

Subtype CTC EcoAir 610M

Certificate Holder	CTC AB
Address	Box 309, Näsvägen
ZIP	SE-341 26
City	Ljungby
Country	SE
Certification Body	RISE CERT
Subtype title	CTC EcoAir 610M
Registration number	012-SC0516-18
Heat Pump Type	Outdoor Air/Water
Refrigerant	R407c
Mass of Refrigerant	2.2 kg
Testing basis	EN 14511:2018, EN 14825:2016, EN 12102:2017
Testing laboratory	RISE Research Institutes of Sweden

Model CTC EcoAir 610M

Model name	CTC EcoAir 610M
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	No

Outdoor Air/Water
EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	5.88 kW	4.67 kW
El input	1.16 kW	1.47 kW
COP	5.06	3.17

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	189 %	143 %
Prated	6.00 kW	6.60 kW
SCOP	4.81	3.64
Tbiv	-9 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.61 kW	5.89 kW
COP Tj = -7°C	3.03	2.03
Pdh Tj = +2°C	3.46 kW	3.62 kW
COP Tj = +2°C	5.14	3.81
Pdh Tj = +7°C	2.45 kW	2.43 kW
COP Tj = +7°C	5.83	4.86
Pdh Tj = 12°C	2.92 kW	2.83 kW
COP Tj = 12°C	7.27	5.90
Pdh Tj = Tbiv	5.88 kW	5.89 kW

COP Tj = Tbiv	2.66	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.71 kW	5.33 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.98
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.29 kW	1.27 kW
Annual energy consumption Qhe	2579 kWh	3743 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	160 %	124 %
Prated	6.50 kW	6.50 kW
SCOP	4.08	3.17
Tbiv	-14 °C	-13 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.29 kW	4.04 kW
COP Tj = -7°C	3.61	2.66
Pdh Tj = +2°C	2.39 kW	2.34 kW
COP Tj = +2°C	5.08	4.11
Pdh Tj = +7°C	2.46 kW	2.44 kW
COP Tj = +7°C	6.00	5.08
Pdh Tj = 12°C	2.94 kW	2.86 kW
COP Tj = 12°C	7.13	6.08
Pdh Tj = Tbiv	5.15 kW	5.00 kW
COP Tj = Tbiv	2.52	1.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.95 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.91	1.25
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.98
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	14 W	14 W

PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.55 kW	2.86 kW
Annual energy consumption Qhe	3932 kWh	5052 kWh