Subtype NIMBUS/ARIANEXT/AEROTOP/ENERGION 80 M - Plus/LB

Certificate Holder	Ariston Thermo Group
Address	Viale Aristide Merloni 45
ZIP	I-60044
City	Fabriano (AN)
Country	IT
Certification Body	ICIM S.p.A.
Subtype title	NIMBUS/ARIANEXT/AEROTOP/ENERGION 80 M - Plus/LB
Registration number	ICIM-PDC-000117
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.4 kg
Certification Date	05.07.2022
Testing basis	Heat Pump KEYMARK rev9

Model NIMBUS PLUS 80 M NET R32	
Model name	NIMBUS PLUS 80 M NET R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

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

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh
Pdh Tj = -15°C (if TOL		
COP Tj = -15°C (if TOL		
Cdh Tj = -15 °C		

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW

COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW
COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model NIMBUS PLUS 80 M-T NET R32	
Model name	NIMBUS PLUS 80 M-T NET R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model NIMBUS POCKET 80 M NET R32

Model name	NIMBUS POCKET 80 M NET R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

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

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model NIMBUS POCKET 80 M-T NET R32	
Model name	NIMBUS POCKET 80 M-T NET R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model ARIANEXT PLUS 80 M LINK R32	
Model name	ARIANEXT PLUS 80 M LINK R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

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

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model ARIANEXT PLUS 80 M-T LINK R32	
Model name	ARIANEXT PLUS 80 M-T LINK R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model ARIANEXT LITE 80 M LINK R32	
Model name	ARIANEXT LITE 80 M LINK R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

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

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model ARIANEXT LITE 80 M-T LINK R32	
Model name	ARIANEXT LITE 80 M-T LINK R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model AEROTOP MONO 08.2 M-RX	
Model name	AEROTOP MONO 08.2 M-RX
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

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

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model AEROTOP MONO 08.2 M-R	
Model name	AEROTOP MONO 08.2 M-R
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model AEROTOP MONO 08.2 M-RXL	
Model name	AEROTOP MONO 08.2 M-RXL
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

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

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model AEROTOP MONO 08.2 M-RL	
Model name	AEROTOP MONO 08.2 M-RL
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model ENERGION M PLUS 80	
Model name	ENERGION M PLUS 80
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

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

Outdoor Air/Water

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model ENERGION M PLUS 80T	
Model name	ENERGION M PLUS 80T
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model ENERGION M LIGHT 80	
Model name	ENERGION M LIGHT 80
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

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

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model ENERGION M LIGHT 80T	
Model name	ENERGION M LIGHT 80T
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model NIMBUS PLUS 80 M NET R32	
Model name	NIMBUS PLUS 80 M NET R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

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

Outdoor Air/Water

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model NIMBUS PLUS 80 M-T NET R32	
Model name	NIMBUS PLUS 80 M-T NET R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model ARIANEXT PLUS 80 M LINK R32	
Model name	ARIANEXT PLUS 80 M LINK R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

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

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model ARIANEXT PLUS 80 M-T LINK R32	
Model name	ARIANEXT PLUS 80 M-T LINK R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model AEROTOP MONO 08.2 M-RX	
Model name	AEROTOP MONO 08.2 M-RX
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

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

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model AEROTOP MONO 08.2 M-R	
Model name	AEROTOP MONO 08.2 M-R
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model ENERGION M PLUS 80	
Model name	ENERGION M PLUS 80
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

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

Outdoor Air/Water

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model ENERGION M PLUS 80T	
Model name	ENERGION M PLUS 80T
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model NIMBUS POCKET 80 M NET R32	
Model name	NIMBUS POCKET 80 M NET R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

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

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model NIMBUS POCKET 80 M-T NET R32	
Model name	NIMBUS POCKET 80 M-T NET R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model ARIANEXT LITE 80 M LINK R32	
Model name	ARIANEXT LITE 80 M LINK R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

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

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model ARIANEXT LITE 80 M-T LINK R32	
Model name	ARIANEXT LITE 80 M-T LINK R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model AEROTOP MONO 08.2 M-RXL	
Model name	AEROTOP MONO 08.2 M-RXL
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

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

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model AEROTOP MONO 08.2 M-RL	
Model name	AEROTOP MONO 08.2 M-RL
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model ENERGION M LIGHT 80	
Model name	ENERGION M LIGHT 80
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

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

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model ENERGION M LIGHT 80T	
Model name	ENERGION M LIGHT 80T
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model NIMBUS M HYBRID 80 R32 NET	
Model name	NIMBUS M HYBRID 80 R32 NET
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

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

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model NIMBUS M HYBRID UNIVERSAL 80 R32 NET	
Model name	NIMBUS M HYBRID UNIVERSAL 80 R32 NET
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

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

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model NIMBUS M HYBRID 80 T R32 NET	
Model name	NIMBUS M HYBRID 80 T R32 NET
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	

Model NIMBUS M HYBRID UNIVERSAL 80 T R32 NET

Model name	NIMBUS M HYBRID UNIVERSAL 80 T R32 NET
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
Pdesignh	8.37 kW	7.62 kW
ηs	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57

Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.40 kW	6.74 kW
COP Tj = -7°C	3.10	2.29
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.54 kW	4.22 kW
COP Tj = +2°C	4.80	3.51
Cdh Tj = +2 °C	0.985	0.988
Pdh Tj = +7°C	2.94 kW	2.74 kW
COP Tj = +7°C	6.61	4.36
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.16 kW	3.28 kW
COP Tj = 12°C	8.15	6.50
Cdh Tj = +12 °C	0.964	0.972
Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3491 kWh	4409 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
ηs	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW

COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	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	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
ηs	247 %	152 %
Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW

COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
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	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	
PSB	14 W	
PCK	0 W	
Annual energy consumption Qce	1381 kWh	