

Summary of	CTC EcoPart 412	Reg. No.	012-065
Certificate Holder			
Name	Enertech CTC AB		
Address	Box 309, Näsvägen	Zip	SE-381 26
City	Ljungby	Country	Sweden
Certification Body	RISE CERT	RISE CERT	
Name of testing laboratory	RISE		
Subtype title	CTC EcoPart 412		
Heat Pump Type	Brine/Water	Brine/Water	
Refrigerant	R407c	R407c	
Mass Of Refrigerant	2.3 kg	2.3 kg	



Model: CTC EcoPart 412 1x230V

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.75 kW	10.97 kW
El input	2.56 kW	3.57 kW
СОР	4.60	3.08
Indoor water flow rate	2.03 m³/h	1.24 m³/h

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

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	182 %	138 %
Prated	13.35 kW	12.49 kW
SCOP	4.80	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.80 kW	11.00 kW
COP Tj = -7°C	4.69	3.25
Pdh Tj = +2°C	11.90 kW	11.20 kW
COP Tj = +2°C	4.88	3.64
Pdh Tj = +7°C	12.00 kW	11.40 kW
COP Tj = +7°C	5.06	4.02
Pdh Tj = 12°C	12.10 kW	11.60 kW
COP Tj = 12°C	5.23	4.40
Pdh Tj = Tbiv	11.80 kW	11.20 kW
COP Tj = Tbiv	4.69	3.25





Pdh Tj = TOL	11.75 kW	10.97 kW
COP Tj = TOL	4.60	3.08
Cdh	0.98	0.99
WTOL	65 °C	65 °C
Poff	18 W	18 W
РТО	22 W	5 W
PSB	18 W	18 W
PCK	o w	o w
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.60 kW	1.50 kW
Annual energy consumption Qhe	5814 kWh	7084 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825		
Low temperature	Medium temperature	
185 %	141 %	
12.44 kW	12.35 kW	
	Low temperature	



 $$\operatorname{\textit{Page}}\xspace\,5$ of 11 This information was generated by the HP KEYMARK database on 17 Dec 2020

SCOP	4.80	3.70
Tbiv	-20 °C	-18 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	11.90 kW	11.20 kW
COP Tj = -7°C	4.89	3.56
Pdh Tj = +2°C	12.00 kW	11.40 kW
COP Tj = +2°C	5.06	3.94
Pdh Tj = $+7^{\circ}$ C	12.10 kW	11.60 kW
$COPTj = +7^{\circ}C$	5.18	4.29
Pdh Tj = 12°C	12.10 kW	11.70 kW
COP Tj = 12°C	5.20	4.54
Pdh Tj = Tbiv	11.80 kW	11.20 kW
COP Tj = Tbiv	4.66	3.25
Pdh Tj = TOL	11.75 kW	10.97 kW
COP Tj = TOL	4.60	3.08
Cdh	0.98	0.99
WTOL	65 °C	65 °C
Poff	18 W	18 W
РТО	22 W	5 W
PSB	18 W	18 W
РСК	o w	o w



Page 6 of 11

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Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.70 kW	1.40 kW
Annual energy consumption Qhe	6373 kWh	8195 kWh



Model: CTC EcoPart 412 3x400V

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.75 kW	10.97 kW
El input	2.56 kW	3.57 kW
СОР	4.60	3.08
Indoor water flow rate	2.03 m³/h	1.24 m³/h

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	

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	182 %	138 %
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COP Tj = 12°C	5.23	4.40
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COP Tj = Tbiv	4.69	3.25





Pdh Tj = TOL	11.75 kW	10.97 kW
COP Tj = TOL	4.60	3.08
Cdh	0.98	0.99
WTOL	65 °C	65 °C
Poff	18 W	18 W
PTO	22 W	5 W
PSB	18 W	18 W
PCK	o w	o w
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Page 10 of 11 This information was generated by the HP KEYMARK database on 17 Dec 2020

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$$\operatorname{\textit{Page}}\ 11$$ of 11 This information was generated by the HP KEYMARK database on 17 Dec 2020

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