Login

Summary of	CTC EcoAir 410	Reg. No.	012-058
Certificate Holder			
Name	Enertech CTC AB		
Address	Box 309, Näsvägen	Zip	SE-381 26
City	Ljungby	Country	Sweden
Certification Body	RISE CERT		
Subtype title	CTC EcoAir 410		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R407c		
Mass of Refrigerant	2.7 kg		
Certification Date	12.06.2017		

Model: CTC EcoAir 410 1x230V

Configure model	
Model name	CTC EcoAir 410 1x230V
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	Colder Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	11.43 kW	10.74 kW
El input	2.34 kW	3.41 kW
COP	4.89	3.15

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	136 %	109 %
Prated	7.50 kW	7.27 kW
SCOP	3.50	2.80
Tbiv	-14 °C	-13 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.50 kW	6.90 kW
COP Tj = -7°C	3.41	2.56
Pdh Tj = +2°C	9.10 kW	8.70 kW
COP Tj = +2°C	4.06	3.28
Pdh Tj = +7°C	11.80 kW	11.30 kW
COP Tj = +7°C	5.21	4.25
Pdh Tj = 12°C	14.00 kW	13.40 kW
COP Tj = 12°C	6.20	5.21
Pdh Tj = Tbiv	5.70 kW	5.50 kW
COP Tj = Tbiv	2.74	2.13

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.10 kW	3.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.07	1.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.97	0.99
WTOL	65 °C	65 °C
Poff	18 W	18 W
PTO	41 W	13 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.40 kW	3.70 kW
Annual energy consumption Qhe	5337 kWh	6381 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	154 %	127 %
Prated	9.60 kW	8.50 kW

SCOP	3.90	3.25
Tbiv	-5 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.40 kW	7.08 kW
COP Tj = -7°C	3.25	2.35
Cdh Tj = -7 °C	0.97	0.990
Pdh Tj = +2°C	9.00 kW	8.62 kW
COP Tj = +2°C	3.94	3.17
Cdh Tj = +2 °C	0.97	0.990
Pdh Tj = +7°C	11.70 kW	11.44 kW
COP Tj = +7°C	5.08	4.29
Cdh Tj = +7 °C	0.97	0.990
Pdh Tj = 12°C	14.00 kW	13.38 kW
COP Tj = 12°C	6.23	5.23
Cdh Tj = +12 °C	0.97	0.990
Pdh Tj = Tbiv	7.80 kW	7.08 kW
COP Tj = Tbiv	3.42	2.35
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.10 kW	6.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.97	2.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.97	0.99
WTOL	65 °C	65 °C

Poff	18 W	18 W
PTO	41 W	18 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.90 kW	2.11 kW
Annual energy consumption Qhe	5063 kWh	5403 kWh

Model: CTC EcoAir 410 3x400V

Configure model	
Model name	CTC EcoAir 410 3x400V
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	Colder Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	11.43 kW	10.74 kW
El input	2.34 kW	3.41 kW
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COP Tj = +7°C	5.21	4.25
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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.07	1.50
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Pdh Tj = Tbiv	7.80 kW	7.08 kW
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