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#### This information was generated by the HP KEYMARK database on 7 Jul 2022

#### Login

Summary of	F1x55-12	Reg. No.	012-048	
Certificate Holder				
Name	Nibe AB	Nibe AB		
Address	Box 14	Zip	S-28521	
City	Markaryd	Country	Sweden	
Certification Body	RISE CERT	RISE CERT		
Subtype title	F1x55-12	F1x55-12		
Heat Pump Type	Brine/Water and	Brine/Water and Water/Water		
Refrigerant	R407c	R407c		
Mass of Refrigerant	2 kg	2 kg		
Certification Date	15.06.2017	15.06.2017		

# Model: F1155-12 1x230

Configure model		
Model name	F1155-12 1x230	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

Brine/Water Heat Pump

### Heating

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	

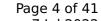
EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.06 kW	4.46 kW
El input	1.04 kW	1.47 kW
СОР	4.87	3.02

### Colder Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	208 %	162 %
Prated	11.60 kW	12.40 kW
SCOP	5.40	4.25
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.10 kW	7.60 kW
COP Tj = -7°C	5.26	3.94
Pdh Tj = +2°C	4.30 kW	4.70 kW
COP Tj = +2°C	5.62	4.58
Pdh Tj = +7°C	2.80 kW	3.00 kW
COP Tj = +7°C	6.01	5.11
Pdh Tj = 12°C	2.70 kW	2.60 kW
COP Tj = 12°C	5.44	4.98
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91





Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.97	0.98
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	20 W	15 W
PSB	7 W	7 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5292 kWh	7173 kWh

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	44 dB(A)	44 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	201 %	157 %
Prated	11.00 kW	12.40 kW



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SCOP	5.23	4.13
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.30 kW	11.10 kW
$COP Tj = -7^{\circ}C$	4.52	3.18
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = $+2$ °C	6.30 kW	6.77 kW
COP Tj = +2°C	5.22	4.12
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = $+7^{\circ}$ C	4.10 kW	4.40 kW
$COPTj = +7^{\circ}C$	5.60	4.67
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	2.70 kW	2.60 kW
COP Tj = 12°C	5.78	5.06
Cdh Tj = +12 °C	0.98	0.99
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	65 °C	65 °C





Poff	5 W	5 W
PTO	20 W	15 W
PSB	7 W	7 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	4582 kWh	6213 kWh

Water/Water Heat Pump

# Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

EN 14511-2		
	Low temperature	Medium temperature
Heat output	6.33 kW	5.79 kW
El input	1.03 kW	1.54 kW
СОР	6.12	3.75



### Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	44 dB(A)	44 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	263 %	204 %
Prated	14.00 kW	14.00 kW
SCOP	6.77	5.30
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.60 kW	8.60 kW
COP Tj = -7°C	6.50	4.85
Pdh Tj = +2°C	5.20 kW	2.20 kW
COP Tj = +2°C	7.13	5.76
Pdh Tj = +7°C	3.40 kW	3.40 kW
COP Tj = +7°C	7.84	6.65
Pdh Tj = 12°C	3.30 kW	3.20 kW
COP Tj = 12°C	7.39	6.58
Pdh Tj = Tbiv	14.00 kW	14.00 kW





COP Tj = Tbiv	5.08	3.48
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.00 kW	14.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.08	3.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.96	0.97
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	30 W	25 W
PSB	10 W	7 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5091 kWh	6497 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	253 %	197 %





Prated	14.00 kW	14.00 kW
SCOP	6.52	5.12
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = $-7^{\circ}$ C	12.50 kW	12.40 kW
$COP Tj = -7^{\circ}C$	5.46	3.84
Pdh Tj = $+2$ °C	7.60 kW	7.60 kW
$COP Tj = +2^{\circ}C$	6.56	5.12
Pdh Tj = $+7^{\circ}$ C	4.90 kW	4.90 kW
$COPTj = +7^{\circ}C$	7.14	5.90
Pdh Tj = 12°C	3.30 kW	3.20 kW
COP Tj = 12°C	7.65	6.52
Pdh Tj = Tbiv	14.00 kW	14.00 kW
COP Tj = Tbiv	5.08	3.48
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.00 kW	14.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.08	3.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.97	0.98
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	30 W	25 W
PSB	10 W	7 W



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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	4433 kWh	5657 kWh

# Model: F1155-12 3x400

Configure model		
Model name	F1155-12 3x400	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

Brine/Water Heat Pump

### Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

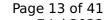
EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.06 kW	4.46 kW
El input	1.04 kW	1.47 kW
СОР	4.87	3.02

### Colder Climate



EN 12102-1		
Low temperature Medium temperature		
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	208 %	162 %
Prated	11.60 kW	12.40 kW
SCOP	5.40	4.25
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.10 kW	7.60 kW
COP Tj = -7°C	5.26	3.94
Pdh Tj = +2°C	4.30 kW	4.70 kW
COP Tj = +2°C	5.62	4.58
Pdh Tj = +7°C	2.80 kW	3.00 kW
COP Tj = +7°C	6.01	5.11
Pdh Tj = 12°C	2.70 kW	2.60 kW
COP Tj = 12°C	5.44	4.98
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91





Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.97	0.98
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	20 W	15 W
PSB	7 W	7 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5292 kWh	7173 kWh

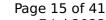
EN 12102-1		
Low temperature Medium temperature		
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	201 %	157 %
Prated	11.00 kW	12.40 kW





SCOP	5.23	4.13
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.30 kW	11.10 kW
COP Tj = -7°C	4.52	3.18
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	6.30 kW	6.77 kW
COP Tj = +2°C	5.22	4.12
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = $+7^{\circ}$ C	4.10 kW	4.40 kW
COP Tj = +7°C	5.60	4.67
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	2.70 kW	2.60 kW
COP Tj = 12°C	5.78	5.06
Cdh Tj = +12 °C	0.98	0.99
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	65 °C	65 °C





Poff	5 W	5 W
РТО	20 W	15 W
PSB	7 W	7 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4582 kWh	6213 kWh

Water/Water Heat Pump

# Heating

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	

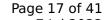
EN 14511-2			
Low temperature Medium temperature			
Heat output	6.33 kW	5.79 kW	
El input	1.03 kW	1.54 kW	
СОР	6.12	3.75	

### Colder Climate

This information was generated by the HP KEYMARK database on 7 Jul 2022

EN 12102-1		
Low temperature Medium temperature		Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	263 %	204 %
Prated	14.00 kW	14.00 kW
SCOP	6.77	5.30
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.60 kW	8.60 kW
COP Tj = $-7^{\circ}$ C	6.50	4.85
Pdh Tj = $+2$ °C	5.20 kW	2.20 kW
COP Tj = +2°C	7.13	5.76
Pdh Tj = $+7^{\circ}$ C	3.40 kW	3.40 kW
$COP Tj = +7^{\circ}C$	7.84	6.65
Pdh Tj = 12°C	3.30 kW	3.20 kW
COP Tj = 12°C	7.39	6.58
Pdh Tj = Tbiv	14.00 kW	14.00 kW



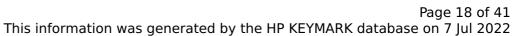


This information was gener	rated by the HP KEYM	ARK database on 7 Jul 2022
	5.08	3.48

COP Tj = Tbiv	5.08	3.48
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.00 kW	14.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.08	3.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.96	0.97
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	30 W	25 W
PSB	10 W	7 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5091 kWh	6497 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	253 %	197 %





This information was ger	icrated by the fir RETT	MARK database on 7 jul 202
Prated	14.00 kW	14.00 kW
SCOP	6.52	5.12
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.50 kW	12.40 kW
$COP Tj = -7^{\circ}C$	5.46	3.84
Pdh Tj = $+2$ °C	7.60 kW	7.60 kW
$COP Tj = +2^{\circ}C$	6.56	5.12
Pdh Tj = $+7^{\circ}$ C	4.90 kW	4.90 kW
$COP Tj = +7^{\circ}C$	7.14	5.90
Pdh Tj = 12°C	3.30 kW	3.20 kW
COP Tj = 12°C	7.65	6.52
Pdh Tj = Tbiv	14.00 kW	14.00 kW
COP Tj = Tbiv	5.08	3.48
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.00 kW	14.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.08	3.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	0.97	0.98
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	30 W	25 W
PSB	10 W	7 W
	+	+



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#### This information was generated by the HP KEYMARK database on 7 Jul 2022

PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4433 kWh	5657 kWh



# Model: F1255-12 1x230

Configure model		
Model name   F1255-12 1x230		
Application	Heating + DHW + low temp	
Units	Indoor	
Climate Zone	Colder Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data	
Power supply	1x230V 50Hz
Off-peak product	No

Brine/Water Heat Pump

### Heating

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.06 kW	4.46 kW
El input	1.04 kW	1.47 kW
СОР	4.87	3.02



### Colder Climate

This information was generated by the HP KEYMARK database on 7 Jul 2022

EN 12102-1		
Low temperature Medium tempera		Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	208 %	162 %
Prated	11.60 kW	12.40 kW
SCOP	5.40	4.25
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.10 kW	7.60 kW
COP Tj = -7°C	5.26	3.94
Pdh Tj = +2°C	4.30 kW	4.70 kW
COP Tj = +2°C	5.62	4.58
Pdh Tj = +7°C	2.80 kW	3.00 kW
COP Tj = +7°C	6.01	5.11
Pdh Tj = 12°C	2.70 kW	2.60 kW
COP Tj = 12°C	5.44	4.98
Pdh Tj = Tbiv	11.50 kW	12.30 kW





COP Tj = Tbiv	4.26	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.97	0.98
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	20 W	15 W
PSB	7 W	7 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5292 kWh	7173 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	201 %	157 %





2.40 kW
.13
.0 °C
.0 °C
1.10 kW
.18
.99
.77 kW
.12
.99
.40 kW
.67
.99
.60 kW
.06
.99
2.30 kW
91
2.30 kW
91
.99
2.9



This information was generated by the HP KEYMARK database on 7 Jul 202		
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	20 W	15 W
PSB	7 W	7 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4582 kWh	6213 kWh

### Domestic Hot Water (DHW)

#### Colder Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	98 %	
СОР	2.45	
Heating up time	01:42 h:min	
Standby power input	50.0 W	
Reference hot water temperature	50.0 °C	
Mixed water at 40°C	240	



EN 16147		
Declared load profile	XL	
Efficiency ηDHW	98 %	
СОР	2.45	
Heating up time	01:42 h:min	
Standby power input	50.0 W	
Reference hot water temperature	50.0 °C	
Mixed water at 40°C	240 I	

Water/Water Heat Pump

# Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

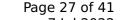


EN 14511-2		
	Low temperature	Medium temperature
Heat output	6.33 kW	5.79 kW
El input	1.03 kW	1.54 kW
СОР	6.12	3.75

### Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

	Low temperature	Medium temperature
$\eta_{s}$	263 %	204 %
Prated	14.00 kW	14.00 kW
SCOP	6.77	5.30
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.60 kW	8.60 kW
COP Tj = -7°C	6.50	4.85
Pdh Tj = $+2$ °C	5.20 kW	2.20 kW





This information was generated by the HP KEYMARK database on 7 Jul 2022  $COPTj = +2^{\circ}C$ 7.13 5.76 3.40 kW 3.40 kW Pdh Tj =  $+7^{\circ}$ C 7.84  $COPTi = +7^{\circ}C$ 6.65 Pdh Tj = 12°C 3.30 kW 3.20 kW  $COPTj = 12^{\circ}C$ 7.39 6.58 14.00 kW 14.00 kW Pdh Tj = TbivCOP Tj = Tbiv5.08 3.48 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 14.00 kW 14.00 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 5.08 3.48 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 0.96 0.97 WTOL 65°C 65 °C Poff 5 W 5 W PTO 30 W 25 W **PSB** 10 W 7 W **PCK** 0 W 0 W

### Average Climate

Supplementary Heater: PSUP

Annual energy consumption Qhe

Supplementary Heater: Type of energy input

Electricity

0.00 kW

5091 kWh

Electricity

0.00 kW

6497 kWh



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	253 %	197 %
Prated	14.00 kW	14.00 kW
SCOP	6.52	5.12
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.50 kW	12.40 kW
COP Tj = -7°C	5.46	3.84
Pdh $Tj = +2$ °C	7.60 kW	7.60 kW
COP Tj = +2°C	6.56	5.12
Pdh Tj = $+7^{\circ}$ C	4.90 kW	4.90 kW
COP Tj = +7°C	7.14	5.90
Pdh Tj = 12°C	3.30 kW	3.20 kW
COP Tj = 12°C	7.65	6.52
Pdh Tj = Tbiv	14.00 kW	14.00 kW
COP Tj = Tbiv	5.08	3.48



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#### This information was generated by the HP KEYMARK database on 7 Jul 2022

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.00 kW	14.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.08	3.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.97	0.98
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	30 W	25 W
PSB	10 W	7 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4433 kWh	5657 kWh

Domestic Hot Water (DHW)

Colder Climate



EN 16147		
Declared load profile	XL	
Efficiency ηDHW	113 %	
СОР	2.82	
Heating up time	01:32 h:min	
Standby power input	45.0 W	
Reference hot water temperature	49.0 °C	
Mixed water at 40°C	235 I	

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	113 %	
СОР	2.82	
Heating up time	01:32 h:min	
Standby power input	45.0 W	
Reference hot water temperature	49.0 °C	
Mixed water at 40°C	235 I	

# Model: F1255-12 3x400

Configure model		
Model name	F1255-12 3x400	
Application	Heating + DHW + low temp	
Units	Indoor	
Climate Zone	Colder Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	
Off-peak product	No	

Brine/Water Heat Pump

### Heating

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.06 kW	4.46 kW
El input	1.04 kW	1.47 kW
СОР	4.87	3.02

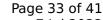


### Colder Climate

This information was generated by the HP KEYMARK database on 7 Jul 2022

EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	44 dB(A)	44 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	208 %	162 %
Prated	11.60 kW	12.40 kW
SCOP	5.40	4.25
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.10 kW	7.60 kW
COP Tj = -7°C	5.26	3.94
Pdh Tj = +2°C	4.30 kW	4.70 kW
COP Tj = +2°C	5.62	4.58
Pdh Tj = +7°C	2.80 kW	3.00 kW
COP Tj = +7°C	6.01	5.11
Pdh Tj = 12°C	2.70 kW	2.60 kW
COP Tj = 12°C	5.44	4.98
Pdh Tj = Tbiv	11.50 kW	12.30 kW

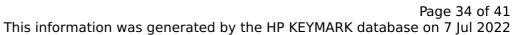




COP Tj = Tbiv	4.26	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.97	0.98
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	20 W	15 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5292 kWh	7173 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	201 %	157 %





Prated	11.00 kW	12.40 kW
SCOP	5.23	4.13
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.30 kW	11.10 kW
COP Tj = -7°C	4.52	3.18
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	6.30 kW	6.77 kW
COP Tj = +2°C	5.22	4.12
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = $+7$ °C	4.10 kW	4.40 kW
$COP Tj = +7^{\circ}C$	5.60	4.67
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	2.70 kW	2.60 kW
COP Tj = 12°C	5.78	5.06
Cdh Tj = +12 °C	0.98	0.99
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	0.98	0.99



This information was gene	rated by the HP KEYM	ARK database on 7 Jul 2022

WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	20 W	15 W
PSB	7 W	7 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4582 kWh	6213 kWh

### Domestic Hot Water (DHW)

### Colder Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	98 %
СОР	2.45
Heating up time	01:42 h:min
Standby power input	50.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	240



EN 16147	
Declared load profile	XL
Efficiency ηDHW	98 %
СОР	2.45
Heating up time	01:42 h:min
Standby power input	50.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	240

Water/Water Heat Pump

# Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed



EN 14511-2		
	Low temperature	Medium temperature
Heat output	6.33 kW	5.79 kW
El input	1.03 kW	1.54 kW
СОР	6.12	3.75

### Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

	Low temperature	Medium temperature
$\eta_{s}$	263 %	204 %
Prated	14.00 kW	14.00 kW
SCOP	6.77	5.30
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.60 kW	8.60 kW
COP Tj = -7°C	6.50	4.85
Pdh Tj = $+2$ °C	5.20 kW	2.20 kW



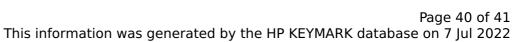


COP Tj = +2°C	7.13	5.76
Pdh Tj = $+7^{\circ}$ C	3.40 kW	3.40 kW
$COP Tj = +7^{\circ}C$	7.84	6.65
Pdh Tj = 12°C	3.30 kW	3.20 kW
COP Tj = 12°C	7.39	6.58
Pdh Tj = Tbiv	14.00 kW	14.00 kW
COP Tj = Tbiv	5.08	3.48
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.00 kW	14.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.08	3.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.96	0.97
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	30 W	25 W
PSB	10 W	7 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5091 kWh	6497 kWh



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	253 %	197 %
Prated	14.00 kW	14.00 kW
SCOP	6.52	5.12
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.50 kW	12.40 kW
COP Tj = $-7$ °C	5.46	3.84
Pdh $Tj = +2$ °C	7.60 kW	7.60 kW
COP Tj = +2°C	6.56	5.12
Pdh Tj = $+7^{\circ}$ C	4.90 kW	4.90 kW
COP Tj = +7°C	7.14	5.90
Pdh Tj = 12°C	3.30 kW	3.20 kW
COP Tj = 12°C	7.65	6.52
Pdh Tj = Tbiv	14.00 kW	14.00 kW
COP Tj = Tbiv	5.08	3.48



$\bigcirc$	
	CEN heat pump
	KEYMARK

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.00 kW	14.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.08	3.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.97	0.98
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	30 W	25 W
PSB	10 W	7 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4433 kWh	5657 kWh

Domestic Hot Water (DHW)

Colder Climate



EN 16147		
Declared load profile	XL	
Efficiency ηDHW	113 %	
СОР	2.82	
Heating up time	01:32 h:min	
Standby power input	45.0 W	
Reference hot water temperature	49.0 °C	
Mixed water at 40°C	235 I	

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	113 %	
СОР	2.82	
Heating up time	01:32 h:min	
Standby power input	45.0 W	
Reference hot water temperature	49.0 °C	
Mixed water at 40°C	235	