

## Subtype CTC EcoAir 406

Certificate Holder	CTC AB
Address	Box 309, Näsvägen
ZIP	SE-341 26
City	Ljungby
Country	SE
Certification Body	RISE CERT
Subtype title	CTC EcoAir 406
Registration number	012-056
Heat Pump Type	Outdoor Air/Water
Refrigerant	R407c
Mass of Refrigerant	2.2 kg
Testing basis	EN 14511:2013, EN 14825:2013, EN12102:2013
Testing laboratory	RISE Research Institutes of Sweden

## Model CTC EcoAir 406 1x230V

Model name	CTC EcoAir 406 1x230V
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	1x230V 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	6.22 kW	5.56 kW
El input	1.28 kW	1.83 kW
COP	4.78	3.03

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	56 dB(A)	56 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	151 %	131 %
Prated	5.08 kW	4.95 kW
SCOP	3.90	3.00
Tbiv	-5 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.90 kW	3.50 kW
COP Tj = -7°C	3.16	2.13
Pdh Tj = +2°C	4.80 kW	4.40 kW
COP Tj = +2°C	3.92	2.93
Pdh Tj = +7°C	6.40 kW	6.00 kW
COP Tj = +7°C	5.25	3.99
Pdh Tj = 12°C	7.90 kW	7.60 kW
COP Tj = 12°C	6.66	5.21
Pdh Tj = Tbiv	4.10 kW	3.80 kW

COP Tj = Tbiv	3.35	2.44
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.85	1.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.97	0.98
WTOL	65 °C	65 °C
Poff	18 W	18 W
PTO	19 W	6 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.60 kW	1.90 kW
Annual energy consumption Qhe	2722 kWh	3045 kWh

#### EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	56 dB(A)	56 dB(A)

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	131 %	103 %
Prated	4.14 kW	5.14 kW
SCOP	3.40	2.70
Tbiv	-13 °C	-9 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.00 kW	3.60 kW
COP Tj = -7°C	3.34	2.49
Pdh Tj = +2°C	4.90 kW	4.50 kW
COP Tj = +2°C	4.07	3.22
Pdh Tj = +7°C	6.40 kW	6.10 kW
COP Tj = +7°C	5.40	4.34
Pdh Tj = 12°C	7.90 kW	7.60 kW
COP Tj = 12°C	6.62	5.44
Pdh Tj = Tbiv	3.20 kW	3.40 kW
COP Tj = Tbiv	2.92	2.37
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.90 kW	1.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.83	1.67
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.97	0.98
WTOL	65 °C	65 °C
Poff	18 W	18 W
PTO	19 W	6 W

PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.20 kW	3.50 kW
Annual energy consumption Q <sub>he</sub>	3045 kWh	4785 kWh

## Model CTC EcoAir 406 3x400V

Model name	CTC EcoAir 406 3x400V
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	6.22 kW	5.56 kW
El input	1.28 kW	1.83 kW
COP	4.78	3.03

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	56 dB(A)	56 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	151 %	131 %
Prated	5.08 kW	4.95 kW
SCOP	3.90	3.00
Tbiv	-5 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.90 kW	3.50 kW
COP Tj = -7°C	3.16	2.13
Pdh Tj = +2°C	4.80 kW	4.40 kW
COP Tj = +2°C	3.92	2.93
Pdh Tj = +7°C	6.40 kW	6.00 kW
COP Tj = +7°C	5.25	3.99
Pdh Tj = 12°C	7.90 kW	7.60 kW
COP Tj = 12°C	6.66	5.21
Pdh Tj = Tbiv	4.10 kW	3.80 kW

COP Tj = Tbiv	3.35	2.44
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.85	1.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.97	0.98
WTOL	65 °C	65 °C
Poff	18 W	18 W
PTO	19 W	6 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.60 kW	1.90 kW
Annual energy consumption Qhe	2722 kWh	3045 kWh

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WTOL	65 °C	65 °C
Poff	18 W	18 W
PTO	19 W	6 W

PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.20 kW	3.50 kW
Annual energy consumption Q <sub>he</sub>	3045 kWh	4785 kWh