

Summary of	F1x45-5	Reg. No.	012-037
Certificate Holder			
Name	Nibe AB		
Address	Box 14	Zip	S-28521
City	Markaryd	Country	Sweden
Certification Body	RISE CERT		
Name of testing laboratory	AIT		
Subtype title	F1x45-5		
Heat Pump Type	Brine/Water		
Refrigerant	R407c		
Mass Of Refrigerant	1.2 kg		



Model: F1145-5 1x230

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.65 kW	3.42 kW
El input	1.13 kW	1.27 kW
СОР	4.12	2.69
Indoor water flow rate	1.00 m³/h	0.54 m³/h

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

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	172 %	128 %
Prated	5.80 kW	5.00 kW
SCOP	4.50	3.40
Tbiv	-5 °C	-4 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.70 kW	3.50 kW
COP Tj = -7°C	4.41	2.99
Pdh Tj = +2°C	4.90 kW	4.10 kW
COP Tj = +2°C	4.60	3.57
Pdh Tj = +7°C	5.00 kW	4.30 kW
COP Tj = +7°C	4.75	3.84
Pdh Tj = 12°C	5.10 kW	4.60 kW
COP Tj = 12°C	4.78	4.04
Pdh Tj = Tbiv	4.80 kW	3.80 kW
COP Tj = Tbiv	4.46	3.26





Pdh Tj = TOL	4.70 kW	3.20 kW
COP Tj = TOL	4.30	2.74
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
РТО	8 W	8 W
PSB	7 W	7 W
PCK	12 W	12 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.10 kW	1.80 kW
Annual energy consumption Qhe	2669 kWh	3027 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825	
Low temperature	Medium temperature
177 %	133 %
5.80 kW	5.00 kW
	Low temperature





		Titil database on 17 Dec 2021
SCOP	4.63	3.53
Tbiv	-16 °C	-13 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.90 kW	4.10 kW
COP Tj = -7 °C	4.65	3.48
Pdh Tj = $+2$ °C	5.00 kW	4.30 kW
COP Tj = +2°C	4.77	3.77
Pdh Tj = $+7^{\circ}$ C	5.10 kW	4.50 kW
$COPTj = +7^{\circ}C$	4.83	4.02
Pdh Tj = 12°C	5.10 kW	4.60 kW
COP Tj = 12°C	4.64	4.07
Pdh Tj = Tbiv	4.80 kW	3.90 kW
COP Tj = Tbiv	4.52	3.29
Pdh Tj = TOL	4.70 kW	3.20 kW
COP Tj = TOL	4.30	2.74
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
РТО	10 W	8 W
PSB	7 W	7 W
РСК	8 W	12 W
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This information was generated by the HP KEYMARK database on 17 Dec 2020

Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.10 kW	1.80 kW
Annual energy consumption Qhe	3097 kWh	3495 kWh



Model: F1145-5 PC 1x230

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.65 kW	3.42 kW
El input	1.13 kW	1.27 kW
СОР	4.12	2.69
Indoor water flow rate	1.00 m³/h	0.54 m³/h

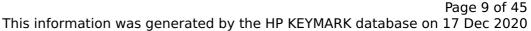
EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	172 %	128 %
Prated	5.80 kW	5.00 kW
SCOP	4.50	3.40
Tbiv	-5 °C	-4 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.70 kW	3.50 kW
COP Tj = -7°C	4.41	2.99
Pdh Tj = +2°C	4.90 kW	4.10 kW
COP Tj = +2°C	4.60	3.57
Pdh Tj = +7°C	5.00 kW	4.30 kW
COP Tj = +7°C	4.75	3.84
Pdh Tj = 12°C	5.10 kW	4.60 kW
COP Tj = 12°C	4.78	4.04
Pdh Tj = Tbiv	4.80 kW	3.80 kW
COP Tj = Tbiv	4.46	3.26





Pdh Tj = TOL4.70 kW 3.20 kW COP Tj = TOL4.30 2.74 Cdh 0.99 0.99 WTOL 65 °C 65 °C Poff 2 W 2 W PTO 8 W 8 W 7 W 7 W **PSB PCK** 12 W 12 W Supplementary Heater: Type of energy input electricity electricity

1.10 kW

2669 kWh

1.80 kW

3027 kWh

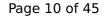
Colder Climate

Supplementary Heater: PSUP

Annual energy consumption Qhe

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
Low temperature	Medium temperature	
177 %	133 %	
5.80 kW	5.00 kW	
	Low temperature	





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SCOP	4.63	3.53		
Tbiv	-16 °C	-13 °C		
TOL	-22 °C	-22 °C		
Pdh Tj = -7°C	4.90 kW	4.10 kW		
COP $Tj = -7$ °C	4.65	3.48		
Pdh Tj = +2°C	5.00 kW	4.30 kW		
COP Tj = +2°C	4.77	3.77		
Pdh Tj = $+7^{\circ}$ C	5.10 kW	4.50 kW		
$COPTj = +7^{\circ}C$	4.83	4.02		
Pdh Tj = 12°C	5.10 kW	4.60 kW		
COP Tj = 12°C	4.64	4.07		
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COP Tj = Tbiv	4.52	3.29		
Pdh Tj = TOL	4.70 kW	3.20 kW		
COP Tj = TOL	4.30	2.74		
Cdh	0.99	0.99		
WTOL	65 °C	65 °C		
Poff	2 W	2 W		
РТО	10 W	8 W		
PSB	7 W	7 W		
PCK	8 W	12 W		



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Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.10 kW	1.80 kW
Annual energy consumption Qhe	3097 kWh	3495 kWh

Model: F1145-5 3x400

General Data	
Power supply 3x400V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.65 kW	3.42 kW
El input	1.13 kW	1.27 kW
СОР	4.12	2.69
Indoor water flow rate	1.00 m³/h	0.54 m³/h

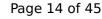
EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	172 %	128 %
Prated	5.80 kW	5.00 kW
SCOP	4.50	3.40
Tbiv	-5 °C	-4 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.70 kW	3.50 kW
COP Tj = -7°C	4.41	2.99
Pdh Tj = +2°C	4.90 kW	4.10 kW
COP Tj = +2°C	4.60	3.57
Pdh Tj = +7°C	5.00 kW	4.30 kW
COP Tj = +7°C	4.75	3.84
Pdh Tj = 12°C	5.10 kW	4.60 kW
COP Tj = 12°C	4.78	4.04
Pdh Tj = Tbiv	4.80 kW	3.80 kW
COP Tj = Tbiv	4.46	3.26





Pdh Tj = TOL	4.70 kW	3.20 kW
COP Tj = TOL	4.30	2.74
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
РТО	8 W	8 W
PSB	7 W	7 W
PCK	12 W	12 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.10 kW	1.80 kW
Annual energy consumption Qhe	2669 kWh	3027 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	177 %	133 %
Prated	5.80 kW	5.00 kW





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SCOP	4.63	3.53
Tbiv	-16 °C	-13 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.90 kW	4.10 kW
COP Tj = -7°C	4.65	3.48
Pdh Tj = +2°C	5.00 kW	4.30 kW
COP Tj = +2°C	4.77	3.77
Pdh Tj = +7°C	5.10 kW	4.50 kW
$COP Tj = +7^{\circ}C$	4.83	4.02
Pdh Tj = 12°C	5.10 kW	4.60 kW
COP Tj = 12°C	4.64	4.07
Pdh Tj = Tbiv	4.80 kW	3.90 kW
COP Tj = Tbiv	4.52	3.29
Pdh Tj = TOL	4.70 kW	3.20 kW
COP Tj = TOL	4.30	2.74
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
РТО	10 W	8 W
PSB	7 W	7 W
РСК	8 W	12 W



$$\operatorname{\textit{Page}}\ 16$$ of 45 This information was generated by the HP KEYMARK database on 17 Dec 2020

Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.10 kW	1.80 kW
Annual energy consumption Qhe	3097 kWh	3495 kWh



Model: F1145-5 PC 3x400

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	4.65 kW	3.42 kW	
El input	1.13 kW	1.27 kW	
СОР	4.12	2.69	
Indoor water flow rate	1.00 m³/h	0.54 m³/h	

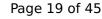
EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
Low temperature	Medium temperature	
172 %	128 %	
5.80 kW	5.00 kW	
4.50	3.40	
-5 °C	-4 °C	
-10 °C	-10 °C	
4.70 kW	3.50 kW	
4.41	2.99	
4.90 kW	4.10 kW	
4.60	3.57	
5.00 kW	4.30 kW	
4.75	3.84	
5.10 kW	4.60 kW	
4.78	4.04	
4.80 kW	3.80 kW	
4.46	3.26	
	172 % 5.80 kW 4.50 -5 °C -10 °C 4.70 kW 4.41 4.90 kW 4.60 5.00 kW 4.75 5.10 kW 4.78 4.80 kW	





Pdh Tj = TOL	4.70 kW	3.20 kW
COP Tj = TOL	4.30	2.74
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
РТО	8 W	8 W
PSB	7 W	7 W
PCK	12 W	12 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.10 kW	1.80 kW
Annual energy consumption Qhe	2669 kWh	3027 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	177 %	133 %
Prated	5.80 kW	5.00 kW





		Titil database on 17 Dec 2021
SCOP	4.63	3.53
Tbiv	-16 °C	-13 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.90 kW	4.10 kW
COP Tj = -7 °C	4.65	3.48
Pdh Tj = $+2$ °C	5.00 kW	4.30 kW
COP Tj = +2°C	4.77	3.77
Pdh Tj = $+7^{\circ}$ C	5.10 kW	4.50 kW
$COPTj = +7^{\circ}C$	4.83	4.02
Pdh Tj = 12°C	5.10 kW	4.60 kW
COP Tj = 12°C	4.64	4.07
Pdh Tj = Tbiv	4.80 kW	3.90 kW
COP Tj = Tbiv	4.52	3.29
Pdh Tj = TOL	4.70 kW	3.20 kW
COP Tj = TOL	4.30	2.74
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
РТО	10 W	8 W
PSB	7 W	7 W
РСК	8 W	12 W
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Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.10 kW	1.80 kW
Annual energy consumption Qhe	3097 kWh	3495 kWh



Model: F1245-5 1x230

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

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.65 kW	3.42 kW
El input	1.13 kW	1.27 kW
СОР	4.12	2.69
Indoor water flow rate	1.00 m³/h	0.54 m³/h

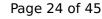
EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	
Complete power supply failure	passed

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	172 %	128 %
Prated	5.80 kW	5.00 kW
SCOP	4.50	3.40
Tbiv	-5 °C	-4 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.70 kW	3.50 kW
COP Tj = -7°C	4.41	2.99
Pdh Tj = +2°C	4.90 kW	4.10 kW
COP Tj = +2°C	4.60	3.57
Pdh Tj = +7°C	5.00 kW	4.30 kW
COP Tj = +7°C	4.75	3.84
Pdh Tj = 12°C	5.10 kW	4.60 kW
COP Tj = 12°C	4.78	4.04
Pdh Tj = Tbiv	4.80 kW	3.80 kW
COP Tj = Tbiv	4.46	3.26





	1	
Pdh Tj = TOL	4.70 kW	3.20 kW
COP Tj = TOL	4.30	2.74
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
РТО	8 W	8 W
PSB	7 W	7 W
PCK	12 W	12 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.10 kW	1.80 kW
Annual energy consumption Qhe	2669 kWh	3027 kWh

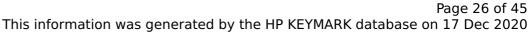
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	177 %	133 %
Prated	5.80 kW	5.00 kW
	'	





SCOP	4.63	3.53
Tbiv	-16 °C	-13 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.90 kW	4.10 kW
COP Tj = -7°C	4.65	3.48
Pdh Tj = $+2$ °C	5.00 kW	4.30 kW
COP Tj = +2°C	4.77	3.77
Pdh Tj = $+7^{\circ}$ C	5.10 kW	4.50 kW
$COPTj = +7^{\circ}C$	4.83	4.02
Pdh Tj = 12°C	5.10 kW	4.60 kW
COP Tj = 12°C	4.64	4.07
Pdh Tj = Tbiv	4.80 kW	3.90 kW
COP Tj = Tbiv	4.52	3.29
Pdh Tj = TOL	4.70 kW	3.20 kW
COP Tj = TOL	4.30	2.74
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
РТО	10 W	8 W
PSB	7 W	7 W
PCK	8 W	12 W



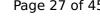


Supplementary Heater: Type of energy input electricity electricity Supplementary Heater: PSUP 1.10 kW 1.80 kW Annual energy consumption Qhe 3097 kWh 3495 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	100 %	
СОР	2.50	
Heating up time	02:50 h:min	
Standby power input	55.0 W	
Reference hot water temperature	50.0 °C	
Mixed water at 40°C	240	





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EN 16147		
Declared load profile	XL	
Efficiency ηDHW	100 %	
СОР	2.50	
Heating up time	02:50 h:min	
Standby power input	55.0 W	
Reference hot water temperature	50.0 °C	
Mixed water at 40°C	240	



Model: F1245-5 PC 1x230

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

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.65 kW	3.42 kW
El input	1.13 kW	1.27 kW
СОР	4.12	2.69
Indoor water flow rate	1.00 m³/h	0.54 m³/h

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

Average Climate



	EN 12102-1	
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	172 %	128 %
Prated	5.80 kW	5.00 kW
SCOP	4.50	3.40
Tbiv	-5 °C	-4 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.70 kW	3.50 kW
COP Tj = -7°C	4.41	2.99
Pdh Tj = +2°C	4.90 kW	4.10 kW
COP Tj = +2°C	4.60	3.57
Pdh Tj = +7°C	5.00 kW	4.30 kW
COP Tj = +7°C	4.75	3.84
Pdh Tj = 12°C	5.10 kW	4.60 kW
COP Tj = 12°C	4.78	4.04
Pdh Tj = Tbiv	4.80 kW	3.80 kW
COP Tj = Tbiv	4.46	3.26

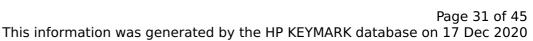




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Pdh Tj = TOL	4.70 kW	3.20 kW
COP Tj = TOL	4.30	2.74
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
РТО	8 W	8 W
PSB	7 W	7 W
PCK	12 W	12 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.10 kW	1.80 kW
Annual energy consumption Qhe	2669 kWh	3027 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	177 %	133 %
Prated	5.80 kW	5.00 kW
	'	



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SCOP	4.63	3.53
Tbiv	-16 °C	-13 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.90 kW	4.10 kW
COP Tj = -7°C	4.65	3.48
Pdh Tj = +2°C	5.00 kW	4.30 kW
COP Tj = +2°C	4.77	3.77
Pdh Tj = +7°C	5.10 kW	4.50 kW
COP Tj = +7°C	4.83	4.02
Pdh Tj = 12°C	5.10 kW	4.60 kW
COP Tj = 12°C	4.64	4.07
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COP Tj = Tbiv	4.52	3.29
Pdh Tj = TOL	4.70 kW	3.20 kW
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Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
РТО	10 W	8 W
PSB	7 W	7 W
PCK	8 W	12 W





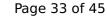
This information was ger	nerated by the HP KEYM	ARK database on 17 Dec 2020

Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.10 kW	1.80 kW
Annual energy consumption Qhe	3097 kWh	3495 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	100 %	
СОР	2.50	
Heating up time	02:50 h:min	
Standby power input	55.0 W	
Reference hot water temperature	50.0 °C	
Mixed water at 40°C	240	





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	100 %	
СОР	2.50	
Heating up time	02:50 h:min	
Standby power input	55.0 W	
Reference hot water temperature	50.0 °C	
Mixed water at 40°C	240	



Model: F1245-5 3x400

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

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.65 kW	3.42 kW
El input	1.13 kW	1.27 kW
СОР	4.12	2.69
Indoor water flow rate	1.00 m³/h	0.54 m³/h

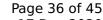
EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	

Average Climate



EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	43 dB(A)	43 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	172 %	128 %
Prated	5.80 kW	5.00 kW
SCOP	4.50	3.40
Tbiv	-5 °C	-4 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.70 kW	3.50 kW
COP Tj = -7°C	4.41	2.99
Pdh Tj = +2°C	4.90 kW	4.10 kW
COP Tj = +2°C	4.60	3.57
Pdh Tj = +7°C	5.00 kW	4.30 kW
COP Tj = +7°C	4.75	3.84
Pdh Tj = 12°C	5.10 kW	4.60 kW
COP Tj = 12°C	4.78	4.04
Pdh Tj = Tbiv	4.80 kW	3.80 kW
COP Tj = Tbiv	4.46	3.26





	-	
Pdh Tj = TOL	4.70 kW	3.20 kW
COP Tj = TOL	4.30	2.74
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
РТО	8 W	8 W
PSB	7 W	7 W
PCK	12 W	12 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.10 kW	1.80 kW
Annual energy consumption Qhe	2669 kWh	3027 kWh

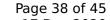
EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	43 dB(A)	43 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{S}	177 %	133 %
Prated	5.80 kW	5.00 kW





This information was generated by the HP RETMARK database on 17 Dec 2020			
SCOP	4.63	3.53	
Tbiv	-16 °C	-13 °C	
TOL	-22 °C	-22 °C	
Pdh Tj = -7°C	4.90 kW	4.10 kW	
COP Tj = -7°C	4.65	3.48	
Pdh Tj = +2°C	5.00 kW	4.30 kW	
COP Tj = +2°C	4.77	3.77	
Pdh Tj = +7°C	5.10 kW	4.50 kW	
$COP Tj = +7^{\circ}C$	4.83	4.02	
Pdh Tj = 12°C	5.10 kW	4.60 kW	
COP Tj = 12°C	4.64	4.07	
Pdh Tj = Tbiv	4.80 kW	3.90 kW	
COP Tj = Tbiv	4.52	3.29	
Pdh Tj = TOL	4.70 kW	3.20 kW	
COP Tj = TOL	4.30	2.74	
Cdh	0.99	0.99	
WTOL	65 °C	65 °C	
Poff	2 W	2 W	
РТО	10 W	8 W	
PSB	7 W	7 W	
PCK	8 W	12 W	





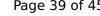
This information was generated by the HP KEYMARK database on 17 Dec 2020			
upplementary Heater: Type of energy input	electricity	electricity	

Supplementary neater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.10 kW	1.80 kW
Annual energy consumption Qhe	3097 kWh	3495 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	100 %	
СОР	2.50	
Heating up time	02:50 h:min	
Standby power input	55.0 W	
Reference hot water temperature	50.0 °C	
Mixed water at 40°C	240	





 $$\operatorname{\textit{Page}}\xspace$ 39 of 45 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	100 %	
СОР	2.50	
Heating up time	02:50 h:min	
Standby power input	55.0 W	
Reference hot water temperature	50.0 °C	
Mixed water at 40°C	240	



Model: F1245-5 PC 3x400

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

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	4.65 kW	3.42 kW	
El input	1.13 kW	1.27 kW	
СОР	4.12	2.69	
Indoor water flow rate	1.00 m³/h	0.54 m³/h	

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

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	172 %	128 %
Prated	5.80 kW	5.00 kW
SCOP	4.50	3.40
Tbiv	-5 °C	-4 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.70 kW	3.50 kW
COP Tj = -7°C	4.41	2.99
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Pdh Tj = +7°C	5.00 kW	4.30 kW
COP Tj = +7°C	4.75	3.84
Pdh Tj = 12°C	5.10 kW	4.60 kW
COP Tj = 12°C	4.78	4.04
Pdh Tj = Tbiv	4.80 kW	3.80 kW
COP Tj = Tbiv	4.46	3.26





Pdh Tj = TOL	4.70 kW	3.20 kW
COP Tj = TOL	4.30	2.74
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
РТО	8 W	8 W
PSB	7 W	7 W
PCK	12 W	12 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.10 kW	1.80 kW
Annual energy consumption Qhe	2669 kWh	3027 kWh

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	43 dB(A)	43 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	177 %	133 %
Prated	5.80 kW	5.00 kW
	-	





mis information was get	Terated by the HP KETM	ARK database on 17 Dec 2020
SCOP	4.63	3.53
Tbiv	-16 °C	-13 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.90 kW	4.10 kW
COP Tj = -7°C	4.65	3.48
Pdh Tj = +2°C	5.00 kW	4.30 kW
COP Tj = +2°C	4.77	3.77
Pdh Tj = +7°C	5.10 kW	4.50 kW
COP Tj = +7°C	4.83	4.02
Pdh Tj = 12°C	5.10 kW	4.60 kW
COP Tj = 12°C	4.64	4.07
Pdh Tj = Tbiv	4.80 kW	3.90 kW
COP Tj = Tbiv	4.52	3.29
Pdh Tj = TOL	4.70 kW	3.20 kW
COP Tj = TOL	4.30	2.74
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
РТО	10 W	8 W
PSB	7 W	7 W
PCK	8 W	12 W



This information was generated by the HP KEYMARK database on 17 Dec 2020 | Iementary Heater: Type of energy input | electricity | electricity

Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.10 kW	1.80 kW
Annual energy consumption Qhe	3097 kWh	3495 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	100 %	
СОР	2.50	
Heating up time	02:50 h:min	
Standby power input	55.0 W	
Reference hot water temperature	50.0 °C	
Mixed water at 40°C	240	





 $$\operatorname{\textit{Page}}45 of 45 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	100 %	
СОР	2.50	
Heating up time	02:50 h:min	
Standby power input	55.0 W	
Reference hot water temperature	50.0 °C	
Mixed water at 40°C	240	