

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

Summary of	NIMBUS 110 S - ARIANEXT 110 S - AEROTOP SPLIT 11	Reg. No.	ICIM-PDC-000001
Certificate Holder			
Name	Ariston Thermo Group		
Address	Viale Aristide Merloni 45	Zip	I-60044
City	Fabriano (AN)	Country	Italy
Certification Body	ICIM S.p.A.		
Name of testing laboratory	-Transition Rules-		
Subtype title	NIMBUS 110 S - ARIANEXT 110 S - AEROTOP SPLIT 11		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	4.3 kg		
Certification Date	19.12.2017		

## Model: AEROTOP SPLIT 11M-R

### General Data

Power supply	3x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
$\eta_s$	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

# Model: ARIANEXT PLUS 110 S-T LINK

## General Data

Power supply	3x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate



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

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
η <sub>s</sub>	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Model: ARIANEXT PLUS 110 S-T

### General Data

Power supply	3x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>



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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
$\eta_s$	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Model: NIMBUS PLUS 110 S-T NET

### General Data

Power supply	3x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
η <sub>s</sub>	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW



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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Model: AEROTOP SPLIT 11M-CR

### General Data

Power supply	3x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
$\eta_s$	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Domestic Hot Water (DHW)

## Average Climate

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

## Warmer Climate

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

## Colder Climate



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

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

# Model: ARIANEXT COMPACT 110 S-T LINK

## General Data

Power supply	3x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
$\eta_s$	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Domestic Hot Water (DHW)

## Average Climate

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

## Warmer Climate

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

## Colder Climate



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

## Model: ARIANEXT FLEX 110 S-T LINK

### General Data

Power supply	3x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
η <sub>s</sub>	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Domestic Hot Water (DHW)

## Average Climate

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

## Warmer Climate

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

## Colder Climate



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

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

# Model: ARIANEXT FLEX 110 S-T - 300 LINK

## General Data

Power supply	3x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
$\eta_s$	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Domestic Hot Water (DHW)

## Average Climate

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

## Warmer Climate

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

## Colder Climate



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

# Model: NIMBUS COMPACT 110 S-T NET

## General Data

Power supply	3x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
η <sub>s</sub>	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Domestic Hot Water (DHW)

## Average Climate

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

## Warmer Climate

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

## Colder Climate



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

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

## Model: NIMBUS FLEX 110 S-T NET

### General Data

Power supply	3x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
$\eta_s$	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Domestic Hot Water (DHW)

## Average Climate

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

## Warmer Climate

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

## Colder Climate



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

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

# Model: NIMBUS FLEX 110 S-T - 300 NET

## General Data

Power supply	3x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
$\eta_s$	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Domestic Hot Water (DHW)

## Average Climate

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

## Warmer Climate

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

## Colder Climate



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

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

## Model: ARIANEXT COMPACT 110 S-T

### General Data

Power supply	3x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Domestic Hot Water (DHW)

### Average Climate

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

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

## Model: ARIANEXT FLEX 110 S-T

### General Data

Power supply	3x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Domestic Hot Water (DHW)

### Average Climate



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

# Model: ARIANEXT FLEX 110 S-T - 300

## General Data

Power supply	3x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Domestic Hot Water (DHW)

### Average Climate

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

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

## Model: AEROTOP SPLIT 11M-RX

### General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>



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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
$\eta_s$	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

# Model: ARIANEXT PLUS 110 S LINK

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
η <sub>s</sub>	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW



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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Model: ARIANEXT PLUS 110 S

### General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
η <sub>s</sub>	149 %	112 %
Prated	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

# Model: NIMBUS PLUS 110 S NET

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate



### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
$\eta_s$	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Model: AEROTOP SPLIT 11M-CRX

### General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>



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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
η <sub>s</sub>	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Domestic Hot Water (DHW)

## Average Climate

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

## Warmer Climate

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

## Colder Climate

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

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

# Model: ARIANEXT COMPACT 110 S LINK

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>



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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
$\eta_s$	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Domestic Hot Water (DHW)

## Average Climate

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

## Warmer Climate

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

## Colder Climate

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

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

## Model: ARIANEXT FLEX 110 S LINK

### General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>



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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
η <sub>s</sub>	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Domestic Hot Water (DHW)

## Average Climate

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

## Warmer Climate

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

## Colder Climate

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

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

# Model: ARIANEXT FLEX 110 S - 300 LINK

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>



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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
$\eta_s$	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Domestic Hot Water (DHW)

## Average Climate

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

## Warmer Climate

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

## Colder Climate

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

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

# Model: NIMBUS COMPACT 110 S NET

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>



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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
$\eta_s$	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Domestic Hot Water (DHW)

## Average Climate

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

## Warmer Climate

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

## Colder Climate

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

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

## Model: NIMBUS FLEX 110 S NET

### General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>



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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
$\eta_s$	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Domestic Hot Water (DHW)

## Average Climate

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

## Warmer Climate

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

## Colder Climate

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

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

# Model: NIMBUS FLEX 110 S - 300 NET

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>



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

P <sub>designh</sub>	8.21 kW	7.46 kW
$\eta_s$	250 %	161 %
P <sub>rated</sub>	10.80 kW	10.00 kW
SCOP	6.33	4.09
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.21 kW	7.46 kW
COP T <sub>j</sub> = +2°C	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = +7°C	5.36 kW	4.90 kW
COP T <sub>j</sub> = +7°C	5.51	3.34
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.39 kW	4.14 kW
COP T <sub>j</sub> = 12°C	8.35	5.86
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.21 kW	7.46 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.28	2.50
P <sub>dh</sub> T <sub>j</sub> = TOL	8.21 kW	7.46 kW
COP T <sub>j</sub> = TOL	4.28	2.50
C <sub>dh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	18 W	18 W
PTO	19 W	19 W

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

PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1734 kWh	2436 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
P <sub>designh</sub>	17.91 kW	17.01 kW
η <sub>s</sub>	149 %	112 %
P <sub>rated</sub>	8.20 kW	7.40 kW
SCOP	3.80	2.87
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.84 kW	10.30 kW

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

COP Tj = -7°C	3.45	2.71
Pdh Tj = +2°C	6.59 kW	6.21 kW
COP Tj = +2°C	4.91	3.76
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	6.56	5.04
Pdh Tj = 12°C	4.42 kW	4.28 kW
COP Tj = 12°C	9.15	7.64
Pdh Tj = Tbiv	10.84 kW	10.30 kW
COP Tj = Tbiv	3.45	2.71
Pdh Tj = TOL	8.78 kW	4.30 kW
COP Tj = TOL	2.20	0.92
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	11631 kWh	14593 kWh

## Domestic Hot Water (DHW)

## Average Climate

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

## Warmer Climate

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

## Colder Climate

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

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

## Model: ARIANEXT COMPACT 110 S

### General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Domestic Hot Water (DHW)

### Average Climate



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

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

## Model: ARIANEXT FLEX 110 S

### General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Domestic Hot Water (DHW)

### Average Climate

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

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

## Model: ARIANEXT FLEX 110 S - 300

### General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.60 kW	9.55 kW
El input	2.06 kW	3.02 kW
COP	5.15	3.17
Indoor water flow rate	1.80 m <sup>3</sup> /h	1.03 m <sup>3</sup> /h

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.29 kW	11.54 kW
$\eta_s$	187 %	135 %
P <sub>rated</sub>	10.60 kW	9.60 kW
SCOP	4.74	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	10.87 kW	10.21 kW
COP T <sub>j</sub> = -7°C	3.21	2.32
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.21 kW
COP T <sub>j</sub> = +2°C	4.52	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.33 kW	3.99 kW
COP T <sub>j</sub> = +7°C	6.12	4.38
P <sub>dh</sub> T <sub>j</sub> = 12°C	4.42 kW	4.27 kW
COP T <sub>j</sub> = 12°C	9.15	6.59

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

Pdh Tj = Tbiv	10.87 kW	10.21 kW
COP Tj = Tbiv	3.21	2.32
Pdh Tj = TOL	12.08 kW	10.36 kW
COP Tj = TOL	2.80	1.82
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	19 W	19 W
PSB	18 W	18 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.08 kW	1.18 kW
Annual energy consumption Qhe	5358 kWh	6891 kWh

## Domestic Hot Water (DHW)

### Average Climate



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

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