Subtype iTec XT 14/16

Certificate Holder	Thermia
Address	Snickaregatan 1
ZIP	
City	Arvika
Country	SE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	iTec XT 14/16
Registration number	011-1W0743
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	3.3 kg
Certification Date	12.12.2023
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 12 (as of 2023-03)

Model iTec XT 14 230-1	
Model name	iTec XT 14 230-1
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	12.00 kW	12.00 kW
El input	2.35 kW	3.53 kW
COP	5.11	3.40

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	193 %	148 %
Prated	12.60 kW	12.60 kW
SCOP	4.90	3.78
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.15 kW	11.15 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.80 kW	6.80 kW
COP Tj = +2°C	4.70	3.70
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.70 kW	4.70 kW

COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.70 kW	4.70 kW
COP Tj = 12°C	8.60	6.30
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.15 kW	11.15 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.30 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.30 kW	0.30 kW
Annual energy consumption Qhe	5277 kWh	6862 kWh

Model iTec XT 14 400V	
Model name	iTec XT 14 400V
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	12.00 kW	12.00 kW
El input	2.35 kW	3.53 kW
COP	5.11	3.40

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	193 %	148 %
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SCOP	4.90	3.78
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.15 kW	11.15 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.80 kW	6.80 kW
COP Tj = +2°C	4.70	3.70
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.70 kW	4.70 kW

COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.70 kW	4.70 kW
COP Tj = 12°C	8.60	6.30
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.15 kW	11.15 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.30 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.30 kW	0.30 kW
Annual energy consumption Qhe	5277 kWh	6862 kWh

Model iTec XT 16 230-1	
Model name	iTec XT 16 230-1
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	14.00 kW	14.00 kW
El input	2.77 kW	4.18 kW
COP	5.05	3.35

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	190 %	147 %
Prated	13.60 kW	13.60 kW
SCOP	4.83	3.75
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.03 kW	12.03 kW
COP Tj = -7°C	2.90	2.28
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.32 kW	7.32 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.80 kW	4.80 kW

COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.80 kW	4.80 kW
COP Tj = 12°C	8.60	6.28
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.03 kW	12.03 kW
COP Tj = Tbiv	2.90	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.30 kW	13.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.30 kW	0.30 kW
Annual energy consumption Qhe	5796 kWh	7472 kWh

Model iTec XT 16 400V	
Model name	iTec XT 16 400V
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	14.00 kW	14.00 kW
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COP	5.05	3.35

EN 12102-1 | Average Climate		
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SCOP	4.83	3.75
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.03 kW	12.03 kW
COP Tj = -7°C	2.90	2.28
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.32 kW	7.32 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.80 kW	4.80 kW

COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.80 kW	4.80 kW
COP Tj = 12°C	8.60	6.28
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.03 kW	12.03 kW
COP Tj = Tbiv	2.90	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.30 kW	13.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.30 kW	0.30 kW
Annual energy consumption Qhe	5796 kWh	7472 kWh