Subtype CTC GSi 612 1x230V

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 1x230V
Registration number	012-C700086
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	2.3 kg
Certification Date	02.04.2023
Testing basis	EN 14511:2018, EN 16147:2011, EN 14825:2018, EN 12102:2017
Testing laboratory	RISE Research Institutes of Sweden

Model CTC GSi 612 F101-1 1x230V	
Model name	CTC GSi 612 F101-1 1x230V
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	1x230V 50Hz
Off-peak product	No

Brine/Water EN 16147 | Average Climate	
Declared load profile	XL
Efficiency ηDHW	96 %
COP	2.40
Heating up time	1:49 h:min
Standby power input	70.3 W
Reference hot water temperature	54.0 °C
Mixed water at 40°C	232 l

EN 16147 | Colder Climate	
Declared load profile	XL
Efficiency ηDHW	96 %
COP	2.40
Heating up time	1:49 h:min
Standby power input	70.3 W
Reference hot water temperature	54.0 °C
Mixed water at 40°C	232 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	5.41 kW	4.88 kW
El input	1.27 kW	1.90 kW
COP	4.27	2.57

EN 12102-1 | Average Climate	Low temperature	Medium temperature

Sound power level indoor	41 dB(A)	41 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	188 %	140 %
Prated	12.00 kW	10.00 kW
SCOP	4.91	3.70
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.47 kW	8.65 kW
COP Tj = -7°C	3.84	2.77
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	6.53 kW	5.29 kW
COP Tj = +2°C	4.84	3.76
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	4.16 kW	3.53 kW
COP Tj = +7°C	5.86	4.35
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	2.29 kW	2.17 kW
COP Tj = 12°C	6.19	4.48
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	11.57 kW	9.75 kW
COP Tj = Tbiv	3.61	2.54
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.57 kW	9.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.61	2.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	65 °C	65 °C
Poff	18 W	18 W
PTO	18 W	18 W
PSB	18 W	18 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	5049 kWh	5582 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	204 %	150 %

Prated	10.00 kW	10.00 kW
SCOP	5.29	3.94
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.99 kW	6.05 kW
COP Tj = -7°C	5.05	3.53
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = +2°C	3.66 kW	3.76 kW
COP Tj = +2°C	5.81	4.30
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	2.35 kW	2.46 kW
COP Tj = +7°C	5.62	5.36
Cdh Tj = +7 °C	0.960	0.960
Pdh Tj = 12°C	2.28 kW	2.39 kW
COP Tj = 12°C	5.71	5.00
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	9.83 kW	9.75 kW
COP Tj = Tbiv	3.86	2.54
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.83 kW	9.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.86	2.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	65 °C	65 °C
Poff	18 W	18 W
PTO	18 W	18 W
PSB	18 W	18 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	4659 kWh	6258 kWh