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#### **Login**

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

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
$\eta_{s}$	184 %	137 %
Prated	7.00 kW	6.00 kW
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
$COP Tj = +7^{\circ}C$	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

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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
РТО	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 Qhe	3010 kWh	3425 kWh

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

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	190 %	141 %
Prated	7.00 kW	6.00 kW
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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
$COP Tj = +7^{\circ}C$	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
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	2 W	2 W
РТО	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 Qhe	3487 kWh	3969 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 14511-2		
Low temperature Medium temperature		Medium temperature
Heat output	6.10 kW	4.56 kW
El input	1.35 kW	1.50 kW
СОР	4.52	3.04

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
$\eta_{s}$	184 %	137 %
Prated	7.00 kW	6.00 kW
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
$COP Tj = +7^{\circ}C$	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

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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
РТО	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 Qhe	3010 kWh	3425 kWh

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

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	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
$COP Tj = +2^{\circ}C$	5.10	3.96
Pdh Tj = +7°C	6.60 kW	5.90 kW
$COP Tj = +7^{\circ}C$	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
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	2 W	2 W
РТО	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 Qhe	3487 kWh	3969 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	

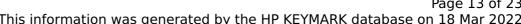
General Data		
Power supply	3x400V 50Hz	
Off-peak product	No	

## Heating

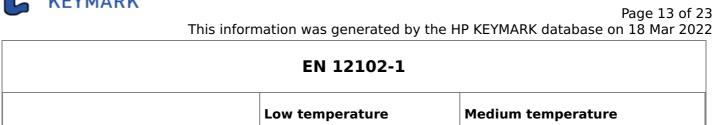
EN 14511-2		
	Low temperature	Medium temperature
Heat output	6.10 kW	4.56 kW
El input	1.35 kW	1.50 kW
СОР	4.52	3.04

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



43 dB(A)



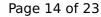
43 dB(A)

CEN heat pump

Sound power level indoor

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	184 %	137 %
Prated	7.00 kW	6.00 kW
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

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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
РТО	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 Qhe	3010 kWh	3425 kWh

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

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	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
$COP Tj = -7^{\circ}C$	4.96	3.58
Pdh Tj = +2°C	6.50 kW	5.60 kW
COP Tj = +2°C	5.10	3.96
Pdh Tj = $+7^{\circ}$ C	6.60 kW	5.90 kW
$COPTj = +7^{\circ}C$	5.18	4.25
Pdh Tj = 12°C	6.60 kW	6.10 kW
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COP Tj = Tbiv	4.75	3.32
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	2 W	2 W
РТО	12 W	10 W
PSB	7 W	7 W
РСК	14 W	14 W



Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	1.50 kW
Annual energy consumption Qhe	3487 kWh	3969 kWh

## Domestic Hot Water (DHW)

## Average Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	98 %
СОР	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 I



EN 16147	
Declared load profile	XL
Efficiency ηDHW	98 %
СОР	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



# 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	
Power supply	3x400V 50Hz
Off-peak product	No

## Heating

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

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 to		
$\eta_{s}$	184 %	137 %
Prated	7.00 kW	6.00 kW
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
$COP Tj = +7^{\circ}C$	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

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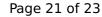




Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.10 kW	4.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.59	2.96
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	65 °C	65 °C
Poff	1 W	2 W
РТО	12 W	10 W
PSB	7 W	7 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	1.50 kW
Annual energy consumption Qhe	3010 kWh	3425 kWh

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

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	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
$COP Tj = -7^{\circ}C$	4.96	3.58
Pdh Tj = +2°C	6.50 kW	5.60 kW
COP Tj = +2°C	5.10	3.96
Pdh Tj = $+7^{\circ}$ C	6.60 kW	5.90 kW
$COP Tj = +7^{\circ}C$	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
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	2 W	2 W
РТО	12 W	10 W
PSB	7 W	7 W
РСК	14 W	14 W



Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	1.50 kW
Annual energy consumption Qhe	3487 kWh	3969 kWh

## Domestic Hot Water (DHW)

## Average Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	98 %	
СОР	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	



EN 16147	
Declared load profile	XL
Efficiency ηDHW	98 %
СОР	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