

## 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, EN12102:2017
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
$\eta_s$	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
$\eta_s$	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 Q <sub>he</sub>	3932 kWh	5052 kWh