

## Subtype CTC EcoPart 410

Certificate Holder	CTC AB
Address	Box 309, Näsvägen
ZIP	SE-341 26
City	Ljungby
Country	SE
Certification Body	RISE CERT
Subtype title	CTC EcoPart 410
Registration number	012-064
Heat Pump Type	Brine/Water
Refrigerant	R407c
Mass of Refrigerant	1.9 kg
Certification Date	22.05.2023
Testing basis	EN 14511:2013, EN 14825:2013, EN12102:2013
Testing laboratory	RISE Research Institutes of Sweden

## Model CTC EcoPart 410 1x230V

Model name	CTC EcoPart 410 1x230V
Application	Heating (medium temp)
Units	Indoor
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

## Brine/Water

### EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
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### EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	9.98 kW	9.30 kW
El input	2.17 kW	3.00 kW
COP	4.60	3.10

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	181 %	138 %
Prated	11.32 kW	10.60 kW
SCOP	4.70	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.00 kW	9.40 kW
COP Tj = -7°C	4.69	3.28
Cdh Tj = -7 °C		
Pdh Tj = +2°C	10.10 kW	9.50 kW
COP Tj = +2°C	1.88	3.66
Cdh Tj = +2 °C		
Pdh Tj = +7°C	10.20 kW	9.70 kW
COP Tj = +7°C	5.10	4.03
Cdh Tj = +7 °C		
Pdh Tj = 12°C	10.30 kW	9.90 kW

COP Tj = 12 °C	5.22	4.41
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	10.00 kW	9.40 kW
COP Tj = Tbiv	4.69	3.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.98 kW	9.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.60	3.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.980	0.990
WTOL	65 °C	65 °C
Poff	18 W	18 W
PTO	14 W	3 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.35 kW	1.30 kW
Annual energy consumption Qhe	4944 kWh	5999 kWh

#### EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	184 %	141 %
Prated	10.56 kW	10.48 kW
SCOP	4.80	3.70
Tbiv	-20 °C	-18 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7 °C	10.10 kW	9.50 kW
COP Tj = -7 °C	4.89	3.58
Pdh Tj = +2 °C	10.20 kW	9.70 kW
COP Tj = +2 °C	5.05	3.96
Pdh Tj = +7 °C	10.20 kW	9.80 kW
COP Tj = +7 °C	5.16	4.29
Pdh Tj = 12 °C	10.20 kW	10.00 kW
COP Tj = 12 °C	5.19	4.54
Pdh Tj = Tbiv	10.00 kW	9.40 kW
COP Tj = Tbiv	4.66	3.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.98 kW	9.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.60	3.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99

WTOL	65 °C	65 °C
Poff	18 W	18 W
PTO	14 W	3 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.60 kW	1.20 kW
Annual energy consumption Qhe	5414 kWh	6939 kWh

## Model CTC EcoPart 410 3x400V

Model name	CTC EcoPart 410 3x400V
Application	Heating (medium temp)
Units	Indoor
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

## Brine/Water

### EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
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### EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	9.98 kW	9.30 kW
El input	2.17 kW	3.00 kW
COP	4.60	3.10

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	181 %	138 %
Prated	11.32 kW	10.60 kW
SCOP	4.70	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.00 kW	9.40 kW
COP Tj = -7°C	4.69	3.28
Cdh Tj = -7 °C		
Pdh Tj = +2°C	10.10 kW	9.50 kW
COP Tj = +2°C	1.88	3.66
Cdh Tj = +2 °C		
Pdh Tj = +7°C	10.20 kW	9.70 kW
COP Tj = +7°C	5.10	4.03
Cdh Tj = +7 °C		
Pdh Tj = 12°C	10.30 kW	9.90 kW

COP Tj = 12 °C	5.22	4.41
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	10.00 kW	9.40 kW
COP Tj = Tbiv	4.69	3.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.98 kW	9.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.60	3.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.980	0.990
WTOL	65 °C	65 °C
Poff	18 W	18 W
PTO	14 W	3 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.35 kW	1.30 kW
Annual energy consumption Qhe	4944 kWh	5999 kWh

#### EN 12102-1 | Colder Climate

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Pdh Tj = +2 °C	10.20 kW	9.70 kW
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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.60	3.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99

WTOL	65 °C	65 °C
Poff	18 W	18 W
PTO	14 W	3 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.60 kW	1.20 kW
Annual energy consumption Qhe	5414 kWh	6939 kWh