

Subtype CTC EcoAir 614M

Certificate Holder	CTC AB
Address	Box 309, Näsvägen
ZIP	SE-341 26
City	Ljungby
Country	SE
Certification Body	RISE CERT
Subtype title	CTC EcoAir 614M
Registration number	012-SC0319-18
Heat Pump Type	Outdoor Air/Water
Refrigerant	R407c
Mass of Refrigerant	2.2 kg
Testing basis	EN 14511:2013, EN 14825:2016, EN12102:2017

Model CTC EcoAir 614M

Model name	CTC EcoAir 614M
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	5.94 kW	4.80 kW
El input	1.16 kW	1.47 kW
COP	5.10	3.26

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	193 %	148 %
Prated	7.50 kW	7.60 kW
SCOP	4.90	3.78
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.80 kW	6.83 kW
COP Tj = -7°C	2.88	2.01
Pdh Tj = +2°C	4.05 kW	4.06 kW
COP Tj = +2°C	5.21	3.94
Pdh Tj = +7°C	2.63 kW	2.57 kW
COP Tj = +7°C	6.24	5.14
Pdh Tj = 12°C	3.03 kW	2.94 kW
COP Tj = 12°C	7.17	6.53
Pdh Tj = Tbiv	7.67 kW	7.65 kW

COP Tj = Tbiv	2.25	1.51
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.67 kW	7.65 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.51
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	3163 kWh	4153 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	151 %	120 %
Prated	11.00 kW	11.00 kW
SCOP	3.85	3.08
Tbiv	-11 °C	-11 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.57 kW	6.68 kW
COP Tj = -7°C	3.16	2.40
Pdh Tj = +2°C	4.33 kW	4.18 kW
COP Tj = +2°C	5.57	4.44
Pdh Tj = +7°C	2.66 kW	2.54 kW
COP Tj = +7°C	6.38	5.29
Pdh Tj = 12°C	3.05 kW	2.98 kW
COP Tj = 12°C	7.04	6.92
Pdh Tj = Tbiv	8.06 kW	7.87 kW
COP Tj = Tbiv	2.20	1.74
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.04 kW	2.73 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.81	1.32
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	5.96 kW	8.27 kW
Annual energy consumption Q _{he}	7038 kWh	8797 kWh