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Summary of	NIMBUS 50 M - ARIANEXT 50 M - AEROTOP MONO 05X - ENERGION M 5		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.			
Subtype title	NIMBUS 50 M - ARIANEXT 50 M - AEROTOP MONO 05X - ENERGION M 5			
Heat Pump Type	Outdoor Air/Water			
Refrigerant	R410A			
Mass of Refrigerant	1.88 kg			
Certification Date	19.12.2017			

Model: AEROTOP MONO 05M-RX 1Z

Configure model	
Model name	AEROTOP MONO 05M-RX 1Z
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW

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η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: AEROTOP MONO 05M-RX 2Z

Configure model	
Model name	AEROTOP MONO 05M-RX 2Z
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: AEROTOP MONO 05M-RXL

Configure model	
Model name	AEROTOP MONO 05M-RXL
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: AEROTOP MONO 05M-X 1Z

Configure model	
Model name	AEROTOP MONO 05M-X 1Z
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: AEROTOP MONO 05M-X 2Z

Configure model	
Model name	AEROTOP MONO 05M-X 2Z
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: ARIANEXT LITE 50 M LINK

Configure model	
Model name	ARIANEXT LITE 50 M LINK
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: ARIANEXT LITE 50 M

Configure model	
Model name	ARIANEXT LITE 50 M
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: ARIANEXT PLUS 50 M 2Z H LINK

Configure model	
Model name	ARIANEXT PLUS 50 M 2Z H LINK
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: ARIANEXT PLUS 50 M 2Z H

Configure model	
Model name	ARIANEXT PLUS 50 M 2Z H
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: ARIANEXT PLUS 50 M 2Z LINK

Configure model	
Model name	ARIANEXT PLUS 50 M 2Z LINK
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: ARIANEXT PLUS 50 M 2Z

Configure model	
Model name	ARIANEXT PLUS 50 M 2Z
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: ARIANEXT PLUS 50 M H LINK

Configure model	
Model name	ARIANEXT PLUS 50 M H LINK
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: ARIANEXT PLUS 50 M H

Configure model	
Model name	ARIANEXT PLUS 50 M H
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: ARIANEXT PLUS 50 M LINK

Configure model	
Model name	ARIANEXT PLUS 50 M LINK
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: ARIANEXT PLUS 50 M

Configure model	
Model name	ARIANEXT PLUS 50 M
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: NIMBUS PLUS 50 M 2Z H NET

Configure model	
Model name	NIMBUS PLUS 50 M 2Z H NET
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: NIMBUS PLUS 50 M 2Z NET

Configure model	
Model name	NIMBUS PLUS 50 M 2Z NET
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: NIMBUS PLUS 50 M H NET

Configure model	
Model name	NIMBUS PLUS 50 M H NET
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: NIMBUS PLUS 50 M NET

Configure model	
Model name	NIMBUS PLUS 50 M NET
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}\text{C}$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}\text{C}$	3.88	2.33
$P_{dh} T_j = +7^{\circ}\text{C}$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}\text{C}$	5.15	3.00
$P_{dh} T_j = 12^{\circ}\text{C}$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}\text{C}$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: NIMBUS POCKET 50 M NET

Configure model	
Model name	NIMBUS POCKET 50 M NET
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}\text{C}$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}\text{C}$	3.88	2.33
$P_{dh} T_j = +7^{\circ}\text{C}$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}\text{C}$	5.15	3.00
$P_{dh} T_j = 12^{\circ}\text{C}$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}\text{C}$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: AEROTOP MONO 05M-CRX 1Z

Configure model	
Model name	AEROTOP MONO 05M-CRX 1Z
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: AEROTOP MONO 05M-CRX 2Z

Configure model	
Model name	AEROTOP MONO 05M-CRX 2Z
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

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

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: ARIANEXT COMPACT 50 M 2Z LINK

Configure model	
Model name	ARIANEXT COMPACT 50 M 2Z LINK
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: ARIANEXT COMPACT 50 M LINK

Configure model	
Model name	ARIANEXT COMPACT 50 M LINK
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: ARIANEXT FLEX 50 M 2Z H LINK

Configure model	
Model name	ARIANEXT FLEX 50 M 2Z H LINK
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: ARIANEXT FLEX 50 M 2Z LINK

Configure model	
Model name	ARIANEXT FLEX 50 M 2Z LINK
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: ARIANEXT FLEX 50 M H LINK

Configure model	
Model name	ARIANEXT FLEX 50 M H LINK
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

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

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: ARIANEXT FLEX 50 M LINK

Configure model	
Model name	ARIANEXT FLEX 50 M LINK
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}\text{C}$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}\text{C}$	3.88	2.33
$P_{dh} T_j = +7^{\circ}\text{C}$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}\text{C}$	5.15	3.00
$P_{dh} T_j = 12^{\circ}\text{C}$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}\text{C}$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

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

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: NIMBUS COMPACT 50 M 2Z NET

Configure model	
Model name	NIMBUS COMPACT 50 M 2Z NET
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: NIMBUS COMPACT 50 M NET

Configure model	
Model name	NIMBUS COMPACT 50 M NET
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: NIMBUS FLEX 50 M 2Z H NET

Configure model	
Model name	NIMBUS FLEX 50 M 2Z H NET
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: NIMBUS FLEX 50 M 2Z NET

Configure model	
Model name	NIMBUS FLEX 50 M 2Z NET
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

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

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: NIMBUS FLEX 50 M H NET

Configure model	
Model name	NIMBUS FLEX 50 M H NET
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: NIMBUS FLEX 50 M NET

Configure model	
Model name	NIMBUS FLEX 50 M NET
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

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

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: ARIANEXT COMPACT 50 M 2Z

Configure model	
Model name	ARIANEXT COMPACT 50 M 2Z
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Average Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW
COP T _j = -7°C	3.15	2.26
P _{dh} T _j = +2°C	3.15 kW	3.17 kW
COP T _j = +2°C	4.42	3.32
P _{dh} T _j = +7°C	2.01 kW	2.14 kW
COP T _j = +7°C	5.28	3.91
P _{dh} T _j = 12°C	1.54 kW	1.50 kW
COP T _j = 12°C	7.28	5.40

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

Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Average Climate

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

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	131 %
COP	3.10
Heating up time	01:34 h:min
Standby power input	38.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	250 l

Model: ARIANEXT COMPACT 50 M

Configure model	
Model name	ARIANEXT COMPACT 50 M
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Average Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW
COP T _j = -7°C	3.15	2.26
P _{dh} T _j = +2°C	3.15 kW	3.17 kW
COP T _j = +2°C	4.42	3.32
P _{dh} T _j = +7°C	2.01 kW	2.14 kW
COP T _j = +7°C	5.28	3.91
P _{dh} T _j = 12°C	1.54 kW	1.50 kW
COP T _j = 12°C	7.28	5.40

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

Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Average Climate

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

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	131 %
COP	3.10
Heating up time	01:34 h:min
Standby power input	38.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	250 l

Model: ARIANEXT FLEX 50 M 2Z H

Configure model	
Model name	ARIANEXT FLEX 50 M 2Z H
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW
COP T _j = -7°C	3.15	2.26
P _{dh} T _j = +2°C	3.15 kW	3.17 kW
COP T _j = +2°C	4.42	3.32
P _{dh} T _j = +7°C	2.01 kW	2.14 kW
COP T _j = +7°C	5.28	3.91
P _{dh} T _j = 12°C	1.54 kW	1.50 kW
COP T _j = 12°C	7.28	5.40

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

Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Average Climate

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

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	131 %
COP	3.10
Heating up time	01:34 h:min
Standby power input	38.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	250 l

Model: ARIANEXT FLEX 50 M 2Z

Configure model	
Model name	ARIANEXT FLEX 50 M 2Z
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Average Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW
COP T _j = -7°C	3.15	2.26
P _{dh} T _j = +2°C	3.15 kW	3.17 kW
COP T _j = +2°C	4.42	3.32
P _{dh} T _j = +7°C	2.01 kW	2.14 kW
COP T _j = +7°C	5.28	3.91
P _{dh} T _j = 12°C	1.54 kW	1.50 kW
COP T _j = 12°C	7.28	5.40

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

Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Average Climate

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

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	131 %
COP	3.10
Heating up time	01:34 h:min
Standby power input	38.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	250 l

Model: ARIANEXT FLEX 50 M H

Configure model	
Model name	ARIANEXT FLEX 50 M H
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Average Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW
COP T _j = -7°C	3.15	2.26
P _{dh} T _j = +2°C	3.15 kW	3.17 kW
COP T _j = +2°C	4.42	3.32
P _{dh} T _j = +7°C	2.01 kW	2.14 kW
COP T _j = +7°C	5.28	3.91
P _{dh} T _j = 12°C	1.54 kW	1.50 kW
COP T _j = 12°C	7.28	5.40

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

Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Average Climate

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

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	131 %
COP	3.10
Heating up time	01:34 h:min
Standby power input	38.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	250 l

Model: ARIANEXT FLEX 50 M

Configure model	
Model name	ARIANEXT FLEX 50 M
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	5.80 kW	5.86 kW
η_s	176 %	130 %
P_{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T_{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
$P_{dh} T_j = -7^{\circ}C$	5.13 kW	5.19 kW
$COP T_j = -7^{\circ}C$	3.15	2.26
$P_{dh} T_j = +2^{\circ}C$	3.15 kW	3.17 kW
$COP T_j = +2^{\circ}C$	4.42	3.32
$P_{dh} T_j = +7^{\circ}C$	2.01 kW	2.14 kW
$COP T_j = +7^{\circ}C$	5.28	3.91
$P_{dh} T_j = 12^{\circ}C$	1.54 kW	1.50 kW
$COP T_j = 12^{\circ}C$	7.28	5.40

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

Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Average Climate

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

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	131 %
COP	3.10
Heating up time	01:34 h:min
Standby power input	38.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	250 l

Model: ENERGION M PLUS 5

Configure model	
Model name	ENERGION M PLUS 5
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: ENERGION M PLUS 5 2Z

Configure model	
Model name	ENERGION M PLUS 5 2Z
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	15 W	15 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W

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

PSB	15 W	15 W
PCK	15 W	15 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	15 W	15 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: ENERGION M COMPACT 5

Configure model	
Model name	ENERGION M COMPACT 5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

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

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: ENERGION M COMPACT 5 2Z

Configure model	
Model name	ENERGION M COMPACT 5 2Z
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	15 W	15 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W

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

PSB	15 W	15 W
PCK	15 W	15 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	15 W	15 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: ENERGION M FLEX 180 e

Configure model	
Model name	ENERGION M FLEX 180 e
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: ENERGION M FLEX 5 2Z 180 e

Configure model	
Model name	ENERGION M FLEX 5 2Z 180 e
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	15 W	15 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W

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

PSB	15 W	15 W
PCK	15 W	15 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	15 W	15 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

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

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: ENERGION M LIGHT 5

Configure model	
Model name	ENERGION M LIGHT 5
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: ENERGION M HYBRIDall 5

Configure model	
Model name	ENERGION M HYBRIDall 5
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.95 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: ATAG p ENERGION M HYBRIDzone 5

Configure model	
Model name	ATAG p ENERGION M HYBRIDzone 5
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.95 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: ATAG i ENERGION M HYBRIDzone 5

Configure model	
Model name	ATAG i ENERGION M HYBRIDzone 5
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.95 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: NIMBUS M HYBRID 5 NET

Configure model	
Model name	NIMBUS M HYBRID 5 NET
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: NIMBUS M HYBRID FLEX 5 NET

Configure model	
Model name	NIMBUS M HYBRID FLEX 5 NET
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

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

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: NIMBUS M HYBRID UNIVERSAL 5 NET

Configure model	
Model name	NIMBUS M HYBRID UNIVERSAL 5 NET
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: ARIANEXT M HYBRID 5 LINK

Configure model	
Model name	ARIANEXT M HYBRID 5 LINK
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: ARIANEXT M HYBRID FLEX 5 LINK

Configure model	
Model name	ARIANEXT M HYBRID FLEX 5 LINK
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	3.47 kW	2.98 kW
η_s	232 %	151 %
P _{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	3.47 kW	2.98 kW
COP T _j = +2°C	3.88	2.33
P _{dh} T _j = +7°C	2.23 kW	1.92 kW
COP T _j = +7°C	5.15	3.00
P _{dh} T _j = 12°C	1.60 kW	1.59 kW
COP T _j = 12°C	7.80	5.86
P _{dh} T _j = T _{biv}	3.47 kW	2.98 kW
COP T _j = T _{biv}	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	133 %
COP	3.20
Heating up time	02:46 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	246 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	95 %
COP	2.30
Heating up time	02:55 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	107 %
COP	2.60
Heating up time	01:48 h:min
Standby power input	44.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	246 l

Model: ARIANEXT M HYBRID UNIVERSAL 5 LINK

Configure model	
Model name	ARIANEXT M HYBRID UNIVERSAL 5 LINK
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: AEROTOP HYBRID MINI EVO 05X

Configure model	
Model name	AEROTOP HYBRID MINI EVO 05X
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: AEROTOP HYBRID MINI EVO 5

Configure model	
Model name	AEROTOP HYBRID MINI EVO 5
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}\text{C}$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}\text{C}$	3.88	2.33
$P_{dh} T_j = +7^{\circ}\text{C}$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}\text{C}$	5.15	3.00
$P_{dh} T_j = 12^{\circ}\text{C}$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}\text{C}$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η _s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: AEROTOP HYBRID UNIVERSAL 5

Configure model	
Model name	AEROTOP HYBRID UNIVERSAL 5
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Warmer Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	3.47 kW	2.98 kW
η_s	232 %	151 %
P_{rated}	3.47 kW	2.98 kW
SCOP	5.88	3.84
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}C$	3.47 kW	2.98 kW
$COP T_j = +2^{\circ}C$	3.88	2.33
$P_{dh} T_j = +7^{\circ}C$	2.23 kW	1.92 kW
$COP T_j = +7^{\circ}C$	5.15	3.00
$P_{dh} T_j = 12^{\circ}C$	1.60 kW	1.59 kW
$COP T_j = 12^{\circ}C$	7.80	5.86
$P_{dh} T_j = T_{biv}$	3.47 kW	2.98 kW
$COP T_j = T_{biv}$	3.88	2.33

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

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.47 kW	2.98 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	3.88	2.33
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	790 kWh	1035 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
$P_{designh}$	8.08 kW	8.58 kW

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

η_s	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W

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

PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q _{he}	5175 kWh	7004 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW

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

COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: NIMBUS M FLEX IN 5 NET

Configure model	
Model name	NIMBUS M FLEX IN 5 NET
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
P _{designh}	5.80 kW	5.86 kW
η_s	176 %	130 %
P _{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.13 kW	5.19 kW
COP T _j = -7°C	3.15	2.26
P _{dh} T _j = +2°C	3.15 kW	3.17 kW
COP T _j = +2°C	4.42	3.32
P _{dh} T _j = +7°C	2.01 kW	2.14 kW
COP T _j = +7°C	5.28	3.91
P _{dh} T _j = 12°C	1.54 kW	1.50 kW
COP T _j = 12°C	7.28	5.40

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

Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.80 kW	0.90 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: ARIANEXT M FLEX IN 5 LINK

Configure model	
Model name	ARIANEXT M FLEX IN 5 LINK
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Average Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	5.80 kW	5.86 kW
η_s	176 %	130 %
P_{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T_{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
$P_{dh} T_j = -7^{\circ}C$	5.13 kW	5.19 kW
$COP T_j = -7^{\circ}C$	3.15	2.26
$P_{dh} T_j = +2^{\circ}C$	3.15 kW	3.17 kW
$COP T_j = +2^{\circ}C$	4.42	3.32
$P_{dh} T_j = +7^{\circ}C$	2.01 kW	2.14 kW
$COP T_j = +7^{\circ}C$	5.28	3.91
$P_{dh} T_j = 12^{\circ}C$	1.54 kW	1.50 kW
$COP T_j = 12^{\circ}C$	7.28	5.40

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

Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.80 kW	0.90 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

Model: AEROTOP MONO BUILT-IN 05M-CRX

Configure model	
Model name	AEROTOP MONO BUILT-IN 05M-CRX
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

Average Climate

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
$P_{designh}$	5.80 kW	5.86 kW
η_s	176 %	130 %
P_{rated}	5.80 kW	5.86 kW
SCOP	4.47	3.92
T_{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
$P_{dh} T_j = -7^{\circ}C$	5.13 kW	5.19 kW
$COP T_j = -7^{\circ}C$	3.15	2.26
$P_{dh} T_j = +2^{\circ}C$	3.15 kW	3.17 kW
$COP T_j = +2^{\circ}C$	4.42	3.32
$P_{dh} T_j = +7^{\circ}C$	2.01 kW	2.14 kW
$COP T_j = +7^{\circ}C$	5.28	3.91
$P_{dh} T_j = 12^{\circ}C$	1.54 kW	1.50 kW
$COP T_j = 12^{\circ}C$	7.28	5.40

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

Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.80 kW	0.90 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh