Login

Summary of	CTC EcoAir 415	Reg. No.	012-059
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 415		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R407c		
Mass of Refrigerant	3.4 kg		

Model: CTC EcoAir 415 1x230V

Configure model	
Model name	CTC EcoAir 415 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	16.33 kW	14.46 kW
El input	3.43 kW	4.66 kW
COP	4.76	3.11

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	130 %	107 %
Prated	10.37 kW	9.58 kW
SCOP	3.30	2.80
Tbiv	-14 °C	-14 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	10.20 kW	9.60 kW
COP Tj = -7°C	3.21	2.52
Pdh Tj = +2°C	12.40 kW	11.70 kW
COP Tj = +2°C	3.90	3.16
Pdh Tj = +7°C	16.50 kW	15.50 kW
COP Tj = +7°C	5.01	4.14
Pdh Tj = 12°C	18.80 kW	18.00 kW
COP Tj = 12°C	5.67	4.92
Pdh Tj = Tbiv	7.90 kW	7.30 kW
COP Tj = Tbiv	2.63	1.95

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.80 kW	5.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.04	1.40
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	67 W	20 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.50 kW	4.40 kW
Annual energy consumption Qhe	7695 kWh	8576 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	147 %	119 %
Prated	13.09 kW	12.27 kW

SCOP	3.80	3.10
Tbiv	-5 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.10 kW	9.50 kW
COP Tj = -7°C	3.08	2.32
Pdh Tj = +2°C	12.30 kW	11.50 kW
COP Tj = +2°C	3.78	2.96
Pdh Tj = +7°C	16.30 kW	15.20 kW
COP Tj = +7°C	4.89	3.91
Pdh Tj = 12°C	18.80 kW	17.90 kW
COP Tj = 12°C	5.70	4.78
Pdh Tj = Tbiv	10.60 kW	9.90 kW
COP Tj = Tbiv	3.25	2.48
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.20 kW	8.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.83	2.06
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	67 W	20 W
PSB	18 W	18 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.90 kW	3.70 kW
Annual energy consumption Qhe	7193 kWh	8314 kWh

Model: CTC EcoAir 415 3x400V

Configure model	
Model name	CTC EcoAir 415 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	16.33 kW	14.46 kW
El input	3.43 kW	4.66 kW
COP	4.76	3.11

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	64 dB(A)	64 dB(A)

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COP Tj = +2°C	3.90	3.16
Pdh Tj = +7°C	16.50 kW	15.50 kW
COP Tj = +7°C	5.01	4.14
Pdh Tj = 12°C	18.80 kW	18.00 kW
COP Tj = 12°C	5.67	4.92
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Prated	13.09 kW	12.27 kW

SCOP	3.80	3.10
Tbiv	-5 °C	-5 °C
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