Subtype CTC GSi 616

Certificate Holder	CTC AB
Address	Box 309, Näsvägen
ZIP	SE-341 26
City	Ljungby
Country	SE
Certification Body	RISE CERT
Subtype title	CTC GSi 616
Registration number	012- C700088
Heat Pump Type	Brine/Water
Refrigerant	R407c
Mass of Refrigerant	2.2 kg
Certification Date	30.11.2020
Testing basis	EN 14511:2018, EN 16147:2017, EN 14825:2016, EN12102:2017
Testing laboratory	RISE Research Institutes of Sweden

Model CTC GSi 616

Model name	CTC GSi 616
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	99 %
COP	2.38
Heating up time	01:04 h:min
Standby power input	57.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	234 l

EN 16147 | Colder Climate

Declared load profile	XL
Efficiency ηDHW	99 %
COP	2.38
Heating up time	01:04 h:min
Standby power input	57.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	234 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	11.55 kW	9.85 kW
El input	2.62 kW	3.63 kW
COP	4.40	2.72

EN 12102-1 | Average Climate

	Low temperature	Medium temperature

Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	201 %	154 %
Prated	16.00 kW	16.00 kW
SCOP	5.23	4.04
Tbiv	-9 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	14.04 kW	14.19 kW
COP Tj = -7°C	4.17	2.79
Pdh Tj = +2°C	8.49 kW	8.83 kW
COP Tj = +2°C	5.36	4.13
Pdh Tj = +7°C	5.61 kW	5.50 kW
COP Tj = +7°C	5.87	4.89
Pdh Tj = 12°C	4.55 kW	4.39 kW
COP Tj = 12°C	6.03	5.14
Pdh Tj = Tbiv	15.27 kW	14.58 kW
COP Tj = Tbiv	3.88	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.60 kW	14.34 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.57
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	65 °C	65 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.40 kW	1.66 kW
Annual energy consumption Qhe	6321 kWh	8176 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	210 %	161 %
Prated	16.00 kW	16.00 kW
SCOP	5.45	4.22
Tbiv	-21 °C	-18 °C
TOL	-22 °C	-22 °C

Pdh Tj = -7°C	9.89 kW	9.98 kW
COP Tj = -7°C	5.22	3.79
Pdh Tj = +2°C	5.88 kW	5.92 kW
COP Tj = +2°C	5.93	4.78
Pdh Tj = +7°C	4.45 kW	4.46 kW
COP Tj = +7°C	6.07	5.31
Pdh Tj = 12°C	4.39 kW	4.46 kW
COP Tj = 12°C	5.76	5.31
Pdh Tj = Tbiv	15.51 kW	14.27 kW
COP Tj = Tbiv	3.77	2.76
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.60 kW	14.34 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.57
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	65 °C	65 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.40 kW	1.66 kW
Annual energy consumption Qhe	7239 kWh	9352 kWh

Model CTC EcoPart 616M	
Model name	CTC EcoPart 616M
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	11.55 kW	9.85 kW
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COP	4.40	2.72

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
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EN 14825 | Average Climate

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WTOL	65 °C	65 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.40 kW	1.66 kW
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WTOL	65 °C	65 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.40 kW	1.66 kW
Annual energy consumption Qhe	7239 kWh	9352 kWh

Model CTC EcoPart i616M	
Model name	CTC EcoPart i616M
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

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