Subtype CTC GSi 612

Certificate Holder	CTC AB
Address	Box 309, Näsvägen
ZIP	SE-341 26
City	Ljungby
Country	SE
Certification Body	RISE CERT
Subtype title	CTC GSi 612
Registration number	012-C700087
Heat Pump Type	Brine/Water
Refrigerant	R407c
Mass of Refrigerant	2.4 kg
Certification Date	11.12.2023
Testing basis	EN 14511:2013, EN 14825:2013, EN 12102:2013, EN 16147:2011
Testing laboratory	RISE Research Institutes of Sweden

Model CTC GSi 612	
Model name	CTC GSi 612
Application	Heating + DHW + low 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 16147 | Average Climate	
Declared load profile	XL
Efficiency ηDHW	100 %
COP	2.50
Heating up time	1:45 h:min
Standby power input	59.0 W
Reference hot water temperature	49.5 °C
Mixed water at 40°C	235 l

EN 16147 | Colder Climate	
Declared load profile	XL
Efficiency ηDHW	100 %
COP	2.50
Heating up time	1:45 h:min
Standby power input	59.0 W
Reference hot water temperature	49.5 °C
Mixed water at 40°C	235 l

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	6.08 kW	5.24 kW
El input	1.27 kW	1.78 kW
COP	4.78	2.95

EN 12102-1 | Average Climate	Low temperature	Medium temperature

Sound power level indoor	39 dB(A)	39 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	208 %	155 %
Prated	9.81 kW	6.80 kW
SCOP	5.40	4.10
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.80 kW	6.00 kW
COP Tj = -7°C	4.59	3.25
Cdh Tj = -7 °C		
Pdh Tj = +2°C	5.40 kW	3.70 kW
COP Tj = +2°C	5.60	4.18
Cdh Tj = +2 °C		
Pdh Tj = +7°C	3.50 kW	2.40 kW
COP Tj = +7°C	6.05	4.70
Cdh Tj = +7 °C		
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	6.03	5.34
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	9.80 kW	6.70 kW
COP Tj = Tbiv	4.30	3.00
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.94 kW	6.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.28	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.970	0.980
WTOL	65 °C	65 °C
Poff	23 W	23 W
PTO	0 W	6 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3800 kWh	3444 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
ηs	208 %	155 %

Prated	11.40 kW	7.20 kW
SCOP	5.50	4.30
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.00 kW	4.46 kW
COP Tj = -7°C	5.33	4.01
Pdh Tj = +2°C	4.20 kW	2.70 kW
COP Tj = +2°C	5.90	4.66
Pdh Tj = +7°C	2.80 kW	2.40 kW
COP Tj = +7°C	5.95	5.17
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	5.74	5.51
Pdh Tj = Tbiv	11.50 kW	7.50 kW
COP Tj = Tbiv	3.93	2.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.45 kW	7.54 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.93	2.86
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.96	0.98
WTOL	65 °C	65 °C
Poff	13 W	23 W
PTO	34 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3800 kWh	3444 kWh

Model CTC EcoPart 612M	
Model name	CTC EcoPart 612M
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	6.08 kW	5.24 kW
El input	1.27 kW	1.78 kW
COP	4.78	2.95

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	208 %	155 %
Prated	9.81 kW	6.80 kW
SCOP	5.40	4.10
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.80 kW	6.00 kW
COP Tj = -7°C	4.59	3.25
Cdh Tj = -7 °C		
Pdh Tj = +2°C	5.40 kW	3.70 kW
COP Tj = +2°C	5.60	4.18
Cdh Tj = +2 °C		
Pdh Tj = +7°C	3.50 kW	2.40 kW
COP Tj = +7°C	6.05	4.70
Cdh Tj = +7 °C		
Pdh Tj = 12°C	2.40 kW	2.40 kW

COP Tj = 12°C	6.03	5.34
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	9.80 kW	6.70 kW
COP Tj = Tbiv	4.30	3.00
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.94 kW	6.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.28	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.970	0.980
WTOL	65 °C	65 °C
Poff	23 W	23 W
PTO	0 W	6 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3800 kWh	3444 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	208 %	155 %
Prated	11.40 kW	7.20 kW
SCOP	5.50	4.30
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.00 kW	4.46 kW
COP Tj = -7°C	5.33	4.01
Pdh Tj = +2°C	4.20 kW	2.70 kW
COP Tj = +2°C	5.90	4.66
Pdh Tj = +7°C	2.80 kW	2.40 kW
COP Tj = +7°C	5.95	5.17
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	5.74	5.51
Pdh Tj = Tbiv	11.50 kW	7.50 kW
COP Tj = Tbiv	3.93	2.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.45 kW	7.54 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.93	2.86
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.96	0.98

WTOL	65 °C	65 °C
Poff	13 W	23 W
PTO	34 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3800 kWh	3444 kWh

Model CTC EcoPart i612M	
Model name	CTC EcoPart i612M
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	6.08 kW	5.24 kW
El input	1.27 kW	1.78 kW
COP	4.78	2.95

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	208 %	155 %
Prated	9.81 kW	6.80 kW
SCOP	5.40	4.10
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.80 kW	6.00 kW
COP Tj = -7°C	4.59	3.25
Cdh Tj = -7 °C		
Pdh Tj = +2°C	5.40 kW	3.70 kW
COP Tj = +2°C	5.60	4.18
Cdh Tj = +2 °C		
Pdh Tj = +7°C	3.50 kW	2.40 kW
COP Tj = +7°C	6.05	4.70
Cdh Tj = +7 °C		
Pdh Tj = 12°C	2.40 kW	2.40 kW

COP Tj = 12°C	6.03	5.34
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	9.80 kW	6.70 kW
COP Tj = Tbiv	4.30	3.00
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.94 kW	6.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.28	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.970	0.980
WTOL	65 °C	65 °C
Poff	23 W	23 W
PTO	0 W	6 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3800 kWh	3444 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	208 %	155 %
Prated	11.40 kW	7.20 kW
SCOP	5.50	4.30
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.00 kW	4.46 kW
COP Tj = -7°C	5.33	4.01
Pdh Tj = +2°C	4.20 kW	2.70 kW
COP Tj = +2°C	5.90	4.66
Pdh Tj = +7°C	2.80 kW	2.40 kW
COP Tj = +7°C	5.95	5.17
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	5.74	5.51
Pdh Tj = Tbiv	11.50 kW	7.50 kW
COP Tj = Tbiv	3.93	2.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.45 kW	7.54 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.93	2.86
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.96	0.98

WTOL	65 °C	65 °C
Poff	13 W	23 W
PTO	34 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3800 kWh	3444 kWh