

## Subtype NIMBUS 50 M - ARIANEXT 50 M - AEROTOP MONO 05X - ENERGION M 5

Certificate Holder	Ariston Thermo Group
Address	Viale Aristide Merloni 45
ZIP	I-60044
City	Fabriano (AN)
Country	IT
Certification Body	ICIM S.p.A.
Subtype title	NIMBUS 50 M - ARIANEXT 50 M - AEROTOP MONO 05X - ENERGION M 5
Registration number	ICIM-PDC-000001
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	1.88 kg
Certification Date	19.12.2017

**Model AEROTOP MONO 05M-RX 1Z**

Model name	AEROTOP MONO 05M-RX 1Z
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model AEROTOP MONO 05M-RX 2Z**

Model name	AEROTOP MONO 05M-RX 2Z
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model AEROTOP MONO 05M-RXL**

Model name	AEROTOP MONO 05M-RXL
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model AEROTOP MONO 05M-X 1Z**

Model name	AEROTOP MONO 05M-X 1Z
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model AEROTOP MONO 05M-X 2Z**

Model name	AEROTOP MONO 05M-X 2Z
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model ARIANEXT LITE 50 M LINK**

Model name	ARIANEXT LITE 50 M LINK
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model ARIANEXT LITE 50 M**

Model name	ARIANEXT LITE 50 M
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model ARIANEXT PLUS 50 M 2Z H LINK**

Model name	ARIANEXT PLUS 50 M 2Z H LINK
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe

790 kWh

1035 kWh

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**Model ARIANEXT PLUS 50 M 2Z H**

Model name	ARIANEXT PLUS 50 M 2Z H
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model ARIANEXT PLUS 50 M 2Z LINK**

Model name	ARIANEXT PLUS 50 M 2Z LINK
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model ARIANEXT PLUS 50 M 2Z**

Model name	ARIANEXT PLUS 50 M 2Z
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model ARIANEXT PLUS 50 M H LINK**

Model name	ARIANEXT PLUS 50 M H LINK
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model ARIANEXT PLUS 50 M H**

Model name	ARIANEXT PLUS 50 M H
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model ARIANEXT PLUS 50 M LINK**

Model name	ARIANEXT PLUS 50 M LINK
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model ARIANEXT PLUS 50 M**

Model name	ARIANEXT PLUS 50 M
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model NIMBUS PLUS 50 M 2Z H NET**

Model name	NIMBUS PLUS 50 M 2Z H NET
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe

790 kWh

1035 kWh

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**Model NIMBUS PLUS 50 M 2Z NET**

Model name	NIMBUS PLUS 50 M 2Z NET
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model NIMBUS PLUS 50 M H NET**

Model name	NIMBUS PLUS 50 M H NET
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model NIMBUS PLUS 50 M NET**

Model name	NIMBUS PLUS 50 M NET
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model NIMBUS POCKET 50 M NET**

Model name	NIMBUS POCKET 50 M NET
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model AEROTOP MONO 05M-CRX 1Z**

Model name	AEROTOP MONO 05M-CRX 1Z
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

**EN 12102-1 | Warmer Climate**

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

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %

Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

**Model AEROTOP MONO 05M-CRX 2Z**

Model name	AEROTOP MONO 05M-CRX 2Z
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

**EN 12102-1 | Warmer Climate**

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

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %



Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

**Model ARIANEXT COMPACT 50 M 2Z LINK**

Model name	ARIANEXT COMPACT 50 M 2Z LINK
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

**EN 12102-1 | Warmer Climate**

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

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %

Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

**Model ARIANEXT COMPACT 50 M LINK**

Model name	ARIANEXT COMPACT 50 M LINK
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %



Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

**Model ARIANEXT FLEX 50 M 2Z H LINK**

Model name	ARIANEXT FLEX 50 M 2Z H LINK
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %

Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

**Model ARIANEXT FLEX 50 M 2Z LINK**

Model name	ARIANEXT FLEX 50 M 2Z LINK
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %



Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

**Model ARIANEXT FLEX 50 M H LINK**

Model name	ARIANEXT FLEX 50 M H LINK
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %

Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

**Model ARIANEXT FLEX 50 M LINK**

Model name	ARIANEXT FLEX 50 M LINK
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

**EN 12102-1 | Warmer Climate**

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

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %



Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

**Model NIMBUS COMPACT 50 M 2Z NET**

Model name	NIMBUS COMPACT 50 M 2Z NET
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

**EN 12102-1 | Warmer Climate**

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

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %

Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

**Model NIMBUS COMPACT 50 M NET**

Model name	NIMBUS COMPACT 50 M NET
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %



Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

**Model NIMBUS FLEX 50 M 2Z H NET**

Model name	NIMBUS FLEX 50 M 2Z H NET
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

**EN 12102-1 | Warmer Climate**

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

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %

Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

**Model NIMBUS FLEX 50 M 2Z NET**

Model name	NIMBUS FLEX 50 M 2Z NET
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %



Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

**Model NIMBUS FLEX 50 M H NET**

Model name	NIMBUS FLEX 50 M H NET
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

**EN 12102-1 | Warmer Climate**

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

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %

Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

**Model NIMBUS FLEX 50 M NET**

Model name	NIMBUS FLEX 50 M NET
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %



Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

## Model ARIANEXT COMPACT 50 M 2Z

Model name	ARIANEXT COMPACT 50 M 2Z
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	1x230V 50Hz
Off-peak product	Yes

## Outdoor Air/Water

## EN 16147 | Average Climate

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

## EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

## EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
Prated	5.80 kW	5.86 kW
SCOP	4.47	3.92

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.13 kW	5.19 kW
COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

**Model ARIANEXT COMPACT 50 M**

Model name	ARIANEXT COMPACT 50 M
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
Prated	5.80 kW	5.86 kW
SCOP	4.47	3.92

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.13 kW	5.19 kW
COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

## Model ARIANEXT FLEX 50 M 2Z H

Model name	ARIANEXT FLEX 50 M 2Z H
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	1x230V 50Hz
Off-peak product	Yes

## Outdoor Air/Water

## EN 16147 | Average Climate

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

## EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

## EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
Prated	5.80 kW	5.86 kW
SCOP	4.47	3.92

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.13 kW	5.19 kW
COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

**Model ARIANEXT FLEX 50 M 2Z**

Model name	ARIANEXT FLEX 50 M 2Z
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
Prated	5.80 kW	5.86 kW
SCOP	4.47	3.92



Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.13 kW	5.19 kW
COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

**Model ARIANEXT FLEX 50 M H**

Model name	ARIANEXT FLEX 50 M H
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
Prated	5.80 kW	5.86 kW
SCOP	4.47	3.92

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.13 kW	5.19 kW
COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

## Model ARIANEXT FLEX 50 M

Model name	ARIANEXT FLEX 50 M
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	1x230V 50Hz
Off-peak product	Yes

## Outdoor Air/Water

## EN 16147 | Average Climate

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

## EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

## EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
Prated	5.80 kW	5.86 kW
SCOP	4.47	3.92

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.13 kW	5.19 kW
COP Tj = -7°C	3.15	2.26
Pdh Tj = +2°C	3.15 kW	3.17 kW
COP Tj = +2°C	4.42	3.32
Pdh Tj = +7°C	2.01 kW	2.14 kW
COP Tj = +7°C	5.28	3.91
Pdh Tj = 12°C	1.54 kW	1.50 kW
COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

**Model ENERGION M PLUS 5**

Model name	ENERGION M PLUS 5
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model ENERGION M PLUS 5 2Z**

Model name	ENERGION M PLUS 5 2Z
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	15 W	15 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	15 W	15 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model ENERGION M COMPACT 5**

Model name	ENERGION M COMPACT 5
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

**EN 12102-1 | Warmer Climate**

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

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %



Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

**Model ENERGION M COMPACT 5 2Z**

Model name	ENERGION M COMPACT 5 2Z
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	15 W	15 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	15 W	15 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %

Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	15 W	15 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

**Model ENERGION M FLEX 180 e**

Model name	ENERGION M FLEX 180 e
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

**EN 12102-1 | Warmer Climate**

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

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %



Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

**Model ENERGION M FLEX 5 2Z 180 e**

Model name	ENERGION M FLEX 5 2Z 180 e
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	15 W	15 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	15 W	15 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

**EN 12102-1 | Warmer Climate**

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

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %

Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	15 W	15 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

**Model ENERGION M LIGHT 5**

Model name	ENERGION M LIGHT 5
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

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

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model ENERGION M HYBRIDall 5**

Model name	ENERGION M HYBRIDall 5
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

COP Tj = 12 °C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7 °C	4.89 kW	5.19 kW
COP Tj = -7 °C	3.46	2.71
Pdh Tj = +2 °C	2.98 kW	3.17 kW
COP Tj = +2 °C	5.11	3.89
Pdh Tj = +7 °C	1.95 kW	2.03 kW
COP Tj = +7 °C	6.93	4.95
Pdh Tj = 12 °C	1.61 kW	1.60 kW
COP Tj = 12 °C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.95 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	790 kWh	1035 kWh
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## Model ATAG p ENERGION M HYBRIDzone 5

Model name	ATAG p ENERGION M HYBRIDzone 5
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	1x230V 50Hz
Off-peak product	n/a

## Outdoor Air/Water

## EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

## EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.95 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model ATAG i ENERGION M HYBRIDzone 5**

Model name	ATAG i ENERGION M HYBRIDzone 5
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.95 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe

790 kWh

1035 kWh

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**Model NIMBUS M HYBRID 5 NET**

Model name	NIMBUS M HYBRID 5 NET
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model NIMBUS M HYBRID FLEX 5 NET**

Model name	NIMBUS M HYBRID FLEX 5 NET
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

**EN 12102-1 | Warmer Climate**

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

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %

Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

## Model NIMBUS M HYBRID UNIVERSAL 5 NET

Model name	NIMBUS M HYBRID UNIVERSAL 5 NET
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	1x230V 50Hz
Off-peak product	n/a

## Outdoor Air/Water

## EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

## EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model ARIANEXT M HYBRID 5 LINK**

Model name	ARIANEXT M HYBRID 5 LINK
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model ARIANEXT M HYBRID FLEX 5 LINK**

Model name	ARIANEXT M HYBRID FLEX 5 LINK
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

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

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

**EN 16147 | Colder Climate**

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

**EN 16147 | Warmer Climate**

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

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
$\eta_s$	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW
COP T <sub>j</sub> = 12°C	7.28	5.40
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.13 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.03 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.82	2.14
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Q <sub>he</sub>	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	8.08 kW	8.58 kW
η <sub>s</sub>	151 %	118 %
P <sub>rated</sub>	8.08 kW	8.58 kW
SCOP	3.85	3.02
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	4.89 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.98 kW	3.17 kW
COP T <sub>j</sub> = +2°C	5.11	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.95 kW	2.03 kW
COP T <sub>j</sub> = +7°C	6.93	4.95
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.61 kW	1.60 kW
COP T <sub>j</sub> = 12°C	7.88	6.35
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	4.89 kW	5.19 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.46	2.71
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.69 kW	3.18 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.29	1.54
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.90	0.90
WTOL	60 °C	60 °C
P <sub>off</sub>	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	5175 kWh	7004 kWh

**EN 12102-1 | Warmer Climate**

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

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	3.47 kW	2.98 kW
η <sub>s</sub>	232 %	151 %



Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	790 kWh	1035 kWh

**Model ARIANEXT M HYBRID UNIVERSAL 5 LINK**

Model name	ARIANEXT M HYBRID UNIVERSAL 5 LINK
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model AEROTOP HYBRID MINI EVO 05X**

Model name	AEROTOP HYBRID MINI EVO 05X
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model AEROTOP HYBRID MINI EVO 5**

Model name	AEROTOP HYBRID MINI EVO 5
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model AEROTOP HYBRID UNIVERSAL 5**

Model name	AEROTOP HYBRID UNIVERSAL 5
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

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

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.77 kW	0.86 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

## EN 12102-1 | Colder Climate

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

## EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	8.08 kW	8.58 kW
ηs	151 %	118 %
Prated	8.08 kW	8.58 kW
SCOP	3.85	3.02
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.89 kW	5.19 kW
COP Tj = -7°C	3.46	2.71
Pdh Tj = +2°C	2.98 kW	3.17 kW
COP Tj = +2°C	5.11	3.89
Pdh Tj = +7°C	1.95 kW	2.03 kW
COP Tj = +7°C	6.93	4.95
Pdh Tj = 12°C	1.61 kW	1.60 kW
COP Tj = 12°C	7.88	6.35
Pdh Tj = Tbiv	4.89 kW	5.19 kW
COP Tj = Tbiv	3.46	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.54

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	3.96 kW	4.00 kW
Annual energy consumption Qhe	5175 kWh	7004 kWh

## EN 12102-1 | Warmer Climate

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

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	3.47 kW	2.98 kW
$\eta_s$	232 %	151 %
Prated	3.47 kW	2.98 kW
SCOP	5.88	3.84
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.47 kW	2.98 kW
COP Tj = +2°C	3.88	2.33
Pdh Tj = +7°C	2.23 kW	1.92 kW
COP Tj = +7°C	5.15	3.00
Pdh Tj = 12°C	1.60 kW	1.59 kW
COP Tj = 12°C	7.80	5.86
Pdh Tj = Tbiv	3.47 kW	2.98 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.47 kW	2.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.88	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	790 kWh	1035 kWh
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**Model NIMBUS M FLEX IN 5 NET**

Model name	NIMBUS M FLEX IN 5 NET
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.80 kW	0.90 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

**Model ARIANEXT M FLEX IN 5 LINK**

Model name	ARIANEXT M FLEX IN 5 LINK
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.80 kW	0.90 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh

**Model AEROTOP MONO BUILT-IN 05M-CRX**

Model name	AEROTOP MONO BUILT-IN 05M-CRX
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	Yes

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.40 kW	3.80 kW
El input	0.88 kW	1.32 kW
COP	5.02	2.88

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
P <sub>designh</sub>	5.80 kW	5.86 kW
η <sub>s</sub>	176 %	130 %
P <sub>rated</sub>	5.80 kW	5.86 kW
SCOP	4.47	3.92
T <sub>biv</sub>	-7 °C	-7 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.13 kW	5.19 kW
COP T <sub>j</sub> = -7°C	3.15	2.26
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.15 kW	3.17 kW
COP T <sub>j</sub> = +2°C	4.42	3.32
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.01 kW	2.14 kW
COP T <sub>j</sub> = +7°C	5.28	3.91
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.54 kW	1.50 kW

COP Tj = 12°C	7.28	5.40
Pdh Tj = Tbiv	5.13 kW	5.19 kW
COP Tj = Tbiv	3.15	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.80 kW	0.90 kW
Annual energy consumption Qhe	2678 kWh	3646 kWh