Subtype CTC EcoPart 417

Certificate Holder	CTC AB
Address	Box 309, Näsvägen
ZIP	SE-341 26
City	Ljungby
Country	SE
Certification Body	RISE CERT
Subtype title	CTC EcoPart 417
Registration number	012-067
Heat Pump Type	Brine/Water
Refrigerant	R407c
Mass of Refrigerant	2.7 kg
Certification Date	11.12.2023
Testing basis	EN 14511:2013, EN 14825:2013, EN 12102:2013
Testing laboratory	RISE Research Institutes of Sweden

Model CTC EcoPart 417 1x230V	
Model name	CTC EcoPart 417 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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	16.60 kW	15.87 kW
El input	3.65 kW	5.17 kW
COP	4.55	3.07

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	181 %	137 %
Prated	19.15 kW	18.03 kW
SCOP	4.70	3.60
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	16.90 kW	15.95 kW
COP Tj = -7°C	4.64	3.23
Cdh Tj = -7 °C		
Pdh Tj = +2°C	17.10 kW	16.10 kW
COP Tj = +2°C	4.83	3.60
Cdh Tj = +2 °C		
Pdh Tj = +7°C	17.20 kW	16.40 kW
COP Tj = +7°C	5.01	3.97
Cdh Tj = +7 °C		
Pdh Tj = 12°C	17.40 kW	16.70 kW

COP Tj = 12°C	5.18	4.36
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	16.90 kW	15.95 kW
COP Tj = Tbiv	4.64	3.23
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.87 kW	15.87 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.55	3.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	65 °C	65 °C
Poff	18 W	18 W
PTO	27 W	8 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.30 kW	2.20 kW
Annual energy consumption Qhe	8362 kWh	10286 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	176 %	140 %
Prated	17.86 kW	17.29 kW
SCOP	4.80	3.70
Tbiv	-20 °C	-19 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	17.10 kW	16.10 kW
COP Tj = -7°C	4.84	3.51
Pdh Tj = +2°C	17.20 kW	16.40 kW
COP Tj = +2°C	5.01	3.89
Pdh Tj = +7°C	17.30 kW	16.60 kW
COP Tj = +7°C	5.13	4.24
Pdh Tj = 12°C	17.30 kW	16.80 kW
COP Tj = 12°C	5.15	4.50
Pdh Tj = Tbiv	16.90 kW	15.90 kW
COP Tj = Tbiv	4.61	3.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.87 kW	15.87 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.55	3.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.96	0.99

WTOL	65 °C	65 °C
Poff	18 W	18 W
PTO	27 W	8 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.00 kW	1.40 kW
Annual energy consumption Qhe	8758 kWh	11554 kWh

Model CTC EcoPart 417 3x400V	
Model name	CTC EcoPart 417 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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	16.60 kW	15.87 kW
El input	3.65 kW	5.17 kW
COP	4.55	3.07

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	181 %	137 %
Prated	19.15 kW	18.03 kW
SCOP	4.70	3.60
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	16.90 kW	15.95 kW
COP Tj = -7°C	4.64	3.23
Cdh Tj = -7 °C		
Pdh Tj = +2°C	17.10 kW	16.10 kW
COP Tj = +2°C	4.83	3.60
Cdh Tj = +2 °C		
Pdh Tj = +7°C	17.20 kW	16.40 kW
COP Tj = +7°C	5.01	3.97
Cdh Tj = +7 °C		
Pdh Tj = 12°C	17.40 kW	16.70 kW

COP Tj = 12°C	5.18	4.36
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	16.90 kW	16.00 kW
COP Tj = Tbiv	4.64	3.23
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.87 kW	15.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.55	3.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	65 °C	65 °C
Poff	18 W	18 W
PTO	27 W	8 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.30 kW	2.16 kW
Annual energy consumption Qhe	8362 kWh	10286 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	176 %	140 %
Prated	17.86 kW	17.29 kW
SCOP	4.80	3.70
Tbiv	-20 °C	-19 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	17.10 kW	16.10 kW
COP Tj = -7°C	4.84	3.51
Pdh Tj = +2°C	17.20 kW	16.40 kW
COP Tj = +2°C	5.01	3.89
Pdh Tj = +7°C	17.30 kW	16.60 kW
COP Tj = +7°C	5.13	4.24
Pdh Tj = 12°C	17.30 kW	16.80 kW
COP Tj = 12°C	5.15	4.50
Pdh Tj = Tbiv	16.90 kW	15.90 kW
COP Tj = Tbiv	4.61	3.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.87 kW	15.87 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.55	3.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.96	0.99

WTOL	65 °C	65 °C
Poff	18 W	18 W
PTO	27 W	8 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.00 kW	1.40 kW
Annual energy consumption Qhe	8758 kWh	11554 kWh