

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

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Summary of	F1x45-6	Reg. No.	012-038
Certificate Holder			
Name	Nibe AB		
Address	Box 14	Zip	S-28521
City	Markaryd	Country	Sweden
Certification Body	RISE CERT		
Subtype title	F1x45-6		
Heat Pump Type	Brine/Water		
Refrigerant	R407c		
Mass of Refrigerant	1.5 kg		

Model: F1145-6 3x400

Configure model	
Model name	F1145-6 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

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	6.10 kW	4.56 kW
El input	1.35 kW	1.50 kW
COP	4.52	3.04

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	43 dB(A)	43 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	190 %	141 %
Prated	7.00 kW	6.00 kW
SCOP	4.95	3.73
Tbiv	-18 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.40 kW	5.20 kW
COP Tj = -7°C	4.96	3.58
Pdh Tj = +2°C	6.50 kW	5.60 kW
COP Tj = +2°C	5.10	3.96
Pdh Tj = +7°C	6.60 kW	5.90 kW
COP Tj = +7°C	5.18	4.25
Pdh Tj = 12°C	6.60 kW	6.10 kW
COP Tj = 12°C	4.97	4.33
Pdh Tj = Tbiv	6.20 kW	4.90 kW
COP Tj = Tbiv	4.75	3.32

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$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	6.10 kW	4.50 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	4.59	2.96
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	12 W	10 W
PSB	7 W	7 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	1.50 kW
Annual energy consumption Q_{he}	3487 kWh	3969 kWh

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	184 %	137 %
Prated	7.00 kW	6.00 kW

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SCOP	4.80	3.63
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.20 kW	4.80 kW
COP Tj = -7°C	4.71	3.18
Pdh Tj = +2°C	6.30 kW	5.30 kW
COP Tj = +2°C	4.91	3.69
Pdh Tj = +7°C	6.50 kW	5.60 kW
COP Tj = +7°C	5.09	4.02
Pdh Tj = 12°C	6.70 kW	6.00 kW
COP Tj = 12°C	5.14	4.29
Pdh Tj = Tbiv	6.20 kW	4.90 kW
COP Tj = Tbiv	4.71	3.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.10 kW	4.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.59	2.96
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	65 °C	65 °C
Poff	1 W	2 W
PTO	12 W	10 W
PSB	7 W	7 W
PCK	14 W	14 W

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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	1.50 kW
Annual energy consumption Q _{he}	3010 kWh	3425 kWh

Model: F1145-6 PC 3x400

Configure model	
Model name	F1145-6 PC 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

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	6.10 kW	4.56 kW
El input	1.35 kW	1.50 kW
COP	4.52	3.04

Colder Climate

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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	190 %	141 %
Prated	7.00 kW	6.00 kW
SCOP	4.95	3.73
Tbiv	-18 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.40 kW	5.20 kW
COP Tj = -7°C	4.96	3.58
Pdh Tj = +2°C	6.50 kW	5.60 kW
COP Tj = +2°C	5.10	3.96
Pdh Tj = +7°C	6.60 kW	5.90 kW
COP Tj = +7°C	5.18	4.25
Pdh Tj = 12°C	6.60 kW	6.10 kW
COP Tj = 12°C	4.97	4.33
Pdh Tj = Tbiv	6.20 kW	4.90 kW
COP Tj = Tbiv	4.75	3.32

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$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	6.10 kW	4.50 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	4.59	2.96
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.99	0.99
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PTO	12 W	10 W
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PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	1.50 kW
Annual energy consumption Q_{he}	3487 kWh	3969 kWh

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	184 %	137 %
Prated	7.00 kW	6.00 kW

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SCOP	4.80	3.63
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.20 kW	4.80 kW
COP Tj = -7°C	4.71	3.18
Pdh Tj = +2°C	6.30 kW	5.30 kW
COP Tj = +2°C	4.91	3.69
Pdh Tj = +7°C	6.50 kW	5.60 kW
COP Tj = +7°C	5.09	4.02
Pdh Tj = 12°C	6.70 kW	6.00 kW
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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.59	2.96
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Poff	1 W	2 W
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PSB	7 W	7 W
PCK	14 W	14 W

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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	1.50 kW
Annual energy consumption Q _{he}	3010 kWh	3425 kWh

Model: F1245-6 3x400

Configure model	
Model name	F1245-6 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

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	6.10 kW	4.56 kW
El input	1.35 kW	1.50 kW
COP	4.52	3.04

Colder Climate

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EN 12102-1

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COP Tj = +2°C	5.10	3.96
Pdh Tj = +7°C	6.60 kW	5.90 kW
COP Tj = +7°C	5.18	4.25
Pdh Tj = 12°C	6.60 kW	6.10 kW
COP Tj = 12°C	4.97	4.33
Pdh Tj = Tbiv	6.20 kW	4.90 kW
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	1.50 kW
Annual energy consumption Q_{he}	3487 kWh	3969 kWh

Average Climate

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Supplementary Heater: PSUP	0.90 kW	1.50 kW
Annual energy consumption Q _{he}	3010 kWh	3425 kWh

Domestic Hot Water (DHW)

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	98 %
COP	2.45
Heating up time	2:45 h:min
Standby power input	55.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	240 l

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	98 %
COP	2.45
Heating up time	2:45 h:min
Standby power input	55.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	240 l

Model: F1245-6 PC 3x400

Configure model	
Model name	F1245-6 PC 3x400
Application	Heating + DHW + low temp
Units	Indoor
Climate Zone	Colder Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
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Off-peak product	No

Heating

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COP Tj = +2°C	5.10	3.96
Pdh Tj = +7°C	6.60 kW	5.90 kW
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WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	12 W	10 W
PSB	7 W	7 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	1.50 kW
Annual energy consumption Q_{he}	3487 kWh	3969 kWh

Average Climate

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Pdh Tj = +7°C	6.50 kW	5.60 kW
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WTOL	65 °C	65 °C
Poff	1 W	2 W
PTO	12 W	10 W
PSB	7 W	7 W
PCK	14 W	14 W

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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	1.50 kW
Annual energy consumption Q _{he}	3010 kWh	3425 kWh

Domestic Hot Water (DHW)

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	98 %
COP	2.45
Heating up time	2:45 h:min
Standby power input	55.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	240 l

Average Climate

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

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	98 %
COP	2.45
Heating up time	2:45 h:min
Standby power input	55.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	240 l