

This information was generated by the HP KEYMARK database on 17 Dec 2020

Summary of	NIMBUS 90 M - ARIANEXT 90 M - AEROTOP MONO 09 - ENERGION M 9		Reg. No.	ICIM-PDC-000001
Certificate Holder				
Name	Ariston Thermo Group			
Address	Viale Aristide Merloni 45		Zip	I-60044
City	Fabriano (AN)		Country	Italy
Certification Body	ICIM S.p.A.			
Name of testing laboratory	-Transition Rules-			
Subtype title	NIMBUS 90 M - ARIANEXT 90 M - AEROTOP MONO 09 - ENERGION M 9			
Heat Pump Type	Outdoor Air/Water			
Refrigerant	R410a			
Mass Of Refrigerant	3.9 kg			
Certification Date	19.12.2017			

Model: AEROTOP MONO 09M-R

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: AEROTOP MONO 09M-RL

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ARIANEXT LITE 90 M-T LINK

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ARIANEXT LITE 90 M-T

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ARIANEXT PLUS 90 M-T LINK

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ARIANEXT PLUS 90 M-T

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: NIMBUS PLUS 90 M-T NET

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: NIMBUS POCKET 90 M-T NET

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: AEROTOP MONO 09M-CR

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	106 %
COP	2.56
Heating up time	01:28 h:min
Standby power input	52.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	251 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.70
Heating up time	01:16 h:min
Standby power input	39.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	248 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	89 %
COP	2.15
Heating up time	01:49 h:min
Standby power input	57.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	250 l

Model: ARIANEXT COMPACT 90 M-T LINK

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	106 %
COP	2.56
Heating up time	01:28 h:min
Standby power input	52.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	251 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.70
Heating up time	01:16 h:min
Standby power input	39.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	248 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	89 %
COP	2.15
Heating up time	01:49 h:min
Standby power input	57.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	250 l

Model: ARIANEXT FLEX 90 M-T - 300 LINK

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XXL
Efficiency η_{DHW}	122 %
COP	3.06
Heating up time	01:52 h:min
Standby power input	53.0 W
Reference hot water temperature	54.5 °C
Mixed water at 40°C	434 l

Warmer Climate

EN 16147	
Declared load profile	XXL
Efficiency η_{DHW}	132 %
COP	3.30
Heating up time	01:34 h:min
Standby power input	48.0 W
Reference hot water temperature	54.2 °C
Mixed water at 40°C	430 l

Colder Climate

EN 16147	
Declared load profile	XXL
Efficiency η_{DHW}	97 %
COP	2.43
Heating up time	02:15 h:min
Standby power input	63.0 W
Reference hot water temperature	53.4 °C
Mixed water at 40°C	422 l

Model: ARIANEXT FLEX 90 M-T LINK

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	106 %
COP	2.56
Heating up time	01:28 h:min
Standby power input	52.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	251 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.70
Heating up time	01:16 h:min
Standby power input	39.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	248 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	89 %
COP	2.15
Heating up time	01:49 h:min
Standby power input	57.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	250 l

Model: NIMBUS COMPACT 90 M-T NET

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	106 %
COP	2.56
Heating up time	01:28 h:min
Standby power input	52.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	251 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.70
Heating up time	01:16 h:min
Standby power input	39.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	248 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	89 %
COP	2.15
Heating up time	01:49 h:min
Standby power input	57.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	250 l

Model: NIMBUS FLEX 90 M-T - 300 NET

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XXL
Efficiency η_{DHW}	122 %
COP	3.06
Heating up time	01:52 h:min
Standby power input	53.0 W
Reference hot water temperature	54.5 °C
Mixed water at 40°C	434 l

Warmer Climate

EN 16147	
Declared load profile	XXL
Efficiency η_{DHW}	132 %
COP	3.30
Heating up time	01:34 h:min
Standby power input	48.0 W
Reference hot water temperature	54.2 °C
Mixed water at 40°C	430 l

Colder Climate

EN 16147	
Declared load profile	XXL
Efficiency η_{DHW}	97 %
COP	2.43
Heating up time	02:15 h:min
Standby power input	63.0 W
Reference hot water temperature	53.4 °C
Mixed water at 40°C	422 l

Model: NIMBUS FLEX 90 M-T NET

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	106 %
COP	2.56
Heating up time	01:28 h:min
Standby power input	52.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	251 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.70
Heating up time	01:16 h:min
Standby power input	39.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	248 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	89 %
COP	2.15
Heating up time	01:49 h:min
Standby power input	57.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	250 l

Model: ARIANEXT COMPACT 90 M-T

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Domestic Hot Water (DHW)

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	127 %
COP	3.01
Heating up time	00:47 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	247 l

Model: ARIANEXT FLEX 90 M-T - 300

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	131 %
COP	3.10
Heating up time	01:52 h:min
Standby power input	61.0 W
Reference hot water temperature	54.4 °C
Mixed water at 40°C	434 l

Model: ARIANEXT FLEX 90 M-T

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Domestic Hot Water (DHW)

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	127 %
COP	3.01
Heating up time	00:47 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	247 l

Model: AEROTOP MONO 09M-RX

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: AEROTOP MONO 09M-RXL

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ARIANEXT LITE 90 M LINK

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ARIANEXT LITE 90 M

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ARIANEXT PLUS 90 M LINK

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ARIANEXT PLUS 90 M

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: NIMBUS PLUS 90 M NET

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: NIMBUS POCKET 90 M NET

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: AEROTOP MONO 09M-CRX

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	106 %
COP	2.56
Heating up time	01:28 h:min
Standby power input	52.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	251 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.70
Heating up time	01:16 h:min
Standby power input	39.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	248 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	89 %
COP	2.15
Heating up time	01:49 h:min
Standby power input	57.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	250 l

Model: ARIANEXT COMPACT 90 M LINK

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	106 %
COP	2.56
Heating up time	01:28 h:min
Standby power input	52.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	251 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.70
Heating up time	01:16 h:min
Standby power input	39.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	248 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	89 %
COP	2.15
Heating up time	01:49 h:min
Standby power input	57.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	250 l

Model: ARIANEXT FLEX 90 M LINK

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	106 %
COP	2.56
Heating up time	01:28 h:min
Standby power input	52.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	251 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.70
Heating up time	01:16 h:min
Standby power input	39.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	248 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	89 %
COP	2.15
Heating up time	01:49 h:min
Standby power input	57.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	250 l

Model: ARIANEXT FLEX 90 M - 300 LINK

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XXL
Efficiency η_{DHW}	122 %
COP	3.06
Heating up time	01:52 h:min
Standby power input	53.0 W
Reference hot water temperature	54.5 °C
Mixed water at 40°C	434 l

Warmer Climate

EN 16147	
Declared load profile	XXL
Efficiency η_{DHW}	132 %
COP	3.30
Heating up time	01:34 h:min
Standby power input	48.0 W
Reference hot water temperature	54.2 °C
Mixed water at 40°C	430 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XXL
Efficiency η_{DHW}	97 %
COP	2.43
Heating up time	02:15 h:min
Standby power input	63.0 W
Reference hot water temperature	53.4 °C
Mixed water at 40°C	422 l

Model: NIMBUS COMPACT 90 M NET

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	106 %
COP	2.56
Heating up time	01:28 h:min
Standby power input	52.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	251 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.70
Heating up time	01:16 h:min
Standby power input	39.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	248 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	89 %
COP	2.15
Heating up time	01:49 h:min
Standby power input	57.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	250 l

Model: NIMBUS FLEX 90 M NET

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	106 %
COP	2.56
Heating up time	01:28 h:min
Standby power input	52.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	251 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.70
Heating up time	01:16 h:min
Standby power input	39.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	248 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	89 %
COP	2.15
Heating up time	01:49 h:min
Standby power input	57.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	250 l

Model: NIMBUS FLEX 90 M - 300 NET

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XXL
Efficiency η_{DHW}	122 %
COP	3.06
Heating up time	01:52 h:min
Standby power input	53.0 W
Reference hot water temperature	54.5 °C
Mixed water at 40°C	434 l

Warmer Climate

EN 16147	
Declared load profile	XXL
Efficiency η_{DHW}	132 %
COP	3.30
Heating up time	01:34 h:min
Standby power input	48.0 W
Reference hot water temperature	54.2 °C
Mixed water at 40°C	430 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XXL
Efficiency η_{DHW}	97 %
COP	2.43
Heating up time	02:15 h:min
Standby power input	63.0 W
Reference hot water temperature	53.4 °C
Mixed water at 40°C	422 l

Model: ARIANEXT COMPACT 90 M

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	127 %
COP	3.01
Heating up time	00:47 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	247 l

Model: ARIANEXT FLEX 90 M

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Domestic Hot Water (DHW)

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	127 %
COP	3.01
Heating up time	00:47 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	247 l

Model: ARIANEXT FLEX 90 M - 300

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Domestic Hot Water (DHW)

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	131 %
COP	3.10
Heating up time	01:52 h:min
Standby power input	61.0 W
Reference hot water temperature	54.4 °C
Mixed water at 40°C	434 l

Model: ENERGION M PLUS 9

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ENERGION M PLUS 9 T

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ENERGION M LIGHT 9

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ENERGION M LIGHT 9 T

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ENERGION M FLEX 9 180 e

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	106 %
COP	2.56
Heating up time	01:28 h:min
Standby power input	52.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	251 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.70
Heating up time	01:16 h:min
Standby power input	39.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	248 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	89 %
COP	2.15
Heating up time	01:49 h:min
Standby power input	57.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	250 l

Model: ENERGION M FLEX 9 T 180 e

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	106 %
COP	2.56
Heating up time	01:28 h:min
Standby power input	52.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	251 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.70
Heating up time	01:16 h:min
Standby power input	39.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	248 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	89 %
COP	2.15
Heating up time	01:49 h:min
Standby power input	57.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	250 l

Model: ENERGION M FLEX 9 300 e

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XXL
Efficiency η_{DHW}	122 %
COP	3.06
Heating up time	01:52 h:min
Standby power input	53.0 W
Reference hot water temperature	54.5 °C
Mixed water at 40°C	434 l

Warmer Climate

EN 16147	
Declared load profile	XXL
Efficiency η_{DHW}	132 %
COP	3.30
Heating up time	01:34 h:min
Standby power input	48.0 W
Reference hot water temperature	54.2 °C
Mixed water at 40°C	430 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XXL
Efficiency η_{DHW}	97 %
COP	2.43
Heating up time	02:15 h:min
Standby power input	63.0 W
Reference hot water temperature	53.4 °C
Mixed water at 40°C	422 l

Model: ENERGION M FLEX 9 T 300 e

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XXL
Efficiency η_{DHW}	122 %
COP	3.06
Heating up time	01:52 h:min
Standby power input	53.0 W
Reference hot water temperature	54.5 °C
Mixed water at 40°C	434 l

Warmer Climate

EN 16147	
Declared load profile	XXL
Efficiency η_{DHW}	132 %
COP	3.30
Heating up time	01:34 h:min
Standby power input	48.0 W
Reference hot water temperature	54.2 °C
Mixed water at 40°C	430 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XXL
Efficiency η_{DHW}	97 %
COP	2.43
Heating up time	02:15 h:min
Standby power input	63.0 W
Reference hot water temperature	53.4 °C
Mixed water at 40°C	422 l

Model: ENERGION M COMPACT 9

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	106 %
COP	2.56
Heating up time	01:28 h:min
Standby power input	52.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	251 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.70
Heating up time	01:16 h:min
Standby power input	39.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	248 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	89 %
COP	2.15
Heating up time	01:49 h:min
Standby power input	57.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	250 l

Model: ENERGION M COMPACT 9 T

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	106 %
COP	2.56
Heating up time	01:28 h:min
Standby power input	52.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	251 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.70
Heating up time	01:16 h:min
Standby power input	39.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	248 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	89 %
COP	2.15
Heating up time	01:49 h:min
Standby power input	57.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	250 l

Model: ENERGION M HYBRIDall 9

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
Pdesignh	15.17 kW	13.91 kW
η_s	152 %	109 %
Prated	6.90 kW	6.20 kW
SCOP	3.88	2.81
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	8.06 kW	11.11 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ENERGION M HYBRIDall 9 T

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
Pdesignh	15.17 kW	13.91 kW
η_s	152 %	109 %
Prated	6.90 kW	6.20 kW
SCOP	3.88	2.81
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	8.06 kW	11.11 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ATAG p ENERGION M HYBRIDzone 9

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	8.06 kW	11.11 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ATAG p ENERGION M HYBRIDzone 9 T

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	8.06 kW	11.11 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ATAG i ENERGION M HYBRIDzone 9

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	8.06 kW	11.11 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ATAG i ENERGION M HYBRIDzone 9 T

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	8.06 kW	11.11 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: NIMBUS M HYBRID 9 NET

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: NIMBUS M HYBRID 9 T NET

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: NIMBUS M HYBRID FLEX 9 NET

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	106 %
COP	2.56
Heating up time	01:28 h:min
Standby power input	52.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	251 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.70
Heating up time	01:16 h:min
Standby power input	39.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	248 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	89 %
COP	2.15
Heating up time	01:49 h:min
Standby power input	57.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	250 l

Model: NIMBUS M HYBRID FLEX 9 T NET

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	106 %
COP	2.56
Heating up time	01:28 h:min
Standby power input	52.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	251 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.70
Heating up time	01:16 h:min
Standby power input	39.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	248 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	89 %
COP	2.15
Heating up time	01:49 h:min
Standby power input	57.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	250 l

Model: NIMBUS M HYBRID UNIVERSAL 9 NET

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: NIMBUS M HYBRID UNIVERSAL 9 T NET

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
Pdesignh	15.17 kW	13.91 kW
η_s	152 %	109 %
Prated	6.90 kW	6.20 kW
SCOP	3.88	2.81
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ARIANEXT M HYBRID 9 LINK

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ARIANEXT M HYBRID 9 T LINK

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ARIANEXT M HYBRID FLEX 9 LINK

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η _s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	106 %
COP	2.56
Heating up time	01:28 h:min
Standby power input	52.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	251 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.70
Heating up time	01:16 h:min
Standby power input	39.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	248 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	89 %
COP	2.15
Heating up time	01:49 h:min
Standby power input	57.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	250 l

Model: ARIANEXT M HYBRID FLEX 9 T LINK

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	106 %
COP	2.56
Heating up time	01:28 h:min
Standby power input	52.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	251 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.70
Heating up time	01:16 h:min
Standby power input	39.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	248 l

Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	89 %
COP	2.15
Heating up time	01:49 h:min
Standby power input	57.0 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	250 l

Model: ARIANEXT M HYBRID UNIVERSAL 9 LINK

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: AEROTOP HYBRID MINI EVO 9

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: AEROTOP HYBRID UNIVERSAL 9

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: ARIANEXT M HYBRID UNIVERSAL 9 T LINK

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.47 kW	0.07 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 17 Dec 2020

P _{designh}	6.65 kW	6.26 kW
η_s	234 %	153 %
P _{rated}	8.70 kW	8.30 kW
SCOP	6.07	3.91
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.65 kW	6.26 kW
COP T _j = +2°C	3.90	2.33
P _{dh} T _j = +7°C	4.46 kW	4.18 kW
COP T _j = +7°C	5.44	3.31
P _{dh} T _j = 12°C	4.36 kW	4.12 kW
COP T _j = 12°C	8.45	5.73
P _{dh} T _j = T _{biv}	6.65 kW	6.26 kW
COP T _j = T _{biv}	3.90	2.33
P _{dh} T _j = TOL	6.65 kW	6.26 kW
COP T _j = TOL	3.90	2.33
C _{dh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W

This information was generated by the HP KEYMARK database on 17 Dec 2020

PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1464 kWh	2142 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	15.17 kW	13.91 kW
η_s	152 %	109 %
P _{rated}	6.90 kW	6.20 kW
SCOP	3.88	2.81
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	9.18 kW	8.42 kW

This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = -7°C	3.67	2.77
Pdh Tj = +2°C	5.61 kW	5.12 kW
COP Tj = +2°C	5.17	3.67
Pdh Tj = +7°C	3.68 kW	3.75 kW
COP Tj = +7°C	6.75	5.12
Pdh Tj = 12°C	4.43 kW	4.30 kW
COP Tj = 12°C	8.92	6.96
Pdh Tj = Tbiv	9.18 kW	8.42 kW
COP Tj = Tbiv	3.67	2.77
Pdh Tj = TOL	6.31 kW	2.06 kW
COP Tj = TOL	2.18	0.54
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	9625 kWh	12191 kWh

Model: NIMBUS M FLEX IN 9 NET

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.50 kW	0.10 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Model: NIMBUS M FLEX IN 9 T NET

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.50 kW	0.10 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Model: ARIANEXT M FLEX IN 9 LINK

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.50 kW	0.10 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Model: ARIANEXT M FLEX IN 9 T LINK

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.50 kW	0.10 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Model: AEROTOP MONO BUILT-IN 09M-CRX

General Data

Power supply	1x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.50 kW	0.10 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh

Model: AEROTOP MONO BUILT-IN 09M-CR

General Data

Power supply	3x230V 50Hz
--------------	-------------

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.49 kW	7.59 kW
El input	1.66 kW	2.50 kW
COP	5.10	3.04
Indoor water flow rate	1.49 m ³ /h	0.82 m ³ /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
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	10.61 kW	9.39 kW
η_s	189 %	129 %
P _{rated}	8.70 kW	7.70 kW
SCOP	4.80	3.30
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	9.38 kW	8.31 kW
COP T _j = -7°C	3.29	2.32
P _{dh} T _j = +2°C	5.71 kW	5.33 kW
COP T _j = +2°C	4.67	3.33
P _{dh} T _j = +7°C	3.67 kW	3.48 kW
COP T _j = +7°C	6.01	3.80
P _{dh} T _j = 12°C	4.44 kW	4.02 kW
COP T _j = 12°C	8.76	5.81

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = Tbiv	9.38 kW	8.31 kW
COP Tj = Tbiv	3.29	2.32
Pdh Tj = TOL	9.14 kW	9.32 kW
COP Tj = TOL	2.77	1.68
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	1.50 kW	0.10 kW
Annual energy consumption Qhe	4561 kWh	5878 kWh