

Subtype AEROTOP T32 / T32R

Certificate Holder	ELCO GmbH
Address	Hohenzollernstrasse 31
ZIP	72379
City	Hechingen
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	AEROTOP T32 / T32R
Registration number	011-1W0302
Heat Pump Type	Outdoor Air/Water
Refrigerant	R407c
Mass of Refrigerant	9.2 kg
Certification Date	04.05.2019

Model AEROTOP T32

Model name	AEROTOP T32
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	38.00 kW	37.00 kW
EI input	8.84 kW	13.70 kW
COP	4.30	2.70

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
η_s	152 %	114 %
Prated	22.50 kW	21.00 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	1.000	1.000
Pdh Tj = +2°C	27.51 kW	27.22 kW
COP Tj = +2°C	3.69	2.69
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	38.40 kW	37.95 kW

COP Tj = +7°C	5.17	4.19
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	43.63 kW	42.96 kW
COP Tj = 12°C	5.90	5.20
Cdh Tj = +12 °C	1.000	1.000
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
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	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	11960 kWh	16478 kWh

EN 12102-1 | Colder Climate

	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 | Colder Climate

	Low temperature	Medium temperature
ηs	139 %	94 %
Prated	23.66 kW	31.70 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	1.000	1.000
Pdh Tj = +2°C	27.59 kW	27.34 kW
COP Tj = +2°C	3.95	3.09
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	38.50 kW	38.15 kW
COP Tj = +7°C	5.39	4.63
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	43.63 kW	43.18 kW
COP Tj = 12°C	5.90	5.44
Cdh Tj = +12 °C	1.000	1.000

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	1.000	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	23.66 kW	31.70 kW
Annual energy consumption Qhe	16470 kWh	34596 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	63 dB(A)	63 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	187 %	144 %
Prated	27.39 kW	26.90 kW
SCOP	4.74	3.67
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	1.000	1.000
Pdh Tj = +7°C	38.20 kW	37.45 kW
COP Tj = +7°C	4.74	3.26
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	43.41 kW	42.51 kW
COP Tj = 12°C	5.67	4.74
Cdh Tj = +12 °C	1.000	1.000
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	1.000	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	6876 kWh	9801 kWh

Model AEROTOP T32R

Model name	AEROTOP T32R
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	38.00 kW	37.00 kW
EI input	8.84 kW	13.70 kW
COP	4.30	2.70

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
η_s	156 %	116 %
Prated	22.50 kW	21.00 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
COP Tj = -7°C	2.86	2.01
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	27.51 kW	27.22 kW
COP Tj = +2°C	3.69	2.69
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	38.40 kW	37.95 kW

COP Tj = +7°C	5.17	4.19
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	43.63 kW	42.96 kW
COP Tj = 12°C	5.90	5.20
Cdh Tj = +12 °C	1.000	1.000
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
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	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	11666 kWh	16185 kWh

EN 12102-1 | Colder Climate

	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 | Colder Climate

	Low temperature	Medium temperature
ηs	140 %	95 %
Prated	23.66 kW	31.70 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	1.000	1.000
Pdh Tj = +2°C	27.59 kW	27.34 kW
COP Tj = +2°C	3.95	3.09
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	38.50 kW	38.15 kW
COP Tj = +7°C	5.39	4.63
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	43.63 kW	43.18 kW
COP Tj = 12°C	5.90	5.44
Cdh Tj = +12 °C	1.000	1.000

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	1.000	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	23.66 kW	31.70 kW
Annual energy consumption Qhe	16294 kWh	34419 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	63 dB(A)	63 dB(A)
Sound power level outdoor	68 dB(A)	68 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	197 %	144 %
Prated	27.39 kW	26.90 kW
SCOP	5.00	3.67
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	1.000	1.000
Pdh Tj = +7°C	38.20 kW	37.45 kW
COP Tj = +7°C	4.74	3.26
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	43.41 kW	42.51 kW
COP Tj = 12°C	5.67	4.74
Cdh Tj = +12 °C	1.000	1.000
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	1.000	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	6523 kWh	9801 kWh