Login

Summary of	NIMBUS/ARIANEXT/AEROTOP/ENERGION 120/150 M - Plus/LB	Reg. No.	ICIM-PDC-000108

Certificate Holder			
Name	Ariston Thermo Group		
Address	Viale Aristide Merloni 45	Zip	I-60044
City	Fabriano (AN)	Country	Italy
Certification Body	ICIM S.p.A.		
Subtype title	NIMBUS/ARIANEXT/AEROTOP/ENERGION 120/150 M - Plus/LB		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	2.1 kg		
Certification Date	05.07.2022		
Testing basis	Heat Pump KEYMARK rev9		

Model: NIMBUS PLUS 120 M NET R32

Configure model	
Model name	NIMBUS PLUS 120 M NET R32
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	2.87 kW	
Cooling capacity	9.05	
EER	3.15	2.93

EN 14825

	+7°C/+12°C
Pdesignc	9.05 kW
SEER	5.40
Pdc Tj = 35°C	9.05 kW
EER Tj = 35°C	3.15
Pdc Tj = 30°C	6.86 kW
EER Tj = 30°C	4.72
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	4.31 kW
EER Tj = 25°C	6.14
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	4.45 kW
EER Tj = 20°C	7.5
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1541 kWh

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	6.83 kW	6.46 kW
η_s	262 %	178 %
Prated	6.83 kW	6.46 kW
SCOP	6.62	4.51
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	6.83 kW	6.46 kW
COP Tj = +2°C	4.37	2.72
Cdh Tj = +2 °C	0.991	0.994
Pdh Tj = +7°C	4.48 kW	4.39 kW
COP Tj = +7°C	5.96	3.77
Cdh Tj = +7 °C	0.982	0.988
Pdh Tj = 12°C	4.72 kW	4.65 kW
COP Tj = 12°C	8.22	6.02

Cdh Tj = +12 °C	0.976	0.982
Pdh Tj = Tbiv	6.83 kW	6.46 kW
COP Tj = Tbiv	4.37	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.83 kW	6.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.37	2.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.994
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1378 kWh	1912 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	15.33 kW	14.18 kW
η_s	160 %	129 %
Prated	15.33 kW	14.18 kW
SCOP	4.07	3.30
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.28 kW	8.58 kW
COP Tj = -7°C	3.74	2.94
Cdh Tj = -7 °C	0.995	0.995
Pdh Tj = +2°C	5.68 kW	5.42 kW
COP Tj = +2°C	5.38	4.26
Cdh Tj = +2 °C	0.987	0.989
Pdh Tj = +7°C	4.20 kW	4.09 kW
COP Tj = +7°C	7.39	5.83
Cdh Tj = +7 °C	0.976	0.981
Pdh Tj = 12°C	4.70 kW	4.72 kW
COP Tj = 12°C	8.75	7.21
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	9.28 kW	8.58 kW

COP Tj = Tbiv	3.74	2.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.41 kW	6.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.26	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.995
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	14.53 kW	13.43 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	9289 kWh	10591 kWh
Pdh Tj = -15°C (if TOL<-20°C)		
COP Tj = -15°C (if TOL<-20°C)		
Cdh Tj = -15 °C		

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	10.84 kW	9.42 kW
η_s	204 %	143 %
Prated	10.84 kW	9.42 kW
SCOP	5.16	3.65
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.59 kW	8.33 kW
COP Tj = -7°C	3.42	2.43
Cdh Tj = -7 °C	0.995	0.996
Pdh Tj = +2°C	5.74 kW	5.47 kW
COP Tj = +2°C	5.10	3.33
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	4.16 kW	3.98 kW
COP Tj = +7°C	6.88	5.04
Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW

COP Tj = Tbiv	3.42	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

Model: NIMBUS PLUS 150 M NET R32

Configure model	
Model name	NIMBUS PLUS 150 M NET R32
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	3.75 kW	
Cooling capacity	11	
EER	2.93	4.70

EN 14825

	+7°C/+12°C
Pdesignc	11 kW
SEER	5.22
Pdc Tj = 35°C	11 kW
EER Tj = 35°C	2.93
Pdc Tj = 30°C	8.18 kW
EER Tj = 30°C	4.4
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	5.23 kW
EER Tj = 25°C	5.77
Cdc Tj = 25 °C	0.99
Pdc Tj = 20°C	4.5 kW
EER Tj = 20°C	7.53
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1951 kWh

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	8.01 kW	7.50 kW
η_s	258 %	181 %
Prated	8.01 kW	7.50 kW
SCOP	6.53	4.61
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.01 kW	7.50 kW
COP Tj = +2°C	4.27	2.77
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	5.33 kW	4.85 kW
COP Tj = +7°C	5.81	3.84
Cdh Tj = +7 °C	0.985	0.989
Pdh Tj = 12°C	4.72 kW	4.61 kW
COP Tj = 12°C	8.10	6.12

Cdh Tj = +12 °C	0.977	0.982
Pdh Tj = Tbiv	8.01 kW	7.50 kW
COP Tj = Tbiv	4.27	2.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.27	2.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.982
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1638 kWh	2172 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	18.17 kW	17.31 kW
η_s	157 %	122 %
Prated	18.17 kW	17.31 kW
SCOP	3.99	3.12
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.00 kW	10.48 kW
COP Tj = -7°C	3.57	2.91
Cdh Tj = -7 °C	0.996	0.996
Pdh Tj = +2°C	6.88 kW	6.45 kW
COP Tj = +2°C	5.36	4.22
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	4.43 kW	4.27 kW
COP Tj = +7°C	7.25	5.79
Cdh Tj = +7 °C	0.978	0.982
Pdh Tj = 12°C	4.71 kW	4.60 kW
COP Tj = 12°C	8.53	7.20
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	11.00 kW	10.48 kW

COP Tj = Tbiv	3.57	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.74 kW	8.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	17.22 kW	16.40 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	11230 kWh	13042 kWh
Pdh Tj = -15°C (if TOL<-20°C)		
COP Tj = -15°C (if TOL<-20°C)		
Cdh Tj = -15 °C		

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	12.48 kW	11.59 kW
η_s	202 %	151 %
Prated	12.48 kW	11.59 kW
SCOP	5.12	3.85
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.04 kW	10.25 kW
COP Tj = -7°C	3.29	2.50
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	6.98 kW	6.50 kW
COP Tj = +2°C	4.92	3.67
Cdh Tj = +2 °C	0.990	0.992
Pdh Tj = +7°C	4.39 kW	3.96 kW
COP Tj = +7°C	6.76	5.04
Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW

COP Tj = Tbiv	3.29	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

Model: NIMBUS PLUS 120 M-T NET R32

Configure model	
Model name	NIMBUS PLUS 120 M-T NET R32
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	2.87 kW	
Cooling capacity	9.05	
EER	3.15	2.93

EN 14825

	+7°C/+12°C
Pdesignc	9.05 kW
SEER	5.40
Pdc Tj = 35°C	9.05 kW
EER Tj = 35°C	3.15
Pdc Tj = 30°C	6.86 kW
EER Tj = 30°C	4.72
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	4.31 kW
EER Tj = 25°C	6.14
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	4.45 kW
EER Tj = 20°C	7.5
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1541 kWh

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	6.83 kW	6.46 kW
η_s	262 %	178 %
Prated	6.83 kW	6.46 kW
SCOP	6.62	4.51
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	6.83 kW	6.46 kW
COP Tj = +2°C	4.37	2.72
Cdh Tj = +2 °C	0.991	0.994
Pdh Tj = +7°C	4.48 kW	4.39 kW
COP Tj = +7°C	5.96	3.77
Cdh Tj = +7 °C	0.982	0.988
Pdh Tj = 12°C	4.72 kW	4.65 kW
COP Tj = 12°C	8.22	6.02

Cdh Tj = +12 °C	0.976	0.982
Pdh Tj = Tbiv	6.83 kW	6.46 kW
COP Tj = Tbiv	4.37	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.83 kW	6.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.37	2.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.994
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1378 kWh	1912 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	15.33 kW	14.18 kW
η_s	160 %	129 %
Prated	15.33 kW	14.18 kW
SCOP	4.07	3.30
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.28 kW	8.58 kW
COP Tj = -7°C	3.74	2.94
Cdh Tj = -7 °C	0.995	0.995
Pdh Tj = +2°C	5.68 kW	5.42 kW
COP Tj = +2°C	5.38	4.26
Cdh Tj = +2 °C	0.987	0.989
Pdh Tj = +7°C	4.20 kW	4.09 kW
COP Tj = +7°C	7.39	5.83
Cdh Tj = +7 °C	0.976	0.981
Pdh Tj = 12°C	4.70 kW	4.72 kW
COP Tj = 12°C	8.75	7.21
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	9.28 kW	8.58 kW

COP Tj = Tbiv	3.74	2.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.41 kW	6.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.26	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.995
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	14.53 kW	13.43 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	9289 kWh	10591 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	10.84 kW	9.42 kW
η_s	204 %	143 %
Prated	10.84 kW	9.42 kW
SCOP	5.16	3.65
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.59 kW	8.33 kW
COP Tj = -7°C	3.42	2.43
Cdh Tj = -7 °C	0.995	0.996
Pdh Tj = +2°C	5.74 kW	5.47 kW
COP Tj = +2°C	5.10	3.33
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	4.16 kW	3.98 kW
COP Tj = +7°C	6.88	5.04
Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

Model: NIMBUS PLUS 150 M-T NET R32

Configure model	
Model name	NIMBUS PLUS 150 M-T NET R32
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	3.75 kW	
Cooling capacity	11	
EER	2.93	4.70

EN 14825

	+7°C/+12°C
Pdesignc	11 kW
SEER	5.22
Pdc Tj = 35°C	11 kW
EER Tj = 35°C	2.93
Pdc Tj = 30°C	8.18 kW
EER Tj = 30°C	4.4
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	5.23 kW
EER Tj = 25°C	5.77
Cdc Tj = 25 °C	0.99
Pdc Tj = 20°C	4.5 kW
EER Tj = 20°C	7.53
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1951 kWh

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	8.01 kW	7.50 kW
η_s	258 %	181 %
Prated	8.01 kW	7.50 kW
SCOP	6.53	4.61
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.01 kW	7.50 kW
COP Tj = +2°C	4.27	2.77
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	5.33 kW	4.85 kW
COP Tj = +7°C	5.81	3.84
Cdh Tj = +7 °C	0.985	0.989
Pdh Tj = 12°C	4.72 kW	4.61 kW
COP Tj = 12°C	8.10	6.12

Cdh Tj = +12 °C	0.977	0.982
Pdh Tj = Tbiv	8.01 kW	7.50 kW
COP Tj = Tbiv	4.27	2.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.27	2.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.982
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1638 kWh	2172 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	18.17 kW	17.31 kW
η_s	157 %	122 %
Prated	18.17 kW	17.31 kW
SCOP	3.99	3.12
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.00 kW	10.48 kW
COP Tj = -7°C	3.57	2.91
Cdh Tj = -7 °C	0.996	0.996
Pdh Tj = +2°C	6.88 kW	6.45 kW
COP Tj = +2°C	5.36	4.22
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	4.43 kW	4.27 kW
COP Tj = +7°C	7.25	5.79
Cdh Tj = +7 °C	0.978	0.982
Pdh Tj = 12°C	4.71 kW	4.60 kW
COP Tj = 12°C	8.53	7.20
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	11.00 kW	10.48 kW

COP Tj = Tbiv	3.57	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.74 kW	8.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	17.22 kW	16.40 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	11230 kWh	13042 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	12.48 kW	11.59 kW
η_s	202 %	151 %
Prated	12.48 kW	11.59 kW
SCOP	5.12	3.85
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.04 kW	10.25 kW
COP Tj = -7°C	3.29	2.50
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	6.98 kW	6.50 kW
COP Tj = +2°C	4.92	3.67
Cdh Tj = +2 °C	0.990	0.992
Pdh Tj = +7°C	4.39 kW	3.96 kW
COP Tj = +7°C	6.76	5.04
Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

Model: NIMBUS POCKET 120 M NET R32

Configure model	
Model name	NIMBUS POCKET 120 M NET R32
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	2.87 kW	
Cooling capacity	9.05	
EER	3.15	2.93

EN 14825

	+7°C/+12°C
Pdesignc	9.05 kW
SEER	5.40
Pdc Tj = 35°C	9.05 kW
EER Tj = 35°C	3.15
Pdc Tj = 30°C	6.86 kW
EER Tj = 30°C	4.72
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	4.31 kW
EER Tj = 25°C	6.14
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	4.45 kW
EER Tj = 20°C	7.5
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1541 kWh

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	6.83 kW	6.46 kW
η_s	262 %	178 %
Prated	6.83 kW	6.46 kW
SCOP	6.62	4.51
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	6.83 kW	6.46 kW
COP Tj = +2°C	4.37	2.72
Cdh Tj = +2 °C	0.991	0.994
Pdh Tj = +7°C	4.48 kW	4.39 kW
COP Tj = +7°C	5.96	3.77
Cdh Tj = +7 °C	0.982	0.988
Pdh Tj = 12°C	4.72 kW	4.65 kW
COP Tj = 12°C	8.22	6.02

Cdh Tj = +12 °C	0.976	0.982
Pdh Tj = Tbiv	6.83 kW	6.46 kW
COP Tj = Tbiv	4.37	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.83 kW	6.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.37	2.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.994
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1378 kWh	1912 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	15.33 kW	14.18 kW
η_s	160 %	129 %
Prated	15.33 kW	14.18 kW
SCOP	4.07	3.30
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.28 kW	8.58 kW
COP Tj = -7°C	3.74	2.94
Cdh Tj = -7 °C	0.995	0.995
Pdh Tj = +2°C	5.68 kW	5.42 kW
COP Tj = +2°C	5.38	4.26
Cdh Tj = +2 °C	0.987	0.989
Pdh Tj = +7°C	4.20 kW	4.09 kW
COP Tj = +7°C	7.39	5.83
Cdh Tj = +7 °C	0.976	0.981
Pdh Tj = 12°C	4.70 kW	4.72 kW
COP Tj = 12°C	8.75	7.21
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	9.28 kW	8.58 kW

COP Tj = Tbiv	3.74	2.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.41 kW	6.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.26	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.995
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	14.53 kW	13.43 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	9289 kWh	10591 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	10.84 kW	9.42 kW
η_s	204 %	143 %
Prated	10.84 kW	9.42 kW
SCOP	5.16	3.65
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.59 kW	8.33 kW
COP Tj = -7°C	3.42	2.43
Cdh Tj = -7 °C	0.995	0.996
Pdh Tj = +2°C	5.74 kW	5.47 kW
COP Tj = +2°C	5.10	3.33
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	4.16 kW	3.98 kW
COP Tj = +7°C	6.88	5.04
Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

Model: NIMBUS POCKET 150 M NET R32

Configure model	
Model name	NIMBUS POCKET 150 M NET R32
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	3.75 kW	
Cooling capacity	11	
EER	2.93	4.70

EN 14825

	+7°C/+12°C
Pdesignc	11 kW
SEER	5.22
Pdc Tj = 35°C	11 kW
EER Tj = 35°C	2.93
Pdc Tj = 30°C	8.18 kW
EER Tj = 30°C	4.4
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	5.23 kW
EER Tj = 25°C	5.77
Cdc Tj = 25 °C	0.99
Pdc Tj = 20°C	4.5 kW
EER Tj = 20°C	7.53
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1951 kWh

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	8.01 kW	7.50 kW
η_s	258 %	181 %
Prated	8.01 kW	7.50 kW
SCOP	6.53	4.61
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.01 kW	7.50 kW
COP Tj = +2°C	4.27	2.77
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	5.33 kW	4.85 kW
COP Tj = +7°C	5.81	3.84
Cdh Tj = +7 °C	0.985	0.989
Pdh Tj = 12°C	4.72 kW	4.61 kW
COP Tj = 12°C	8.10	6.12

Cdh Tj = +12 °C	0.977	0.982
Pdh Tj = Tbiv	8.01 kW	7.50 kW
COP Tj = Tbiv	4.27	2.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.27	2.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.982
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1638 kWh	2172 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	18.17 kW	17.31 kW
η_s	157 %	122 %
Prated	18.17 kW	17.31 kW
SCOP	3.99	3.12
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.00 kW	10.48 kW
COP Tj = -7°C	3.57	2.91
Cdh Tj = -7 °C	0.996	0.996
Pdh Tj = +2°C	6.88 kW	6.45 kW
COP Tj = +2°C	5.36	4.22
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	4.43 kW	4.27 kW
COP Tj = +7°C	7.25	5.79
Cdh Tj = +7 °C	0.978	0.982
Pdh Tj = 12°C	4.71 kW	4.60 kW
COP Tj = 12°C	8.53	7.20
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	11.00 kW	10.48 kW

COP Tj = Tbiv	3.57	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.74 kW	8.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	17.22 kW	16.40 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	11230 kWh	13042 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	12.48 kW	11.59 kW
η_s	202 %	151 %
Prated	12.48 kW	11.59 kW
SCOP	5.12	3.85
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.04 kW	10.25 kW
COP Tj = -7°C	3.29	2.50
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	6.98 kW	6.50 kW
COP Tj = +2°C	4.92	3.67
Cdh Tj = +2 °C	0.990	0.992
Pdh Tj = +7°C	4.39 kW	3.96 kW
COP Tj = +7°C	6.76	5.04
Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

Model: NIMBUS POCKET 120 M-T NET R32

Configure model	
Model name	NIMBUS POCKET 120 M-T NET R32
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	2.87 kW	
Cooling capacity	9.05	
EER	3.15	2.93

EN 14825

	+7°C/+12°C
Pdesignc	9.05 kW
SEER	5.40
Pdc Tj = 35°C	9.05 kW
EER Tj = 35°C	3.15
Pdc Tj = 30°C	6.86 kW
EER Tj = 30°C	4.72
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	4.31 kW
EER Tj = 25°C	6.14
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	4.45 kW
EER Tj = 20°C	7.5
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1541 kWh

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	6.83 kW	6.46 kW
η_s	262 %	178 %
Prated	6.83 kW	6.46 kW
SCOP	6.62	4.51
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	6.83 kW	6.46 kW
COP Tj = +2°C	4.37	2.72
Cdh Tj = +2 °C	0.991	0.994
Pdh Tj = +7°C	4.48 kW	4.39 kW
COP Tj = +7°C	5.96	3.77
Cdh Tj = +7 °C	0.982	0.988
Pdh Tj = 12°C	4.72 kW	4.65 kW
COP Tj = 12°C	8.22	6.02

Cdh Tj = +12 °C	0.976	0.982
Pdh Tj = Tbiv	6.83 kW	6.46 kW
COP Tj = Tbiv	4.37	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.83 kW	6.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.37	2.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.994
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1378 kWh	1912 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	15.33 kW	14.18 kW
η_s	160 %	129 %
Prated	15.33 kW	14.18 kW
SCOP	4.07	3.30
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.28 kW	8.58 kW
COP Tj = -7°C	3.74	2.94
Cdh Tj = -7 °C	0.995	0.995
Pdh Tj = +2°C	5.68 kW	5.42 kW
COP Tj = +2°C	5.38	4.26
Cdh Tj = +2 °C	0.987	0.989
Pdh Tj = +7°C	4.20 kW	4.09 kW
COP Tj = +7°C	7.39	5.83
Cdh Tj = +7 °C	0.976	0.981
Pdh Tj = 12°C	4.70 kW	4.72 kW
COP Tj = 12°C	8.75	7.21
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	9.28 kW	8.58 kW

COP Tj = Tbiv	3.74	2.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.41 kW	6.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.26	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.995
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	14.53 kW	13.43 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	9289 kWh	10591 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	10.84 kW	9.42 kW
η_s	204 %	143 %
Prated	10.84 kW	9.42 kW
SCOP	5.16	3.65
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.59 kW	8.33 kW
COP Tj = -7°C	3.42	2.43
Cdh Tj = -7 °C	0.995	0.996
Pdh Tj = +2°C	5.74 kW	5.47 kW
COP Tj = +2°C	5.10	3.33
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	4.16 kW	3.98 kW
COP Tj = +7°C	6.88	5.04
Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

Model: NIMBUS POCKET 150 M-T NET R32

Configure model	
Model name	NIMBUS POCKET 150 M-T NET R32
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	3.75 kW	
Cooling capacity	11	
EER	2.93	4.70

EN 14825

	+7°C/+12°C
Pdesignc	11 kW
SEER	5.22
Pdc Tj = 35°C	11 kW
EER Tj = 35°C	2.93
Pdc Tj = 30°C	8.18 kW
EER Tj = 30°C	4.4
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	5.23 kW
EER Tj = 25°C	5.77
Cdc Tj = 25 °C	0.99
Pdc Tj = 20°C	4.5 kW
EER Tj = 20°C	7.53
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1951 kWh

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	8.01 kW	7.50 kW
η_s	258 %	181 %
Prated	8.01 kW	7.50 kW
SCOP	6.53	4.61
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.01 kW	7.50 kW
COP Tj = +2°C	4.27	2.77
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	5.33 kW	4.85 kW
COP Tj = +7°C	5.81	3.84
Cdh Tj = +7 °C	0.985	0.989
Pdh Tj = 12°C	4.72 kW	4.61 kW
COP Tj = 12°C	8.10	6.12

Cdh Tj = +12 °C	0.977	0.982
Pdh Tj = Tbiv	8.01 kW	7.50 kW
COP Tj = Tbiv	4.27	2.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.27	2.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.982
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1638 kWh	2172 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	18.17 kW	17.31 kW
η_s	157 %	122 %
Prated	18.17 kW	17.31 kW
SCOP	3.99	3.12
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.00 kW	10.48 kW
COP Tj = -7°C	3.57	2.91
Cdh Tj = -7 °C	0.996	0.996
Pdh Tj = +2°C	6.88 kW	6.45 kW
COP Tj = +2°C	5.36	4.22
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	4.43 kW	4.27 kW
COP Tj = +7°C	7.25	5.79
Cdh Tj = +7 °C	0.978	0.982
Pdh Tj = 12°C	4.71 kW	4.60 kW
COP Tj = 12°C	8.53	7.20
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	11.00 kW	10.48 kW

COP Tj = Tbiv	3.57	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.74 kW	8.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	17.22 kW	16.40 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	11230 kWh	13042 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	12.48 kW	11.59 kW
η_s	202 %	151 %
Prated	12.48 kW	11.59 kW
SCOP	5.12	3.85
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.04 kW	10.25 kW
COP Tj = -7°C	3.29	2.50
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	6.98 kW	6.50 kW
COP Tj = +2°C	4.92	3.67
Cdh Tj = +2 °C	0.990	0.992
Pdh Tj = +7°C	4.39 kW	3.96 kW
COP Tj = +7°C	6.76	5.04
Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

Model: ARIANEXT PLUS 120 M LINK R32

Configure model	
Model name	ARIANEXT PLUS 120 M LINK R32
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	2.87 kW	
Cooling capacity	9.05	
EER	3.15	2.93

EN 14825

	+7°C/+12°C
Pdesignc	9.05 kW
SEER	5.40
Pdc Tj = 35°C	9.05 kW
EER Tj = 35°C	3.15
Pdc Tj = 30°C	6.86 kW
EER Tj = 30°C	4.72
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	4.31 kW
EER Tj = 25°C	6.14
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	4.45 kW
EER Tj = 20°C	7.5
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1541 kWh

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	6.83 kW	6.46 kW
η_s	262 %	178 %
Prated	6.83 kW	6.46 kW
SCOP	6.62	4.51
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	6.83 kW	6.46 kW
COP Tj = +2°C	4.37	2.72
Cdh Tj = +2 °C	0.991	0.994
Pdh Tj = +7°C	4.48 kW	4.39 kW
COP Tj = +7°C	5.96	3.77
Cdh Tj = +7 °C	0.982	0.988
Pdh Tj = 12°C	4.72 kW	4.65 kW
COP Tj = 12°C	8.22	6.02

Cdh Tj = +12 °C	0.976	0.982
Pdh Tj = Tbiv	6.83 kW	6.46 kW
COP Tj = Tbiv	4.37	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.83 kW	6.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.37	2.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.994
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1378 kWh	1912 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	15.33 kW	14.18 kW
η_s	160 %	129 %
Prated	15.33 kW	14.18 kW
SCOP	4.07	3.30
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.28 kW	8.58 kW
COP Tj = -7°C	3.74	2.94
Cdh Tj = -7 °C	0.995	0.995
Pdh Tj = +2°C	5.68 kW	5.42 kW
COP Tj = +2°C	5.38	4.26
Cdh Tj = +2 °C	0.987	0.989
Pdh Tj = +7°C	4.20 kW	4.09 kW
COP Tj = +7°C	7.39	5.83
Cdh Tj = +7 °C	0.976	0.981
Pdh Tj = 12°C	4.70 kW	4.72 kW
COP Tj = 12°C	8.75	7.21
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	9.28 kW	8.58 kW

COP Tj = Tbiv	3.74	2.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.41 kW	6.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.26	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.995
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	14.53 kW	13.43 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	9289 kWh	10591 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	10.84 kW	9.42 kW
η_s	204 %	143 %
Prated	10.84 kW	9.42 kW
SCOP	5.16	3.65
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.59 kW	8.33 kW
COP Tj = -7°C	3.42	2.43
Cdh Tj = -7 °C	0.995	0.996
Pdh Tj = +2°C	5.74 kW	5.47 kW
COP Tj = +2°C	5.10	3.33
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	4.16 kW	3.98 kW
COP Tj = +7°C	6.88	5.04
Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

Model: ARIANEXT PLUS 120 M-T LINK R32

Configure model	
Model name	ARIANEXT PLUS 120 M-T LINK R32
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	2.87 kW	
Cooling capacity	9.05	
EER	3.15	2.93

EN 14825

	+7°C/+12°C
Pdesignc	9.05 kW
SEER	5.40
Pdc Tj = 35°C	9.05 kW
EER Tj = 35°C	3.15
Pdc Tj = 30°C	6.86 kW
EER Tj = 30°C	4.72
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	4.31 kW
EER Tj = 25°C	6.14
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	4.45 kW
EER Tj = 20°C	7.5
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1541 kWh

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	6.83 kW	6.46 kW
η_s	262 %	178 %
Prated	6.83 kW	6.46 kW
SCOP	6.62	4.51
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	6.83 kW	6.46 kW
COP Tj = +2°C	4.37	2.72
Cdh Tj = +2 °C	0.991	0.994
Pdh Tj = +7°C	4.48 kW	4.39 kW
COP Tj = +7°C	5.96	3.77
Cdh Tj = +7 °C	0.982	0.988
Pdh Tj = 12°C	4.72 kW	4.65 kW
COP Tj = 12°C	8.22	6.02

Cdh Tj = +12 °C	0.976	0.982
Pdh Tj = Tbiv	6.83 kW	6.46 kW
COP Tj = Tbiv	4.37	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.83 kW	6.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.37	2.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.994
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1378 kWh	1912 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	15.33 kW	14.18 kW
η_s	160 %	129 %
Prated	15.33 kW	14.18 kW
SCOP	4.07	3.30
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.28 kW	8.58 kW
COP Tj = -7°C	3.74	2.94
Cdh Tj = -7 °C	0.995	0.995
Pdh Tj = +2°C	5.68 kW	5.42 kW
COP Tj = +2°C	5.38	4.26
Cdh Tj = +2 °C	0.987	0.989
Pdh Tj = +7°C	4.20 kW	4.09 kW
COP Tj = +7°C	7.39	5.83
Cdh Tj = +7 °C	0.976	0.981
Pdh Tj = 12°C	4.70 kW	4.72 kW
COP Tj = 12°C	8.75	7.21
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	9.28 kW	8.58 kW

COP Tj = Tbiv	3.74	2.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.41 kW	6.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.26	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.995
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	14.53 kW	13.43 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	9289 kWh	10591 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	10.84 kW	9.42 kW
η_s	204 %	143 %
Prated	10.84 kW	9.42 kW
SCOP	5.16	3.65
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.59 kW	8.33 kW
COP Tj = -7°C	3.42	2.43
Cdh Tj = -7 °C	0.995	0.996
Pdh Tj = +2°C	5.74 kW	5.47 kW
COP Tj = +2°C	5.10	3.33
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	4.16 kW	3.98 kW
COP Tj = +7°C	6.88	5.04
Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

Model: ARIANEXT PLUS 150 M LINK R32

Configure model	
Model name	ARIANEXT PLUS 150 M LINK R32
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	3.75 kW	
Cooling capacity	11	
EER	2.93	4.70

EN 14825

	+7°C/+12°C
Pdesignc	11 kW
SEER	5.22
Pdc Tj = 35°C	11 kW
EER Tj = 35°C	2.93
Pdc Tj = 30°C	8.18 kW
EER Tj = 30°C	4.4
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	5.23 kW
EER Tj = 25°C	5.77
Cdc Tj = 25 °C	0.99
Pdc Tj = 20°C	4.5 kW
EER Tj = 20°C	7.53
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1951 kWh

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	8.01 kW	7.50 kW
η_s	258 %	181 %
Prated	8.01 kW	7.50 kW
SCOP	6.53	4.61
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.01 kW	7.50 kW
COP Tj = +2°C	4.27	2.77
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	5.33 kW	4.85 kW
COP Tj = +7°C	5.81	3.84
Cdh Tj = +7 °C	0.985	0.989
Pdh Tj = 12°C	4.72 kW	4.61 kW
COP Tj = 12°C	8.10	6.12

Cdh Tj = +12 °C	0.977	0.982
Pdh Tj = Tbiv	8.01 kW	7.50 kW
COP Tj = Tbiv	4.27	2.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.27	2.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.982
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1638 kWh	2172 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	18.17 kW	17.31 kW
η_s	157 %	122 %
Prated	18.17 kW	17.31 kW
SCOP	3.99	3.12
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.00 kW	10.48 kW
COP Tj = -7°C	3.57	2.91
Cdh Tj = -7 °C	0.996	0.996
Pdh Tj = +2°C	6.88 kW	6.45 kW
COP Tj = +2°C	5.36	4.22
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	4.43 kW	4.27 kW
COP Tj = +7°C	7.25	5.79
Cdh Tj = +7 °C	0.978	0.982
Pdh Tj = 12°C	4.71 kW	4.60 kW
COP Tj = 12°C	8.53	7.20
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	11.00 kW	10.48 kW

COP Tj = Tbiv	3.57	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.74 kW	8.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	17.22 kW	16.40 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	11230 kWh	13042 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	12.48 kW	11.59 kW
η_s	202 %	151 %
Prated	12.48 kW	11.59 kW
SCOP	5.12	3.85
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.04 kW	10.25 kW
COP Tj = -7°C	3.29	2.50
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	6.98 kW	6.50 kW
COP Tj = +2°C	4.92	3.67
Cdh Tj = +2 °C	0.990	0.992
Pdh Tj = +7°C	4.39 kW	3.96 kW
COP Tj = +7°C	6.76	5.04
Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

Model: ARIANEXT PLUS 150 M-T LINK R32

Configure model	
Model name	ARIANEXT PLUS 150 M-T LINK R32
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	3.75 kW	
Cooling capacity	11	
EER	2.93	4.70

EN 14825

	+7°C/+12°C
Pdesignc	11 kW
SEER	5.22
Pdc Tj = 35°C	11 kW
EER Tj = 35°C	2.93
Pdc Tj = 30°C	8.18 kW
EER Tj = 30°C	4.4
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	5.23 kW
EER Tj = 25°C	5.77
Cdc Tj = 25 °C	0.99
Pdc Tj = 20°C	4.5 kW
EER Tj = 20°C	7.53
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1951 kWh

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	8.01 kW	7.50 kW
η_s	258 %	181 %
Prated	8.01 kW	7.50 kW
SCOP	6.53	4.61
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.01 kW	7.50 kW
COP Tj = +2°C	4.27	2.77
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	5.33 kW	4.85 kW
COP Tj = +7°C	5.81	3.84
Cdh Tj = +7 °C	0.985	0.989
Pdh Tj = 12°C	4.72 kW	4.61 kW
COP Tj = 12°C	8.10	6.12

Cdh Tj = +12 °C	0.977	0.982
Pdh Tj = Tbiv	8.01 kW	7.50 kW
COP Tj = Tbiv	4.27	2.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.27	2.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.982
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1638 kWh	2172 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	18.17 kW	17.31 kW
η_s	157 %	122 %
Prated	18.17 kW	17.31 kW
SCOP	3.99	3.12
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.00 kW	10.48 kW
COP Tj = -7°C	3.57	2.91
Cdh Tj = -7 °C	0.996	0.996
Pdh Tj = +2°C	6.88 kW	6.45 kW
COP Tj = +2°C	5.36	4.22
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	4.43 kW	4.27 kW
COP Tj = +7°C	7.25	5.79
Cdh Tj = +7 °C	0.978	0.982
Pdh Tj = 12°C	4.71 kW	4.60 kW
COP Tj = 12°C	8.53	7.20
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	11.00 kW	10.48 kW

COP Tj = Tbiv	3.57	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.74 kW	8.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	17.22 kW	16.40 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	11230 kWh	13042 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	12.48 kW	11.59 kW
η_s	202 %	151 %
Prated	12.48 kW	11.59 kW
SCOP	5.12	3.85
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.04 kW	10.25 kW
COP Tj = -7°C	3.29	2.50
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	6.98 kW	6.50 kW
COP Tj = +2°C	4.92	3.67
Cdh Tj = +2 °C	0.990	0.992
Pdh Tj = +7°C	4.39 kW	3.96 kW
COP Tj = +7°C	6.76	5.04
Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

Model: ARIANEXT LITE 120 M LINK R32

Configure model	
Model name	ARIANEXT LITE 120 M LINK R32
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	2.87 kW	
Cooling capacity	9.05	
EER	3.15	2.93

EN 14825

	+7°C/+12°C
Pdesignc	9.05 kW
SEER	5.40
Pdc Tj = 35°C	9.05 kW
EER Tj = 35°C	3.15
Pdc Tj = 30°C	6.86 kW
EER Tj = 30°C	4.72
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	4.31 kW
EER Tj = 25°C	6.14
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	4.45 kW
EER Tj = 20°C	7.5
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1541 kWh

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	6.83 kW	6.46 kW
η_s	262 %	178 %
Prated	6.83 kW	6.46 kW
SCOP	6.62	4.51
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	6.83 kW	6.46 kW
COP Tj = +2°C	4.37	2.72
Cdh Tj = +2 °C	0.991	0.994
Pdh Tj = +7°C	4.48 kW	4.39 kW
COP Tj = +7°C	5.96	3.77
Cdh Tj = +7 °C	0.982	0.988
Pdh Tj = 12°C	4.72 kW	4.65 kW
COP Tj = 12°C	8.22	6.02

Cdh Tj = +12 °C	0.976	0.982
Pdh Tj = Tbiv	6.83 kW	6.46 kW
COP Tj = Tbiv	4.37	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.83 kW	6.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.37	2.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.994
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1378 kWh	1912 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	15.33 kW	14.18 kW
η_s	160 %	129 %
Prated	15.33 kW	14.18 kW
SCOP	4.07	3.30
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.28 kW	8.58 kW
COP Tj = -7°C	3.74	2.94
Cdh Tj = -7 °C	0.995	0.995
Pdh Tj = +2°C	5.68 kW	5.42 kW
COP Tj = +2°C	5.38	4.26
Cdh Tj = +2 °C	0.987	0.989
Pdh Tj = +7°C	4.20 kW	4.09 kW
COP Tj = +7°C	7.39	5.83
Cdh Tj = +7 °C	0.976	0.981
Pdh Tj = 12°C	4.70 kW	4.72 kW
COP Tj = 12°C	8.75	7.21
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	9.28 kW	8.58 kW

COP Tj = Tbiv	3.74	2.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.41 kW	6.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.26	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.995
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	14.53 kW	13.43 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	9289 kWh	10591 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	10.84 kW	9.42 kW
η_s	204 %	143 %
Prated	10.84 kW	9.42 kW
SCOP	5.16	3.65
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.59 kW	8.33 kW
COP Tj = -7°C	3.42	2.43
Cdh Tj = -7 °C	0.995	0.996
Pdh Tj = +2°C	5.74 kW	5.47 kW
COP Tj = +2°C	5.10	3.33
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	4.16 kW	3.98 kW
COP Tj = +7°C	6.88	5.04
Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

Model: ARIANEXT LITE 120 M-T LINK R32

Configure model	
Model name	ARIANEXT LITE 120 M-T LINK R32
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	2.87 kW	
Cooling capacity	9.05	
EER	3.15	2.93

EN 14825

	+7°C/+12°C
Pdesignc	9.05 kW
SEER	5.40
Pdc Tj = 35°C	9.05 kW
EER Tj = 35°C	3.15
Pdc Tj = 30°C	6.86 kW
EER Tj = 30°C	4.72
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	4.31 kW
EER Tj = 25°C	6.14
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	4.45 kW
EER Tj = 20°C	7.5
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1541 kWh

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	6.83 kW	6.46 kW
η_s	262 %	178 %
Prated	6.83 kW	6.46 kW
SCOP	6.62	4.51
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	6.83 kW	6.46 kW
COP Tj = +2°C	4.37	2.72
Cdh Tj = +2 °C	0.991	0.994
Pdh Tj = +7°C	4.48 kW	4.39 kW
COP Tj = +7°C	5.96	3.77
Cdh Tj = +7 °C	0.982	0.988
Pdh Tj = 12°C	4.72 kW	4.65 kW
COP Tj = 12°C	8.22	6.02

Cdh Tj = +12 °C	0.976	0.982
Pdh Tj = Tbiv	6.83 kW	6.46 kW
COP Tj = Tbiv	4.37	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.83 kW	6.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.37	2.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.994
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1378 kWh	1912 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	15.33 kW	14.18 kW
η_s	160 %	129 %
Prated	15.33 kW	14.18 kW
SCOP	4.07	3.30
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.28 kW	8.58 kW
COP Tj = -7°C	3.74	2.94
Cdh Tj = -7 °C	0.995	0.995
Pdh Tj = +2°C	5.68 kW	5.42 kW
COP Tj = +2°C	5.38	4.26
Cdh Tj = +2 °C	0.987	0.989
Pdh Tj = +7°C	4.20 kW	4.09 kW
COP Tj = +7°C	7.39	5.83
Cdh Tj = +7 °C	0.976	0.981
Pdh Tj = 12°C	4.70 kW	4.72 kW
COP Tj = 12°C	8.75	7.21
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	9.28 kW	8.58 kW

COP Tj = Tbiv	3.74	2.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.41 kW	6.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.26	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.995
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	14.53 kW	13.43 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	9289 kWh	10591 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	10.84 kW	9.42 kW
η_s	204 %	143 %
Prated	10.84 kW	9.42 kW
SCOP	5.16	3.65
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.59 kW	8.33 kW
COP Tj = -7°C	3.42	2.43
Cdh Tj = -7 °C	0.995	0.996
Pdh Tj = +2°C	5.74 kW	5.47 kW
COP Tj = +2°C	5.10	3.33
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	4.16 kW	3.98 kW
COP Tj = +7°C	6.88	5.04
Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

Model: ARIANEXT LITE 150 M LINK R32

Configure model	
Model name	ARIANEXT LITE 150 M LINK R32
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	3.75 kW	
Cooling capacity	11	
EER	2.93	4.70

EN 14825

	+7°C/+12°C
Pdesignc	11 kW
SEER	5.22
Pdc Tj = 35°C	11 kW
EER Tj = 35°C	2.93
Pdc Tj = 30°C	8.18 kW
EER Tj = 30°C	4.4
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	5.23 kW
EER Tj = 25°C	5.77
Cdc Tj = 25 °C	0.99
Pdc Tj = 20°C	4.5 kW
EER Tj = 20°C	7.53
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1951 kWh

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	8.01 kW	7.50 kW
η_s	258 %	181 %
Prated	8.01 kW	7.50 kW
SCOP	6.53	4.61
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.01 kW	7.50 kW
COP Tj = +2°C	4.27	2.77
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	5.33 kW	4.85 kW
COP Tj = +7°C	5.81	3.84
Cdh Tj = +7 °C	0.985	0.989
Pdh Tj = 12°C	4.72 kW	4.61 kW
COP Tj = 12°C	8.10	6.12

Cdh Tj = +12 °C	0.977	0.982
Pdh Tj = Tbiv	8.01 kW	7.50 kW
COP Tj = Tbiv	4.27	2.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.27	2.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.982
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1638 kWh	2172 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	18.17 kW	17.31 kW
η_s	157 %	122 %
Prated	18.17 kW	17.31 kW
SCOP	3.99	3.12
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.00 kW	10.48 kW
COP Tj = -7°C	3.57	2.91
Cdh Tj = -7 °C	0.996	0.996
Pdh Tj = +2°C	6.88 kW	6.45 kW
COP Tj = +2°C	5.36	4.22
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	4.43 kW	4.27 kW
COP Tj = +7°C	7.25	5.79
Cdh Tj = +7 °C	0.978	0.982
Pdh Tj = 12°C	4.71 kW	4.60 kW
COP Tj = 12°C	8.53	7.20
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	11.00 kW	10.48 kW

COP Tj = Tbiv	3.57	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.74 kW	8.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	17.22 kW	16.40 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	11230 kWh	13042 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	12.48 kW	11.59 kW
η_s	202 %	151 %
Prated	12.48 kW	11.59 kW
SCOP	5.12	3.85
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.04 kW	10.25 kW
COP Tj = -7°C	3.29	2.50
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	6.98 kW	6.50 kW
COP Tj = +2°C	4.92	3.67
Cdh Tj = +2 °C	0.990	0.992
Pdh Tj = +7°C	4.39 kW	3.96 kW
COP Tj = +7°C	6.76	5.04
Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

Model: ARIANEXT LITE 150 M-T LINK R32

Configure model	
Model name	ARIANEXT LITE 150 M-T LINK R32
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	3.75 kW	
Cooling capacity	11	
EER	2.93	4.70

EN 14825

	+7°C/+12°C
Pdesignc	11 kW
SEER	5.22
Pdc Tj = 35°C	11 kW
EER Tj = 35°C	2.93
Pdc Tj = 30°C	8.18 kW
EER Tj = 30°C	4.4
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	5.23 kW
EER Tj = 25°C	5.77
Cdc Tj = 25 °C	0.99
Pdc Tj = 20°C	4.5 kW
EER Tj = 20°C	7.53
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1951 kWh

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	8.01 kW	7.50 kW
η_s	258 %	181 %
Prated	8.01 kW	7.50 kW
SCOP	6.53	4.61
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.01 kW	7.50 kW
COP Tj = +2°C	4.27	2.77
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	5.33 kW	4.85 kW
COP Tj = +7°C	5.81	3.84
Cdh Tj = +7 °C	0.985	0.989
Pdh Tj = 12°C	4.72 kW	4.61 kW
COP Tj = 12°C	8.10	6.12

Cdh Tj = +12 °C	0.977	0.982
Pdh Tj = Tbiv	8.01 kW	7.50 kW
COP Tj = Tbiv	4.27	2.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.27	2.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.982
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1638 kWh	2172 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	18.17 kW	17.31 kW
η_s	157 %	122 %
Prated	18.17 kW	17.31 kW
SCOP	3.99	3.12
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.00 kW	10.48 kW
COP Tj = -7°C	3.57	2.91
Cdh Tj = -7 °C	0.996	0.996
Pdh Tj = +2°C	6.88 kW	6.45 kW
COP Tj = +2°C	5.36	4.22
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	4.43 kW	4.27 kW
COP Tj = +7°C	7.25	5.79
Cdh Tj = +7 °C	0.978	0.982
Pdh Tj = 12°C	4.71 kW	4.60 kW
COP Tj = 12°C	8.53	7.20
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	11.00 kW	10.48 kW

COP Tj = Tbiv	3.57	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.74 kW	8.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	17.22 kW	16.40 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	11230 kWh	13042 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	12.48 kW	11.59 kW
η_s	202 %	151 %
Prated	12.48 kW	11.59 kW
SCOP	5.12	3.85
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.04 kW	10.25 kW
COP Tj = -7°C	3.29	2.50
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	6.98 kW	6.50 kW
COP Tj = +2°C	4.92	3.67
Cdh Tj = +2 °C	0.990	0.992
Pdh Tj = +7°C	4.39 kW	3.96 kW
COP Tj = +7°C	6.76	5.04
Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

Model: AEROTOP MONO 12.2 M-RX

Configure model	
Model name	AEROTOP MONO 12.2 M-RX
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	2.87 kW	
Cooling capacity	9.05	
EER	3.15	2.93

EN 14825

	+7°C/+12°C
Pdesignc	9.05 kW
SEER	5.40
Pdc Tj = 35°C	9.05 kW
EER Tj = 35°C	3.15
Pdc Tj = 30°C	6.86 kW
EER Tj = 30°C	4.72
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	4.31 kW
EER Tj = 25°C	6.14
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	4.45 kW
EER Tj = 20°C	7.5
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1541 kWh

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	6.83 kW	6.46 kW
η_s	262 %	178 %
Prated	6.83 kW	6.46 kW
SCOP	6.62	4.51
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	6.83 kW	6.46 kW
COP Tj = +2°C	4.37	2.72
Cdh Tj = +2 °C	0.991	0.994
Pdh Tj = +7°C	4.48 kW	4.39 kW
COP Tj = +7°C	5.96	3.77
Cdh Tj = +7 °C	0.982	0.988
Pdh Tj = 12°C	4.72 kW	4.65 kW
COP Tj = 12°C	8.22	6.02

Cdh Tj = +12 °C	0.976	0.982
Pdh Tj = Tbiv	6.83 kW	6.46 kW
COP Tj = Tbiv	4.37	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.83 kW	6.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.37	2.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.994
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1378 kWh	1912 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	15.33 kW	14.18 kW
η_s	160 %	129 %
Prated	15.33 kW	14.18 kW
SCOP	4.07	3.30
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.28 kW	8.58 kW
COP Tj = -7°C	3.74	2.94
Cdh Tj = -7 °C	0.995	0.995
Pdh Tj = +2°C	5.68 kW	5.42 kW
COP Tj = +2°C	5.38	4.26
Cdh Tj = +2 °C	0.987	0.989
Pdh Tj = +7°C	4.20 kW	4.09 kW
COP Tj = +7°C	7.39	5.83
Cdh Tj = +7 °C	0.976	0.981
Pdh Tj = 12°C	4.70 kW	4.72 kW
COP Tj = 12°C	8.75	7.21
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	9.28 kW	8.58 kW

COP Tj = Tbiv	3.74	2.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.41 kW	6.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.26	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.995
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	14.53 kW	13.43 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	9289 kWh	10591 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	10.84 kW	9.42 kW
η_s	204 %	143 %
Prated	10.84 kW	9.42 kW
SCOP	5.16	3.65
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.59 kW	8.33 kW
COP Tj = -7°C	3.42	2.43
Cdh Tj = -7 °C	0.995	0.996
Pdh Tj = +2°C	5.74 kW	5.47 kW
COP Tj = +2°C	5.10	3.33
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	4.16 kW	3.98 kW
COP Tj = +7°C	6.88	5.04
Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

Model: AEROTOP MONO 12.2 M-R

Configure model	
Model name	AEROTOP MONO 12.2 M-R
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	2.87 kW	
Cooling capacity	9.05	
EER	3.15	2.93

EN 14825

	+7°C/+12°C
Pdesignc	9.05 kW
SEER	5.40
Pdc Tj = 35°C	9.05 kW
EER Tj = 35°C	3.15
Pdc Tj = 30°C	6.86 kW
EER Tj = 30°C	4.72
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	4.31 kW
EER Tj = 25°C	6.14
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	4.45 kW
EER Tj = 20°C	7.5
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1541 kWh

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	6.83 kW	6.46 kW
η_s	262 %	178 %
Prated	6.83 kW	6.46 kW
SCOP	6.62	4.51
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	6.83 kW	6.46 kW
COP Tj = +2°C	4.37	2.72
Cdh Tj = +2 °C	0.991	0.994
Pdh Tj = +7°C	4.48 kW	4.39 kW
COP Tj = +7°C	5.96	3.77
Cdh Tj = +7 °C	0.982	0.988
Pdh Tj = 12°C	4.72 kW	4.65 kW
COP Tj = 12°C	8.22	6.02

Cdh Tj = +12 °C	0.976	0.982
Pdh Tj = Tbiv	6.83 kW	6.46 kW
COP Tj = Tbiv	4.37	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.83 kW	6.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.37	2.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.994
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1378 kWh	1912 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	15.33 kW	14.18 kW
η_s	160 %	129 %
Prated	15.33 kW	14.18 kW
SCOP	4.07	3.30
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.28 kW	8.58 kW
COP Tj = -7°C	3.74	2.94
Cdh Tj = -7 °C	0.995	0.995
Pdh Tj = +2°C	5.68 kW	5.42 kW
COP Tj = +2°C	5.38	4.26
Cdh Tj = +2 °C	0.987	0.989
Pdh Tj = +7°C	4.20 kW	4.09 kW
COP Tj = +7°C	7.39	5.83
Cdh Tj = +7 °C	0.976	0.981
Pdh Tj = 12°C	4.70 kW	4.72 kW
COP Tj = 12°C	8.75	7.21
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	9.28 kW	8.58 kW

COP Tj = Tbiv	3.74	2.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.41 kW	6.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.26	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.995
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	14.53 kW	13.43 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	9289 kWh	10591 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	10.84 kW	9.42 kW
η_s	204 %	143 %
Prated	10.84 kW	9.42 kW
SCOP	5.16	3.65
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.59 kW	8.33 kW
COP Tj = -7°C	3.42	2.43
Cdh Tj = -7 °C	0.995	0.996
Pdh Tj = +2°C	5.74 kW	5.47 kW
COP Tj = +2°C	5.10	3.33
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	4.16 kW	3.98 kW
COP Tj = +7°C	6.88	5.04
Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

Model: AEROTOP MONO 15.2 M-RX

Configure model	
Model name	AEROTOP MONO 15.2 M-RX
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	3.75 kW	
Cooling capacity	11	
EER	2.93	4.70

EN 14825

	+7°C/+12°C
Pdesignc	11 kW
SEER	5.22
Pdc Tj = 35°C	11 kW
EER Tj = 35°C	2.93
Pdc Tj = 30°C	8.18 kW
EER Tj = 30°C	4.4
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	5.23 kW
EER Tj = 25°C	5.77
Cdc Tj = 25 °C	0.99
Pdc Tj = 20°C	4.5 kW
EER Tj = 20°C	7.53
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1951 kWh

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	8.01 kW	7.50 kW
η_s	258 %	181 %
Prated	8.01 kW	7.50 kW
SCOP	6.53	4.61
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.01 kW	7.50 kW
COP Tj = +2°C	4.27	2.77
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	5.33 kW	4.85 kW
COP Tj = +7°C	5.81	3.84
Cdh Tj = +7 °C	0.985	0.989
Pdh Tj = 12°C	4.72 kW	4.61 kW
COP Tj = 12°C	8.10	6.12

Cdh Tj = +12 °C	0.977	0.982
Pdh Tj = Tbiv	8.01 kW	7.50 kW
COP Tj = Tbiv	4.27	2.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.27	2.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.982
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1638 kWh	2172 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	18.17 kW	17.31 kW
η_s	157 %	122 %
Prated	18.17 kW	17.31 kW
SCOP	3.99	3.12
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.00 kW	10.48 kW
COP Tj = -7°C	3.57	2.91
Cdh Tj = -7 °C	0.996	0.996
Pdh Tj = +2°C	6.88 kW	6.45 kW
COP Tj = +2°C	5.36	4.22
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	4.43 kW	4.27 kW
COP Tj = +7°C	7.25	5.79
Cdh Tj = +7 °C	0.978	0.982
Pdh Tj = 12°C	4.71 kW	4.60 kW
COP Tj = 12°C	8.53	7.20
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	11.00 kW	10.48 kW

COP Tj = Tbiv	3.57	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.74 kW	8.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	17.22 kW	16.40 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	11230 kWh	13042 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	12.48 kW	11.59 kW
η_s	202 %	151 %
Prated	12.48 kW	11.59 kW
SCOP	5.12	3.85
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.04 kW	10.25 kW
COP Tj = -7°C	3.29	2.50
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	6.98 kW	6.50 kW
COP Tj = +2°C	4.92	3.67
Cdh Tj = +2 °C	0.990	0.992
Pdh Tj = +7°C	4.39 kW	3.96 kW
COP Tj = +7°C	6.76	5.04
Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

Model: AEROTOP MONO 15.2 M-R

Configure model	
Model name	AEROTOP MONO 15.2 M-R
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	3.75 kW	
Cooling capacity	11	
EER	2.93	4.70

EN 14825

	+7°C/+12°C
Pdesignc	11 kW
SEER	5.22
Pdc Tj = 35°C	11 kW
EER Tj = 35°C	2.93
Pdc Tj = 30°C	8.18 kW
EER Tj = 30°C	4.4
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	5.23 kW
EER Tj = 25°C	5.77
Cdc Tj = 25 °C	0.99
Pdc Tj = 20°C	4.5 kW
EER Tj = 20°C	7.53
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1951 kWh

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	8.01 kW	7.50 kW
η_s	258 %	181 %
Prated	8.01 kW	7.50 kW
SCOP	6.53	4.61
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.01 kW	7.50 kW
COP Tj = +2°C	4.27	2.77
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	5.33 kW	4.85 kW
COP Tj = +7°C	5.81	3.84
Cdh Tj = +7 °C	0.985	0.989
Pdh Tj = 12°C	4.72 kW	4.61 kW
COP Tj = 12°C	8.10	6.12

Cdh Tj = +12 °C	0.977	0.982
Pdh Tj = Tbiv	8.01 kW	7.50 kW
COP Tj = Tbiv	4.27	2.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.27	2.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.982
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1638 kWh	2172 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	18.17 kW	17.31 kW
η_s	157 %	122 %
Prated	18.17 kW	17.31 kW
SCOP	3.99	3.12
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.00 kW	10.48 kW
COP Tj = -7°C	3.57	2.91
Cdh Tj = -7 °C	0.996	0.996
Pdh Tj = +2°C	6.88 kW	6.45 kW
COP Tj = +2°C	5.36	4.22
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	4.43 kW	4.27 kW
COP Tj = +7°C	7.25	5.79
Cdh Tj = +7 °C	0.978	0.982
Pdh Tj = 12°C	4.71 kW	4.60 kW
COP Tj = 12°C	8.53	7.20
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	11.00 kW	10.48 kW

COP Tj = Tbiv	3.57	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.74 kW	8.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	17.22 kW	16.40 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	11230 kWh	13042 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	12.48 kW	11.59 kW
η_s	202 %	151 %
Prated	12.48 kW	11.59 kW
SCOP	5.12	3.85
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.04 kW	10.25 kW
COP Tj = -7°C	3.29	2.50
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	6.98 kW	6.50 kW
COP Tj = +2°C	4.92	3.67
Cdh Tj = +2 °C	0.990	0.992
Pdh Tj = +7°C	4.39 kW	3.96 kW
COP Tj = +7°C	6.76	5.04
Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

Model: AEROTOP MONO 12.2 M-RXL

Configure model	
Model name	AEROTOP MONO 12.2 M-RXL
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	2.87 kW	
Cooling capacity	9.05	
EER	3.15	2.93

EN 14825

	+7°C/+12°C
Pdesignc	9.05 kW
SEER	5.40
Pdc Tj = 35°C	9.05 kW
EER Tj = 35°C	3.15
Pdc Tj = 30°C	6.86 kW
EER Tj = 30°C	4.72
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	4.31 kW
EER Tj = 25°C	6.14
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	4.45 kW
EER Tj = 20°C	7.5
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1541 kWh

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	6.83 kW	6.46 kW
η_s	262 %	178 %
Prated	6.83 kW	6.46 kW
SCOP	6.62	4.51
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	6.83 kW	6.46 kW
COP Tj = +2°C	4.37	2.72
Cdh Tj = +2 °C	0.991	0.994
Pdh Tj = +7°C	4.48 kW	4.39 kW
COP Tj = +7°C	5.96	3.77
Cdh Tj = +7 °C	0.982	0.988
Pdh Tj = 12°C	4.72 kW	4.65 kW
COP Tj = 12°C	8.22	6.02

Cdh Tj = +12 °C	0.976	0.982
Pdh Tj = Tbiv	6.83 kW	6.46 kW
COP Tj = Tbiv	4.37	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.83 kW	6.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.37	2.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.994
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1378 kWh	1912 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	15.33 kW	14.18 kW
η_s	160 %	129 %
Prated	15.33 kW	14.18 kW
SCOP	4.07	3.30
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.28 kW	8.58 kW
COP Tj = -7°C	3.74	2.94
Cdh Tj = -7 °C	0.995	0.995
Pdh Tj = +2°C	5.68 kW	5.42 kW
COP Tj = +2°C	5.38	4.26
Cdh Tj = +2 °C	0.987	0.989
Pdh Tj = +7°C	4.20 kW	4.09 kW
COP Tj = +7°C	7.39	5.83
Cdh Tj = +7 °C	0.976	0.981
Pdh Tj = 12°C	4.70 kW	4.72 kW
COP Tj = 12°C	8.75	7.21
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	9.28 kW	8.58 kW

COP Tj = Tbiv	3.74	2.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.41 kW	6.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.26	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.995
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	14.53 kW	13.43 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	9289 kWh	10591 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	10.84 kW	9.42 kW
η_s	204 %	143 %
Prated	10.84 kW	9.42 kW
SCOP	5.16	3.65
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.59 kW	8.33 kW
COP Tj = -7°C	3.42	2.43
Cdh Tj = -7 °C	0.995	0.996
Pdh Tj = +2°C	5.74 kW	5.47 kW
COP Tj = +2°C	5.10	3.33
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	4.16 kW	3.98 kW
COP Tj = +7°C	6.88	5.04
Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

Model: AEROTOP MONO 12.2 M-RL

Configure model	
Model name	AEROTOP MONO 12.2 M-RL
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	2.87 kW	
Cooling capacity	9.05	
EER	3.15	2.93

EN 14825

	+7°C/+12°C
Pdesignc	9.05 kW
SEER	5.40
Pdc Tj = 35°C	9.05 kW
EER Tj = 35°C	3.15
Pdc Tj = 30°C	6.86 kW
EER Tj = 30°C	4.72
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	4.31 kW
EER Tj = 25°C	6.14
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	4.45 kW
EER Tj = 20°C	7.5
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1541 kWh

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	6.83 kW	6.46 kW
η_s	262 %	178 %
Prated	6.83 kW	6.46 kW
SCOP	6.62	4.51
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	6.83 kW	6.46 kW
COP Tj = +2°C	4.37	2.72
Cdh Tj = +2 °C	0.991	0.994
Pdh Tj = +7°C	4.48 kW	4.39 kW
COP Tj = +7°C	5.96	3.77
Cdh Tj = +7 °C	0.982	0.988
Pdh Tj = 12°C	4.72 kW	4.65 kW
COP Tj = 12°C	8.22	6.02

Cdh Tj = +12 °C	0.976	0.982
Pdh Tj = Tbiv	6.83 kW	6.46 kW
COP Tj = Tbiv	4.37	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.83 kW	6.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.37	2.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.994
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1378 kWh	1912 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	15.33 kW	14.18 kW
η_s	160 %	129 %
Prated	15.33 kW	14.18 kW
SCOP	4.07	3.30
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.28 kW	8.58 kW
COP Tj = -7°C	3.74	2.94
Cdh Tj = -7 °C	0.995	0.995
Pdh Tj = +2°C	5.68 kW	5.42 kW
COP Tj = +2°C	5.38	4.26
Cdh Tj = +2 °C	0.987	0.989
Pdh Tj = +7°C	4.20 kW	4.09 kW
COP Tj = +7°C	7.39	5.83
Cdh Tj = +7 °C	0.976	0.981
Pdh Tj = 12°C	4.70 kW	4.72 kW
COP Tj = 12°C	8.75	7.21
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	9.28 kW	8.58 kW

COP Tj = Tbiv	3.74	2.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.41 kW	6.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.26	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.995
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	14.53 kW	13.43 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	9289 kWh	10591 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	10.84 kW	9.42 kW
η_s	204 %	143 %
Prated	10.84 kW	9.42 kW
SCOP	5.16	3.65
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.59 kW	8.33 kW
COP Tj = -7°C	3.42	2.43
Cdh Tj = -7 °C	0.995	0.996
Pdh Tj = +2°C	5.74 kW	5.47 kW
COP Tj = +2°C	5.10	3.33
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	4.16 kW	3.98 kW
COP Tj = +7°C	6.88	5.04
Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

Model: AEROTOP MONO 15.2 M-RXL

Configure model	
Model name	AEROTOP MONO 15.2 M-RXL
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	3.75 kW	
Cooling capacity	11	
EER	2.93	4.70

EN 14825

	+7°C/+12°C
Pdesignc	11 kW
SEER	5.22
Pdc Tj = 35°C	11 kW
EER Tj = 35°C	2.93
Pdc Tj = 30°C	8.18 kW
EER Tj = 30°C	4.4
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	5.23 kW
EER Tj = 25°C	5.77
Cdc Tj = 25 °C	0.99
Pdc Tj = 20°C	4.5 kW
EER Tj = 20°C	7.53
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1951 kWh

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	8.01 kW	7.50 kW
η_s	258 %	181 %
Prated	8.01 kW	7.50 kW
SCOP	6.53	4.61
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.01 kW	7.50 kW
COP Tj = +2°C	4.27	2.77
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	5.33 kW	4.85 kW
COP Tj = +7°C	5.81	3.84
Cdh Tj = +7 °C	0.985	0.989
Pdh Tj = 12°C	4.72 kW	4.61 kW
COP Tj = 12°C	8.10	6.12

Cdh Tj = +12 °C	0.977	0.982
Pdh Tj = Tbiv	8.01 kW	7.50 kW
COP Tj = Tbiv	4.27	2.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.27	2.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.982
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1638 kWh	2172 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	18.17 kW	17.31 kW
η_s	157 %	122 %
Prated	18.17 kW	17.31 kW
SCOP	3.99	3.12
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.00 kW	10.48 kW
COP Tj = -7°C	3.57	2.91
Cdh Tj = -7 °C	0.996	0.996
Pdh Tj = +2°C	6.88 kW	6.45 kW
COP Tj = +2°C	5.36	4.22
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	4.43 kW	4.27 kW
COP Tj = +7°C	7.25	5.79
Cdh Tj = +7 °C	0.978	0.982
Pdh Tj = 12°C	4.71 kW	4.60 kW
COP Tj = 12°C	8.53	7.20
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	11.00 kW	10.48 kW

COP Tj = Tbiv	3.57	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.74 kW	8.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	17.22 kW	16.40 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	11230 kWh	13042 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	12.48 kW	11.59 kW
η_s	202 %	151 %
Prated	12.48 kW	11.59 kW
SCOP	5.12	3.85
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.04 kW	10.25 kW
COP Tj = -7°C	3.29	2.50
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	6.98 kW	6.50 kW
COP Tj = +2°C	4.92	3.67
Cdh Tj = +2 °C	0.990	0.992
Pdh Tj = +7°C	4.39 kW	3.96 kW
COP Tj = +7°C	6.76	5.04
Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

Model: AEROTOP MONO 15.2 M-RL

Configure model	
Model name	AEROTOP MONO 15.2 M-RL
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	3.75 kW	
Cooling capacity	11	
EER	2.93	4.70

EN 14825

	+7°C/+12°C
Pdesignc	11 kW
SEER	5.22
Pdc Tj = 35°C	11 kW
EER Tj = 35°C	2.93
Pdc Tj = 30°C	8.18 kW
EER Tj = 30°C	4.4
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	5.23 kW
EER Tj = 25°C	5.77
Cdc Tj = 25 °C	0.99
Pdc Tj = 20°C	4.5 kW
EER Tj = 20°C	7.53
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1951 kWh

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	8.01 kW	7.50 kW
η_s	258 %	181 %
Prated	8.01 kW	7.50 kW
SCOP	6.53	4.61
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.01 kW	7.50 kW
COP Tj = +2°C	4.27	2.77
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	5.33 kW	4.85 kW
COP Tj = +7°C	5.81	3.84
Cdh Tj = +7 °C	0.985	0.989
Pdh Tj = 12°C	4.72 kW	4.61 kW
COP Tj = 12°C	8.10	6.12

Cdh Tj = +12 °C	0.977	0.982
Pdh Tj = Tbiv	8.01 kW	7.50 kW
COP Tj = Tbiv	4.27	2.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.27	2.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.982
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1638 kWh	2172 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	18.17 kW	17.31 kW
η_s	157 %	122 %
Prated	18.17 kW	17.31 kW
SCOP	3.99	3.12
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.00 kW	10.48 kW
COP Tj = -7°C	3.57	2.91
Cdh Tj = -7 °C	0.996	0.996
Pdh Tj = +2°C	6.88 kW	6.45 kW
COP Tj = +2°C	5.36	4.22
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	4.43 kW	4.27 kW
COP Tj = +7°C	7.25	5.79
Cdh Tj = +7 °C	0.978	0.982
Pdh Tj = 12°C	4.71 kW	4.60 kW
COP Tj = 12°C	8.53	7.20
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	11.00 kW	10.48 kW

COP Tj = Tbiv	3.57	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.74 kW	8.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	17.22 kW	16.40 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	11230 kWh	13042 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	12.48 kW	11.59 kW
η_s	202 %	151 %
Prated	12.48 kW	11.59 kW
SCOP	5.12	3.85
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.04 kW	10.25 kW
COP Tj = -7°C	3.29	2.50
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	6.98 kW	6.50 kW
COP Tj = +2°C	4.92	3.67
Cdh Tj = +2 °C	0.990	0.992
Pdh Tj = +7°C	4.39 kW	3.96 kW
COP Tj = +7°C	6.76	5.04
Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

Model: ENERGION M PLUS 120T

Configure model	
Model name	ENERGION M PLUS 120T
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	2.87 kW	
Cooling capacity	9.05	
EER	3.15	2.93

EN 14825

	+7°C/+12°C
Pdesignc	9.05 kW
SEER	5.40
Pdc Tj = 35°C	9.05 kW
EER Tj = 35°C	3.15
Pdc Tj = 30°C	6.86 kW
EER Tj = 30°C	4.72
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	4.31 kW
EER Tj = 25°C	6.14
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	4.45 kW
EER Tj = 20°C	7.5
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1541 kWh

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	6.83 kW	6.46 kW
η_s	262 %	178 %
Prated	6.83 kW	6.46 kW
SCOP	6.62	4.51
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	6.83 kW	6.46 kW
COP Tj = +2°C	4.37	2.72
Cdh Tj = +2 °C	0.991	0.994
Pdh Tj = +7°C	4.48 kW	4.39 kW
COP Tj = +7°C	5.96	3.77
Cdh Tj = +7 °C	0.982	0.988
Pdh Tj = 12°C	4.72 kW	4.65 kW
COP Tj = 12°C	8.22	6.02

Cdh Tj = +12 °C	0.976	0.982
Pdh Tj = Tbiv	6.83 kW	6.46 kW
COP Tj = Tbiv	4.37	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.83 kW	6.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.37	2.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.994
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1378 kWh	1912 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	15.33 kW	14.18 kW
η_s	160 %	129 %
Prated	15.33 kW	14.18 kW
SCOP	4.07	3.30
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.28 kW	8.58 kW
COP Tj = -7°C	3.74	2.94
Cdh Tj = -7 °C	0.995	0.995
Pdh Tj = +2°C	5.68 kW	5.42 kW
COP Tj = +2°C	5.38	4.26
Cdh Tj = +2 °C	0.987	0.989
Pdh Tj = +7°C	4.20 kW	4.09 kW
COP Tj = +7°C	7.39	5.83
Cdh Tj = +7 °C	0.976	0.981
Pdh Tj = 12°C	4.70 kW	4.72 kW
COP Tj = 12°C	8.75	7.21
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	9.28 kW	8.58 kW

COP Tj = Tbiv	3.74	2.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.41 kW	6.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.26	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.995
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	14.53 kW	13.43 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	9289 kWh	10591 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	10.84 kW	9.42 kW
η_s	204 %	143 %
Prated	10.84 kW	9.42 kW
SCOP	5.16	3.65
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.59 kW	8.33 kW
COP Tj = -7°C	3.42	2.43
Cdh Tj = -7 °C	0.995	0.996
Pdh Tj = +2°C	5.74 kW	5.47 kW
COP Tj = +2°C	5.10	3.33
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	4.16 kW	3.98 kW
COP Tj = +7°C	6.88	5.04
Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

Model: ENERGION M PLUS 150T

Configure model	
Model name	ENERGION M PLUS 150T
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	3.75 kW	
Cooling capacity	11	
EER	2.93	4.70

EN 14825

	+7°C/+12°C
Pdesignc	11 kW
SEER	5.22
Pdc Tj = 35°C	11 kW
EER Tj = 35°C	2.93
Pdc Tj = 30°C	8.18 kW
EER Tj = 30°C	4.4
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	5.23 kW
EER Tj = 25°C	5.77
Cdc Tj = 25 °C	0.99
Pdc Tj = 20°C	4.5 kW
EER Tj = 20°C	7.53
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1951 kWh

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	8.01 kW	7.50 kW
η_s	258 %	181 %
Prated	8.01 kW	7.50 kW
SCOP	6.53	4.61
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.01 kW	7.50 kW
COP Tj = +2°C	4.27	2.77
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	5.33 kW	4.85 kW
COP Tj = +7°C	5.81	3.84
Cdh Tj = +7 °C	0.985	0.989
Pdh Tj = 12°C	4.72 kW	4.61 kW
COP Tj = 12°C	8.10	6.12

Cdh Tj = +12 °C	0.977	0.982
Pdh Tj = Tbiv	8.01 kW	7.50 kW
COP Tj = Tbiv	4.27	2.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.27	2.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.982
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1638 kWh	2172 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	18.17 kW	17.31 kW
η_s	157 %	122 %
Prated	18.17 kW	17.31 kW
SCOP	3.99	3.12
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.00 kW	10.48 kW
COP Tj = -7°C	3.57	2.91
Cdh Tj = -7 °C	0.996	0.996
Pdh Tj = +2°C	6.88 kW	6.45 kW
COP Tj = +2°C	5.36	4.22
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	4.43 kW	4.27 kW
COP Tj = +7°C	7.25	5.79
Cdh Tj = +7 °C	0.978	0.982
Pdh Tj = 12°C	4.71 kW	4.60 kW
COP Tj = 12°C	8.53	7.20
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	11.00 kW	10.48 kW

COP Tj = Tbiv	3.57	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.74 kW	8.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	17.22 kW	16.40 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	11230 kWh	13042 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	12.48 kW	11.59 kW
η_s	202 %	151 %
Prated	12.48 kW	11.59 kW
SCOP	5.12	3.85
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.04 kW	10.25 kW
COP Tj = -7°C	3.29	2.50
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	6.98 kW	6.50 kW
COP Tj = +2°C	4.92	3.67
Cdh Tj = +2 °C	0.990	0.992
Pdh Tj = +7°C	4.39 kW	3.96 kW
COP Tj = +7°C	6.76	5.04
Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

Model: ENERGION M LIGHT 120T

Configure model	
Model name	ENERGION M LIGHT 120T
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	2.87 kW	
Cooling capacity	9.05	
EER	3.15	2.93

EN 14825

	+7°C/+12°C
Pdesignc	9.05 kW
SEER	5.40
Pdc Tj = 35°C	9.05 kW
EER Tj = 35°C	3.15
Pdc Tj = 30°C	6.86 kW
EER Tj = 30°C	4.72
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	4.31 kW
EER Tj = 25°C	6.14
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	4.45 kW
EER Tj = 20°C	7.5
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1541 kWh

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	6.83 kW	6.46 kW
η_s	262 %	178 %
Prated	6.83 kW	6.46 kW
SCOP	6.62	4.51
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	6.83 kW	6.46 kW
COP Tj = +2°C	4.37	2.72
Cdh Tj = +2 °C	0.991	0.994
Pdh Tj = +7°C	4.48 kW	4.39 kW
COP Tj = +7°C	5.96	3.77
Cdh Tj = +7 °C	0.982	0.988
Pdh Tj = 12°C	4.72 kW	4.65 kW
COP Tj = 12°C	8.22	6.02

Cdh Tj = +12 °C	0.976	0.982
Pdh Tj = Tbiv	6.83 kW	6.46 kW
COP Tj = Tbiv	4.37	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.83 kW	6.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.37	2.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.994
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1378 kWh	1912 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	15.33 kW	14.18 kW
η_s	160 %	129 %
Prated	15.33 kW	14.18 kW
SCOP	4.07	3.30
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.28 kW	8.58 kW
COP Tj = -7°C	3.74	2.94
Cdh Tj = -7 °C	0.995	0.995
Pdh Tj = +2°C	5.68 kW	5.42 kW
COP Tj = +2°C	5.38	4.26
Cdh Tj = +2 °C	0.987	0.989
Pdh Tj = +7°C	4.20 kW	4.09 kW
COP Tj = +7°C	7.39	5.83
Cdh Tj = +7 °C	0.976	0.981
Pdh Tj = 12°C	4.70 kW	4.72 kW
COP Tj = 12°C	8.75	7.21
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	9.28 kW	8.58 kW

COP Tj = Tbiv	3.74	2.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.41 kW	6.75 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.26	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.995
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	14.53 kW	13.43 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	9289 kWh	10591 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	10.84 kW	9.42 kW
η_s	204 %	143 %
Prated	10.84 kW	9.42 kW
SCOP	5.16	3.65
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.59 kW	8.33 kW
COP Tj = -7°C	3.42	2.43
Cdh Tj = -7 °C	0.995	0.996
Pdh Tj = +2°C	5.74 kW	5.47 kW
COP Tj = +2°C	5.10	3.33
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	4.16 kW	3.98 kW
COP Tj = +7°C	6.88	5.04
Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

Model: ENERGION M LIGHT 150T

Configure model	
Model name	ENERGION M LIGHT 150T
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	3.75 kW	
Cooling capacity	11	
EER	2.93	4.70

EN 14825

	+7°C/+12°C
Pdesignc	11 kW
SEER	5.22
Pdc Tj = 35°C	11 kW
EER Tj = 35°C	2.93
Pdc Tj = 30°C	8.18 kW
EER Tj = 30°C	4.4
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	5.23 kW
EER Tj = 25°C	5.77
Cdc Tj = 25 °C	0.99
Pdc Tj = 20°C	4.5 kW
EER Tj = 20°C	7.53
Cdc Tj = 20 °C	0.98
Poff	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	1951 kWh

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	8.01 kW	7.50 kW
η_s	258 %	181 %
Prated	8.01 kW	7.50 kW
SCOP	6.53	4.61
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.01 kW	7.50 kW
COP Tj = +2°C	4.27	2.77
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	5.33 kW	4.85 kW
COP Tj = +7°C	5.81	3.84
Cdh Tj = +7 °C	0.985	0.989
Pdh Tj = 12°C	4.72 kW	4.61 kW
COP Tj = 12°C	8.10	6.12

Cdh Tj = +12 °C	0.977	0.982
Pdh Tj = Tbiv	8.01 kW	7.50 kW
COP Tj = Tbiv	4.27	2.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.27	2.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.982
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	1638 kWh	2172 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	Medium temperature
Pdesignh	18.17 kW	17.31 kW
η_s	157 %	122 %
Prated	18.17 kW	17.31 kW
SCOP	3.99	3.12
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.00 kW	10.48 kW
COP Tj = -7°C	3.57	2.91
Cdh Tj = -7 °C	0.996	0.996
Pdh Tj = +2°C	6.88 kW	6.45 kW
COP Tj = +2°C	5.36	4.22
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	4.43 kW	4.27 kW
COP Tj = +7°C	7.25	5.79
Cdh Tj = +7 °C	0.978	0.982
Pdh Tj = 12°C	4.71 kW	4.60 kW
COP Tj = 12°C	8.53	7.20
Cdh Tj = +12 °C	0.975	0.979
Pdh Tj = Tbiv	11.00 kW	10.48 kW

COP Tj = Tbiv	3.57	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.74 kW	8.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	17.22 kW	16.40 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	11230 kWh	13042 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	12.48 kW	11.59 kW
η_s	202 %	151 %
Prated	12.48 kW	11.59 kW
SCOP	5.12	3.85
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.04 kW	10.25 kW
COP Tj = -7°C	3.29	2.50
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	6.98 kW	6.50 kW
COP Tj = +2°C	4.92	3.67
Cdh Tj = +2 °C	0.990	0.992
Pdh Tj = +7°C	4.39 kW	3.96 kW
COP Tj = +7°C	6.76	5.04
Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh