

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

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 η_{DHW}	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 η_{DHW}	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
η_s	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
η_s	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
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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 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

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Supplementary Heater: PSUP	0.40 kW	1.66 kW
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