

Subtype Fx7x

Certificate Holder	Nibe AB
Address	Box 14
ZIP	S-28521
City	Markaryd
Country	SE
Certification Body	RISE CERT
Subtype title	Fx7x
Registration number	012-036
Heat Pump Type	Exhaust Air/Water
Refrigerant	R290
Mass of Refrigerant	0.4 kg
Certification Date	06.11.2024
Testing basis	HP Keymark Scheme 2017
Testing laboratory	RISE Research Institutes of Sweden

**Model F370 1x230**

Model name	F370 1x230
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	No

**Exhaust Air/Water**
**EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	75 %
COP	1.90
Heating up time	07:16 h:min
Standby power input	85.0 W
Reference hot water temperature	50.2 °C
Mixed water at 40°C	217 l

**EN 16147 | Colder Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	75 %
COP	1.90
Heating up time	07:16 h:min
Standby power input	85.0 W
Reference hot water temperature	50.2 °C
Mixed water at 40°C	217 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	2.18 kW	1.86 kW
El input	0.55 kW	0.68 kW
COP	3.93	2.74

**EN 12102-1 | Average Climate**

Low temperature	Medium temperature
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Sound power level indoor	47 dB(A)	47 dB(A)
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**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	131 %	110 %
P <sub>rated</sub>	2.60 kW	2.60 kW
SCOP	3.35	2.82
T <sub>biv</sub>	-2 °C	-2 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	1.70 kW	1.70 kW
COP T <sub>j</sub> = -7°C	3.78	2.72
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.950	0.950
P <sub>dh</sub> T <sub>j</sub> = +2°C	1.70 kW	1.70 kW
COP T <sub>j</sub> = +2°C	3.98	3.22
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.950	0.950
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.70 kW	1.70 kW
COP T <sub>j</sub> = +7°C	3.96	3.37
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.950	0.950
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.70 kW	1.70 kW
COP T <sub>j</sub> = 12°C	3.65	3.28
C <sub>dh</sub> T <sub>j</sub> = +12 °C	0.950	0.950
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	1.70 kW	1.70 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.91	3.04
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	1.70 kW	1.70 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.71	2.56
Rated airflow rate	180 m <sup>3</sup> /h	180 m <sup>3</sup> /h
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.950	0.950
WTOL	65 °C	65 °C
P <sub>off</sub>	2 W	2 W
PTO	20 W	20 W
PSB	15 W	15 W
PCK	24 W	24 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	0.90 kW
Annual energy consumption Q <sub>he</sub>	1598 kWh	1898 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
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$\eta_s$	139 %	116 %
Prated	2.60 kW	2.60 kW
SCOP	3.55	2.97
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.70 kW	1.70 kW
COP Tj = -7°C	4.04	3.16
Cdh Tj = -7 °C	0.950	0.950
Pdh Tj = +2°C	1.70 kW	1.70 kW
COP Tj = +2°C	3.99	3.34
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.70 kW	1.70 kW
COP Tj = +7°C	3.88	3.41
Cdh Tj = +7 °C	0.950	0.950
Pdh Tj = 12°C	1.70 kW	1.70 kW
COP Tj = 12°C	3.35	3.11
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	1.70 kW	1.70 kW
COP Tj = Tbiv	4.00	3.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.70 kW	1.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.71	2.56
Rated airflow rate	180 m³/h	180 m³/h
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.950	0.950
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	20 W	20 W
PSB	15 W	15 W
PCK	24 W	24 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	0.90 kW
Annual energy consumption Qhe	1808 kWh	2162 kWh
Pdh Tj = -15°C (if TOL)		
COP Tj = -15°C (if TOL)		
Cdh Tj = -15 °C		

**Model F370 3x400**

Model name	F370 3x400
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**Exhaust Air/Water**
**EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	75 %
COP	1.90
Heating up time	07:16 h:min
Standby power input	85.0 W
Reference hot water temperature	50.2 °C
Mixed water at 40°C	217 l

**EN 16147 | Colder Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	75 %
COP	1.90
Heating up time	07:16 h:min
Standby power input	85.0 W
Reference hot water temperature	50.2 °C
Mixed water at 40°C	217 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	2.18 kW	1.86 kW
El input	0.55 kW	0.68 kW
COP	3.93	2.74

**EN 12102-1 | Average Climate**

Low temperature	Medium temperature
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Sound power level indoor	47 dB(A)	47 dB(A)
<b>EN 14825   Average Climate</b>		
ηs	Low temperature	Medium temperature
Prated	131 %	110 %
SCOP	2.60 kW	2.60 kW
Tbiv	3.35	2.82
TOL	-2 °C	-10 °C
Pdh Tj = -7°C	-10 °C	-10 °C
COP Tj = -7°C	1.70 kW	1.70 kW
Cdh Tj = -7 °C	3.78	2.72
Pdh Tj = +2°C	0.950	0.950
COP Tj = +2°C	1.70 kW	1.70 kW
Cdh Tj = +2 °C	3.98	3.22
Pdh Tj = +7°C	0.950	0.950
COP Tj = +7°C	1.70 kW	1.70 kW
Cdh Tj = +7 °C	3.96	3.37
Pdh Tj = 12°C	0.950	0.950
COP Tj = 12°C	1.70 kW	1.70 kW
Cdh Tj = +12 °C	3.65	3.28
Pdh Tj = Tbiv	0.950	0.950
COP Tj = Tbiv	1.70 kW	1.70 kW
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.91	3.04
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.70 kW	1.70 kW
Rated airflow rate	1.70 kW	1.70 kW
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	180 m³/h	180 m³/h
WTOL	0.950	0.950
Poff	65 °C	65 °C
PTO	2 W	2 W
PSB	20 W	20 W
PCK	15 W	15 W
Supplementary Heater: Type of energy input	24 W	24 W
Supplementary Heater: PSUP	Electricity	Electricity
Annual energy consumption Qhe	0.90 kW	0.90 kW
	1598 kWh	1898 kWh

EN 12102-1   Colder Climate	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
<b>EN 14825   Colder Climate</b>		
	Low temperature	Medium temperature

$\eta_s$	139 %	116 %
Prated	2.60 kW	2.60 kW
SCOP	3.55	2.97
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.70 kW	1.70 kW
COP Tj = -7°C	4.04	3.16
Cdh Tj = -7 °C	0.950	0.950
Pdh Tj = +2°C	1.70 kW	1.70 kW
COP Tj = +2°C	3.99	3.34
Cdh Tj = +2 °C	0.950	0.950
Pdh Tj = +7°C	1.70 kW	1.70 kW
COP Tj = +7°C	3.88	3.41
Cdh Tj = +7 °C	0.950	0.950
Pdh Tj = 12°C	1.70 kW	1.70 kW
COP Tj = 12°C	3.35	3.11
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	1.70 kW	1.70 kW
COP Tj = Tbiv	4.00	3.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.70 kW	1.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.71	2.56
Rated airflow rate	180 m³/h	180 m³/h
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.950	0.950
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	20 W	20 W
PSB	15 W	15 W
PCK	24 W	24 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	0.90 kW
Annual energy consumption Qhe	1808 kWh	2162 kWh
Pdh Tj = -15°C (if TOL)		
COP Tj = -15°C (if TOL)		
Cdh Tj = -15 °C		

**Model F470 1x230**

Model name	F470 1x230
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	No

**Exhaust Air/Water**
**EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	79 %
COP	2.00
Heating up time	07:16 h:min
Standby power input	65.0 W
Reference hot water temperature	50.2 °C
Mixed water at 40°C	217 l

**EN 16147 | Colder Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	79 %
COP	2.00
Heating up time	07:16 h:min
Standby power input	65.0 W
Reference hot water temperature	50.2 °C
Mixed water at 40°C	217 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	2.18 kW	1.86 kW
El input	0.55 kW	0.68 kW
COP	3.93	2.74

**EN 12102-1 | Average Climate**

Low temperature	Medium temperature
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Sound power level indoor	52 dB(A)	52 dB(A)
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**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	140 %	116 %
P <sub>rated</sub>	2.60 kW	2.60 kW
SCOP	3.57	2.97
T <sub>biv</sub>	-2 °C	-2 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	1.70 kW	1.70 kW
COP T <sub>j</sub> = -7°C	3.78	2.72
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.950	0.950
P <sub>dh</sub> T <sub>j</sub> = +2°C	1.70 kW	1.70 kW
COP T <sub>j</sub> = +2°C	3.98	3.22
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.950	0.950
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.70 kW	1.70 kW
COP T <sub>j</sub> = +7°C	3.96	3.37
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.950	0.950
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.70 kW	1.70 kW
COP T <sub>j</sub> = 12°C	3.65	3.28
C <sub>dh</sub> T <sub>j</sub> = +12 °C	0.950	0.950
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	1.70 kW	1.70 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.91	3.04
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	1.70 kW	1.70 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.71	2.56
Rated airflow rate	180 m <sup>3</sup> /h	180 m <sup>3</sup> /h
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.950	0.950
WTOL	65 °C	65 °C
P <sub>off</sub>	2 W	2 W
PTO	20 W	20 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	0.90 kW
Annual energy consumption Q <sub>he</sub>	1505 kWh	1806 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	52 dB(A)	52 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
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$\eta_s$	145 %	120 %
Prated	2.60 kW	2.60 kW
SCOP	3.70	3.07
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.70 kW	1.70 kW
COP Tj = -7°C	4.04	3.16
Cdh Tj = -7 °C	0.950	0.950
Pdh Tj = +2°C	1.70 kW	1.70 kW
COP Tj = +2°C	3.99	3.34
Cdh Tj = +2 °C	0.950	0.950
Pdh Tj = +7°C	1.70 kW	1.70 kW
COP Tj = +7°C	3.88	3.41
Cdh Tj = +7 °C	0.950	0.950
Pdh Tj = 12°C	1.70 kW	1.70 kW
COP Tj = 12°C	3.35	3.11
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	1.70 kW	1.70 kW
COP Tj = Tbiv	4.00	3.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.70 kW	1.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.71	2.56
Rated airflow rate	180 m³/h	180 m³/h
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.950	0.950
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	20 W	20 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	0.90 kW
Annual energy consumption Qhe	1737 kWh	2091 kWh
Pdh Tj = -15°C (if TOL)		
COP Tj = -15°C (if TOL)		
Cdh Tj = -15 °C		

**Model F470 3x400**

Model name	F470 3x400
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**Exhaust Air/Water**
**EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	79 %
COP	2.00
Heating up time	07:16 h:min
Standby power input	65.0 W
Reference hot water temperature	50.2 °C
Mixed water at 40°C	217 l

**EN 16147 | Colder Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	79 %
COP	2.00
Heating up time	07:16 h:min
Standby power input	65.0 W
Reference hot water temperature	50.2 °C
Mixed water at 40°C	217 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	2.18 kW	1.86 kW
El input	0.55 kW	0.68 kW
COP	3.93	2.74

**EN 12102-1 | Average Climate**

Low temperature	Medium temperature
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Sound power level indoor	52 dB(A)	52 dB(A)
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**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	140 %	116 %
P <sub>rated</sub>	2.60 kW	2.60 kW
SCOP	3.57	2.97
T <sub>biv</sub>	-2 °C	-2 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	1.70 kW	1.70 kW
COP T <sub>j</sub> = -7°C	3.78	2.72
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.950	0.950
P <sub>dh</sub> T <sub>j</sub> = +2°C	1.70 kW	1.70 kW
COP T <sub>j</sub> = +2°C	3.98	3.22
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.950	0.950
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.70 kW	1.70 kW
COP T <sub>j</sub> = +7°C	3.96	3.37
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.950	0.950
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.70 kW	1.70 kW
COP T <sub>j</sub> = 12°C	3.65	3.28
C <sub>dh</sub> T <sub>j</sub> = +12 °C	0.950	0.950
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	1.70 kW	1.70 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.91	3.04
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	1.70 kW	1.70 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.71	2.56
Rated airflow rate	180 m <sup>3</sup> /h	180 m <sup>3</sup> /h
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.950	0.950
WTOL	65 °C	65 °C
P <sub>off</sub>	2 W	2 W
PTO	20 W	20 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	0.90 kW
Annual energy consumption Q <sub>he</sub>	1505 kWh	1806 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	52 dB(A)	52 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
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$\eta_s$	145 %	120 %
Prated	2.60 kW	2.60 kW
SCOP	3.70	3.07
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.70 kW	1.70 kW
COP Tj = -7°C	4.04	3.16
Cdh Tj = -7 °C	0.950	0.950
Pdh Tj = +2°C	1.70 kW	1.70 kW
COP Tj = +2°C	3.99	3.34
Cdh Tj = +2 °C	0.950	0.950
Pdh Tj = +7°C	1.70 kW	1.70 kW
COP Tj = +7°C	3.88	3.41
Cdh Tj = +7 °C	0.950	0.950
Pdh Tj = 12°C	1.70 kW	1.70 kW
COP Tj = 12°C	3.35	3.11
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	1.70 kW	1.70 kW
COP Tj = Tbiv	4.00	3.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.70 kW	1.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.71	2.56
Rated airflow rate	180 m³/h	180 m³/h
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.950	0.950
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	20 W	20 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	0.90 kW
Annual energy consumption Qhe	1737 kWh	2091 kWh
Pdh Tj = -15°C (if TOL)		
COP Tj = -15°C (if TOL)		
Cdh Tj = -15 °C		

**Model F 372 3X400**

Model name	F 372 3X400
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**Exhaust Air/Water**
**EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	75 %
COP	1.90
Heating up time	07:16 h:min
Standby power input	85.0 W
Reference hot water temperature	50.2 °C
Mixed water at 40°C	217 l

**EN 16147 | Colder Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	75 %
COP	1.90
Heating up time	07:16 h:min
Standby power input	85.0 W
Reference hot water temperature	50.2 °C
Mixed water at 40°C	217 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	1.68 kW	1.68 kW
El input	0.46 kW	0.66 kW
COP	3.67	2.55

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
<b>EN 14825   Average Climate</b>		
	Low temperature	Medium temperature
ηs	131 %	110 %
Prated	2.60 kW	2.60 kW
SCOP	3.35	2.82
Tbiv	-2 °C	-2 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	1.70 kW	1.70 kW
COP Tj = -7°C	3.78	2.72
Cdh Tj = -7 °C	0.950	0.950
Pdh Tj = +2°C	1.70 kW	1.70 kW
COP Tj = +2°C	3.98	3.22
Cdh Tj = +2 °C	0.950	0.950
Pdh Tj = +7°C	1.70 kW	1.70 kW
COP Tj = +7°C	3.96	3.37
Cdh Tj = +7 °C	0.950	0.950
Pdh Tj = 12°C	1.70 kW	1.70 kW
COP Tj = 12°C	3.65	3.28
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	1.70 kW	1.70 kW
COP Tj = Tbiv	3.91	3.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.70 kW	1.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.71	2.56
Rated airflow rate	180 m³/h	180 m³/h
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.950	0.950
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	20 W	20 W
PSB	15 W	15 W
PCK	24 W	24 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	0.90 kW
Annual energy consumption Qhe	1598 kWh	1898 kWh
<b>EN 12102-1   Colder Climate</b>		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
<b>EN 14825   Colder Climate</b>		

	Low temperature	Medium temperature
$\eta_s$	139 %	116 %
Prated	2.60 kW	2.60 kW
SCOP	3.55	2.97
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.70 kW	1.70 kW
COP Tj = -7°C	4.04	3.16
Cdh Tj = -7 °C	0.950	0.950
Pdh Tj = +2°C	1.70 kW	1.70 kW
COP Tj = +2°C	3.99	3.34
Cdh Tj = +2 °C	0.950	0.950
Pdh Tj = +7°C	1.70 kW	1.70 kW
COP Tj = +7°C	3.88	3.41
Cdh Tj = +7 °C	0.950	0.950
Pdh Tj = 12°C	1.70 kW	1.70 kW
COP Tj = 12°C	3.35	3.11
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	1.70 kW	1.70 kW
COP Tj = Tbiv	4.00	3.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.70 kW	1.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.71	2.56
Rated airflow rate	180 m³/h	180 m³/h
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.950	0.950
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	20 W	20 W
PSB	15 W	15 W
PCK	24 W	24 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	0.90 kW
Annual energy consumption Qhe	1808 kWh	2162 kWh
Pdh Tj = -15°C (if TOL)		
COP Tj = -15°C (if TOL)		
Cdh Tj = -15 °C		

**Model F 372 3X230**

Model name	F 372 3X230
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x230V 50Hz
Off-peak product	No

**Exhaust Air/Water**
**EN 16147 | Average Climate**

Declared load profile	L
Efficiency ηDHW	75 %
COP	1.90
Heating up time	07:16 h:min
Standby power input	85.0 W
Reference hot water temperature	50.2 °C
Mixed water at 40°C	217 l

**EN 16147 | Colder Climate**

Declared load profile	L
Efficiency ηDHW	75 %
COP	1.90
Heating up time	07:16 h:min
Standby power input	85.0 W
Reference hot water temperature	50.2 °C
Mixed water at 40°C	217 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	1.68 kW	1.68 kW
El input	0.46 kW	0.66 kW
COP	3.67	2.55

**EN 12102-1 | Average Climate**

Low temperature	Medium temperature
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Sound power level indoor	47 dB(A)	47 dB(A)
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**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	131 %	110 %
P <sub>rated</sub>	2.60 kW	2.60 kW
SCOP	3.35	2.82
T <sub>biv</sub>	-2 °C	-2 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	1.70 kW	1.70 kW
COP T <sub>j</sub> = -7°C	3.78	2.72
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.950	0.950
P <sub>dh</sub> T <sub>j</sub> = +2°C	1.70 kW	1.70 kW
COP T <sub>j</sub> = +2°C	3.98	3.22
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.950	0.950
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.70 kW	1.70 kW
COP T <sub>j</sub> = +7°C	3.96	3.37
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.950	0.950
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.70 kW	1.70 kW
COP T <sub>j</sub> = 12°C	3.65	3.28
C <sub>dh</sub> T <sub>j</sub> = +12 °C	0.950	0.950
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	1.70 kW	1.70 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.91	3.04
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	1.70 kW	1.70 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.71	2.56
Rated airflow rate	180 m <sup>3</sup> /h	180 m <sup>3</sup> /h
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.950	0.950
WTOL	65 °C	65 °C
P <sub>off</sub>	2 W	2 W
PTO	20 W	20 W
PSB	15 W	15 W
PCK	24 W	24 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	0.90 kW
Annual energy consumption Q <sub>he</sub>	1598 kWh	1898 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
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$\eta_s$	139 %	116 %
Prated	2.60 kW	2.60 kW
SCOP	3.55	2.97
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.70 kW	1.70 kW
COP Tj = -7°C	4.04	3.16
Cdh Tj = -7 °C	0.950	0.950
Pdh Tj = +2°C	1.70 kW	1.70 kW
COP Tj = +2°C	3.99	3.34
Cdh Tj = +2 °C	0.950	0.950
Pdh Tj = +7°C	1.70 kW	1.70 kW
COP Tj = +7°C	3.88	3.41
Cdh Tj = +7 °C	0.950	0.950
Pdh Tj = 12°C	1.70 kW	1.70 kW
COP Tj = 12°C	3.35	3.11
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	1.70 kW	1.70 kW
COP Tj = Tbiv	4.00	3.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.70 kW	1.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.71	2.56
Rated airflow rate	180 m³/h	180 m³/h
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.950	0.950
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	20 W	20 W
PSB	15 W	15 W
PCK	24 W	24 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	0.90 kW
Annual energy consumption Qhe	1808 kWh	2162 kWh
Pdh Tj = -15°C (if TOL)		
COP Tj = -15°C (if TOL)		
Cdh Tj = -15 °C		