

Subtype AEROTOP T35 / T35R

Certificate Holder	ELCO GmbH
Address	Hohenzollernstrasse 31
ZIP	72379
City	Hechingen
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	AEROTOP T35 / T35R
Registration number	011-1W0303
Heat Pump Type	Outdoor Air/Water
Refrigerant	R407c
Mass of Refrigerant	9.2 kg
Certification Date	04.05.2019

Model AEROTOP T35

Model name	AEROTOP T35
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x230V 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 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	39.60 kW	37.20 kW
EI input	9.66 kW	12.80 kW
COP	4.10	2.90

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
η_s	153 %	121 %
Prated	24.50 kW	23.40 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 Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	30.85 kW	29.58 kW
COP Tj = +2°C	3.84	2.95
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	40.56 kW	39.48 kW

COP Tj = +7°C	4.69	4.03
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	44.63 kW	44.07 kW
COP Tj = 12°C	5.23	4.77
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	24.50 kW	23.40 kW
COP Tj = Tbiv	2.90	2.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.50 kW	23.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
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	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	12964 kWh	15691 kWh

EN 12102-1 | Colder Climate

	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 | Colder Climate

	Low temperature	Medium temperature
ηs	145 %	98 %
Prated	25.85 kW	34.90 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 Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	31.17 kW	30.11 kW
COP Tj = +2°C	4.07	3.31
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	40.80 kW	39.96 kW
COP Tj = +7°C	4.83	4.32
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	44.63 kW	44.26 kW
COP Tj = 12°C	5.23	4.92
Cdh Tj = +12 °C	1.000	1.000

Pdh Tj = Tbiv	21.09 kW	23.90 kW
COP Tj = Tbiv	2.67	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	21.05 kW	23.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	2.43
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
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	Electricity	Electricity
Supplementary Heater: PSUP	25.85 kW	34.90 kW
Annual energy consumption Qhe	17170 kWh	33619 kWh
Pdh Tj = -15°C (if TOL)	0.01	0.01
COP Tj = -15°C (if TOL)	0.01	0.01
Cdh Tj = -15 °C	0.900	0.900

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	Low temperature	Medium temperature
ηs	175 %	143 %
Prated	30.32 kW	28.00 kW
SCOP	4.45	3.65
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 Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	40.08 kW	38.28 kW
COP Tj = +7°C	4.39	3.36
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	44.45 kW	43.69 kW
COP Tj = 12°C	5.08	4.46
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	30.32 kW	28.20 kW
COP Tj = Tbiv	3.46	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	30.32 kW	28.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.46	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
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	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	10017 kWh	14192 kWh

Model AEROTOP T35R

Model name	AEROTOP T35R
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x230V 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 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	39.60 kW	37.20 kW
EI input	9.66 kW	12.80 kW
COP	4.10	2.90

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
η_s	157 %	124 %
Prated	24.50 kW	23.40 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 Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	30.85 kW	29.58 kW
COP Tj = +2°C	3.84	2.95
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	40.56 kW	39.48 kW

COP Tj = +7°C	4.69	4.03
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	44.63 kW	44.07 kW
COP Tj = 12°C	5.23	4.77
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	24.50 kW	23.40 kW
COP Tj = Tbiv	2.90	2.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.50 kW	23.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
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	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	12670 kWh	15397 kWh

EN 12102-1 | Colder Climate

	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 | Colder Climate

	Low temperature	Medium temperature
ηs	146 %	99 %
Prated	25.85 kW	34.90 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 Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	31.17 kW	30.11 kW
COP Tj = +2°C	4.07	3.31
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	40.80 kW	39.96 kW
COP Tj = +7°C	4.83	4.32
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	44.63 kW	44.26 kW
COP Tj = 12°C	5.23	4.92
Cdh Tj = +12 °C	1.000	1.000

Pdh Tj = Tbiv	21.09 kW	23.90 kW
COP Tj = Tbiv	2.67	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	21.05 kW	23.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	2.43
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
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	Electricity	Electricity
Supplementary Heater: PSUP	25.85 kW	34.90 kW
Annual energy consumption Qhe	16994 kWh	33442 kWh
Pdh Tj = -15°C (if TOL)	0.01	0.01
COP Tj = -15°C (if TOL)	0.01	0.01
Cdh Tj = -15 °C	0.900	0.900

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	Low temperature	Medium temperature
ηs	182 %	143 %
Prated	30.32 kW	28.00 kW
SCOP	4.62	3.65
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 Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	40.08 kW	38.28 kW
COP Tj = +7°C	4.39	3.36
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	44.45 kW	43.69 kW
COP Tj = 12°C	5.08	4.46
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	30.32 kW	28.20 kW
COP Tj = Tbiv	3.46	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	30.32 kW	28.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.46	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
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	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	9664 kWh	13839 kWh