL | -20 °C | -10 °C |
| Pdh Tj = +2°C | 27.39 kW | 26.90 kW |
| COP Tj = +2°C | 3.26 | 2.40 |
| Cdh Tj = +2 °C | 1.00 | 1.00 |
| Pdh Tj = +7°C | 38.20 kW | 37.45 kW |
| COP Tj = +7°C | 4.74 | 3.26 |
| Cdh Tj = +7 °C | 1.00 | 1.00 |
| Pdh Tj = 12°C | 43.41 kW | 42.51 kW |
| COP Tj = 12°C | 5.67 | 2.22 |
| Cdh Tj = +12 °C | 1.00 | 1.00 |

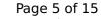




| Pdh Tj = Tbiv | 27.39 kW | 43.41 kW |
|---|-------------|-------------|
| COP Tj = Tbiv | 3.26 | 2.40 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 27.39 kW | 43.41 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.26 | 2.40 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 57 °C | 57 °C |
| Poff | o w | o w |
| РТО | 10 W | 10 W |
| PSB | 10 W | 10 W |
| PCK | 80 W | 80 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 6876 kWh | 13864 kWh |

Colder Climate

| EN 12102-1 | | | |
|---------------------------|-----------------|--------------------|--|
| | Low temperature | Medium temperature | |
| Sound power level indoor | 63 dB(A) | 63 dB(A) | |
| Sound power level outdoor | 67 dB(A) | 67 dB(A) | |





| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| ης | 139 % | 94 % |
| Prated | 24.00 kW | 34.00 kW |
| SCOP | 3.54 | 2.44 |
| Tbiv | -15 °C | -10 °C |
| TOL | -20 °C | -10 °C |
| Pdh Tj = -7 °C | 24.83 kW | 23.63 kW |
| COP Tj = -7 °C | 3.08 | 2.33 |
| Cdh Tj = -7 °C | 1.00 | 1.00 |
| Pdh $Tj = +2$ °C | 27.59 kW | 27.34 kW |
| COP Tj = +2°C | 3.95 | 3.09 |
| Cdh Tj = +2 °C | 1.00 | 1.00 |
| Pdh Tj = $+7^{\circ}$ C | 38.50 kW | 38.15 kW |
| $COP Tj = +7^{\circ}C$ | 5.39 | 4.63 |
| Cdh Tj = +7 °C | 1.00 | 1.00 |
| Pdh Tj = 12°C | 43.63 kW | 43.18 kW |
| COP Tj = 12°C | 5.90 | 5.44 |
| Cdh Tj = +12 °C | 1.00 | 1.00 |
| Pdh Tj = Tbiv | 19.30 kW | 21.68 kW |
| COP Tj = Tbiv | 2.25 | 2.15 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 19.30 kW | 21.68 kW |





| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.22 | 2.15 |
|---|-------------|-------------|
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 57 °C | 57 °C |
| Poff | o w | 0 W |
| РТО | 10 W | 10 W |
| PSB | 10 W | 10 W |
| PCK | 80 W | 80 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 16470 kWh | 34596 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 Tj = -15 °C | 0.90 | 0.90 |
| | | |

Average Climate

| EN 12102-1 | | | |
|---------------------------|-----------------|--------------------|--|
| | Low temperature | Medium temperature | |
| Sound power level indoor | 63 dB(A) | 63 dB(A) | |
| Sound power level outdoor | 67 dB(A) | 67 dB(A) | |





| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_{s} | 152 % | 114 % |
| Prated | 23.00 kW | 23.00 kW |
| SCOP | 3.89 | 2.93 |
| Tbiv | -10 °C | -10 °C |
| TOL | -20 °C | -10 °C |
| Pdh Tj = -7°C | 24.49 kW | 22.95 kW |
| COP Tj = -7°C | 2.86 | 2.01 |
| Cdh Tj = -7 °C | 1.00 | 1.00 |
| Pdh Tj = +2°C | 27.51 kW | 27.22 kW |
| COP Tj = +2°C | 3.69 | 2.69 |
| Cdh Tj = +2 °C | 1.00 | 1.00 |
| Pdh Tj = +7°C | 38.40 kW | 37.95 kW |
| $COP Tj = +7^{\circ}C$ | 5.17 | 4.19 |
| Cdh Tj = +7 °C | 1.00 | 1.00 |
| Pdh Tj = 12°C | 43.63 kW | 42.96 kW |
| COP Tj = 12°C | 5.90 | 5.20 |
| Cdh Tj = +12 °C | 1.00 | 1.00 |
| Pdh Tj = Tbiv | 43.41 kW | 21.00 kW |
| COP Tj = Tbiv | 2.60 | 1.80 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 22.50 kW | 21.00 kW |



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| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.60 | 1.80 |
|---|-------------|-------------|
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 57 °C | 57 °C |
| Poff | o w | 0 W |
| РТО | 10 W | 10 W |
| PSB | 10 W | 10 W |
| PCK | 80 W | 80 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 11960 kWh | 16478 kWh |

Model: AEROTOP T32R

| Configure model | | |
|-------------------------------------|---------------------------------|--|
| Model name | AEROTOP T32R | |
| Application | Heating (medium temp) | |
| Units | Indoor + Outdoor | |
| Climate Zone | Colder Climate + Warmer Climate | |
| Reversibility | No | |
| Cooling mode application (optional) | n/a | |

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

Heating

| 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 | |

| EN 14511-2 | | |
|-------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Heat output | 38.00 kW | 37.00 kW |
| El input | 8.84 kW | 13.70 kW |
| СОР | 4.30 | 2.70 |

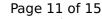
Warmer Climate





| EN 12102-1 | | |
|---------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 63 dB(A) | 63 dB(A) |
| Sound power level outdoor | 68 dB(A) | 68 dB(A) |

| EN 14825 | | |
|-----------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| η_{s} | 197 % | 126 % |
| Prated | 24.00 kW | 33.00 kW |
| SCOP | 5.00 | 3.21 |
| Tbiv | 2 °C | 2 °C |
| TOL | -20 °C | -10 °C |
| Pdh Tj = +2°C | 27.39 kW | 26.90 kW |
| COP Tj = +2°C | 3.26 | 2.40 |
| Cdh Tj = +2 °C | 1.00 | 1.00 |
| Pdh Tj = +7°C | 38.20 kW | 37.45 kW |
| COP Tj = +7°C | 4.74 | 3.26 |
| Cdh Tj = +7 °C | 1.00 | 1.00 |
| Pdh Tj = 12°C | 43.41 kW | 42.51 kW |
| COP Tj = 12°C | 5.67 | 2.22 |
| Cdh Tj = +12 °C | 1.00 | 1.00 |

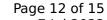




| Pdh Tj = Tbiv | 27.39 kW | 26.90 kW |
|---|-------------|-------------|
| COP Tj = Tbiv | 3.26 | 2.40 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 27.39 kW | 26.90 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.26 | 2.40 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 57 °C | 57 °C |
| Poff | 0 W | 0 W |
| РТО | 10 W | 10 W |
| PSB | 10 W | 10 W |
| PCK | 80 W | 80 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 6523 kWh | 13511 kWh |
| | | |

Colder Climate

| EN 12102-1 | | | |
|---------------------------|-----------------|--------------------|--|
| | Low temperature | Medium temperature | |
| Sound power level indoor | 63 dB(A) | 63 dB(A) | |
| Sound power level outdoor | 68 dB(A) | 68 dB(A) | |





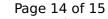
| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_{s} | 140 % | 95 % |
| Prated | 24.00 kW | 34.00 kW |
| SCOP | 3.58 | 2.45 |
| Tbiv | -15 °C | -10 °C |
| TOL | -20 °C | -10 °C |
| Pdh Tj = -7°C | 24.83 kW | 23.63 kW |
| COP Tj = -7°C | 3.08 | 2.33 |
| Cdh Tj = -7 °C | 1.00 | 1.00 |
| Pdh Tj = +2°C | 27.59 kW | 27.34 kW |
| $COPTj = +2^{\circ}C$ | 3.95 | 3.09 |
| Cdh Tj = +2 °C | 1.00 | 1.00 |
| Pdh Tj = +7°C | 38.50 kW | 38.15 kW |
| $COP Tj = +7^{\circ}C$ | 5.39 | 4.63 |
| Cdh Tj = +7 °C | 1.00 | 1.00 |
| Pdh Tj = 12°C | 43.63 kW | 43.18 kW |
| COP Tj = 12°C | 5.90 | 5.44 |
| Cdh Tj = +12 °C | 1.00 | 1.00 |
| Pdh Tj = Tbiv | 19.30 kW | 21.68 kW |
| COP Tj = Tbiv | 2.25 | 2.15 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 19.30 kW | 21.68 kW |



| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.22 | 2.15 |
|---|-------------|-------------|
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 57 °C | 57 °C |
| Poff | o w | 0 W |
| РТО | 10 W | 10 W |
| PSB | 10 W | 10 W |
| PCK | 80 W | 80 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 16294 kWh | 34419 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 Tj = -15 °C | 0.90 | 0.90 |

Average Climate

| EN 12102-1 | | | | |
|---------------------------|-----------------|--------------------|--|--|
| | Low temperature | Medium temperature | | |
| Sound power level indoor | 63 dB(A) | 63 dB(A) | | |
| Sound power level outdoor | 68 dB(A) | 68 dB(A) | | |





| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_{s} | 156 % | 116 % |
| Prated | 23.00 kW | 23.00 kW |
| SCOP | 3.98 | 2.99 |
| Tbiv | -10 °C | -10 °C |
| TOL | -20 °C | -10 °C |
| Pdh Tj = -7°C | 24.49 kW | 22.95 kW |
| $COPTj = -7^{\circ}C$ | 2.86 | 2.01 |
| Cdh Tj = -7 °C | 1.00 | 1.00 |
| Pdh Tj = +2°C | 27.51 kW | 27.22 kW |
| COP Tj = +2°C | 3.69 | 2.69 |
| Cdh Tj = +2 °C | 1.00 | 1.00 |
| Pdh Tj = +7°C | 38.40 kW | 37.95 kW |
| COP Tj = +7°C | 5.17 | 4.19 |
| Cdh Tj = +7 °C | 1.00 | 1.00 |
| Pdh Tj = 12°C | 43.63 kW | 42.96 kW |
| COP Tj = 12°C | 5.90 | 5.20 |
| Cdh Tj = +12 °C | 1.00 | 1.00 |
| Pdh Tj = Tbiv | 43.41 kW | 21.00 kW |
| COP Tj = Tbiv | 2.60 | 1.80 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 22.50 kW | 21.00 kW |



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This information was generated by the HP KEYMARK database on 7 Jul 2022

| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.60 | 1.80 |
|---|-------------|-------------|
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 57 °C | 57 °C |
| Poff | o w | 0 W |
| РТО | 10 W | 10 W |
| PSB | 10 W | 10 W |
| PCK | 80 W | 80 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 11666 kWh | 16185 kWh |