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Login

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		
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

Configure model	
Model name	AEROTOP T35
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	39.60 kW	37.20 kW
El input	9.66 kW	12.80 kW
COP	4.10	2.90

Warmer 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
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 Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	40.08 kW	38.28 kW
COP Tj = +7°C	4.39	3.36
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	44.45 kW	43.69 kW
COP Tj = 12°C	5.08	2.35
Cdh Tj = +12 °C	1.00	1.00

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	1.00	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	Electricity	Electricity
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**
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 Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	31.17 kW	30.11 kW
COP Tj = +2°C	4.07	3.31
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	40.80 kW	39.96 kW
COP Tj = +7°C	4.83	4.32
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	44.63 kW	44.26 kW
COP Tj = 12°C	5.23	4.92
Cdh Tj = +12 °C	1.00	1.00
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	1.00	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	Electricity	Electricity
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 Tj = -15 °C	0.90	0.90

Average 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**
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 Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	30.85 kW	29.58 kW
COP Tj = +2°C	3.84	2.95
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	40.56 kW	39.48 kW
COP Tj = +7°C	4.69	4.03
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	44.63 kW	44.07 kW
COP Tj = 12°C	5.23	4.77
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	44.45 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	1.00	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	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	12964 kWh	15691 kWh

Model: AEROTOP T35R

Configure model	
Model name	AEROTOP T35R
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	39.60 kW	37.20 kW
El input	9.66 kW	12.80 kW
COP	4.10	2.90

Warmer 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
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 Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	40.08 kW	38.28 kW
COP Tj = +7°C	4.39	3.36
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	44.45 kW	43.69 kW
COP Tj = 12°C	5.08	2.35
Cdh Tj = +12 °C	1.00	1.00

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	1.00	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	Electricity	Electricity
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**
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 Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	31.17 kW	30.11 kW
COP Tj = +2°C	4.07	3.31
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	40.80 kW	39.96 kW
COP Tj = +7°C	4.83	4.32
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	44.63 kW	44.26 kW
COP Tj = 12°C	5.23	4.92
Cdh Tj = +12 °C	1.00	1.00
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	1.00	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	Electricity	Electricity
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 Tj = -15 °C	0.90	0.90

Average 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**
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 Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	30.85 kW	29.58 kW
COP Tj = +2°C	3.84	2.95
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	40.56 kW	39.48 kW
COP Tj = +7°C	4.69	4.03
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	44.63 kW	44.07 kW
COP Tj = 12°C	5.23	4.77
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	44.45 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	1.00	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	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	12670 kWh	15397 kWh