

Page 1 of 145

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Login

Summary of	NIMBUS/ARIANEXT/AEROTOP/ENERGION 35/50 M - Plus/LB	Reg. No.	ICIM-PDC-000111		
Certificate Holder	Certificate Holder				
Name	Ariston Thermo Group				
Address	Viale Aristide Merloni 45	Zip	I-60044		
City	Fabriano (AN)	briano (AN) Country Italy			
Certification Body	ICIM S.p.A.				
Subtype title	NIMBUS/ARIANEXT/AEROTOP/ENERGION 35/50 M - Plus/LB				
Heat Pump Type	Outdoor Air/Water				
Refrigerant	R32				
Mass of Refrigerant	1 kg				
Certification Date	05.07.2022				
Testing basis	Heat Pump KEYMARK rev9				



Model: NIMBUS PLUS 35 M NET R32

Configure model		
Model name NIMBUS PLUS 35 M NET R32		
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

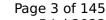
General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	3.50 kW	2.95 kW
El input	0.69 kW	1.09 kW
СОР	5.10	2.70

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

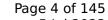
Cooling





EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	1.03 kW	kW
Cooling capacity	3.5	
EER		

EN :	14825
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	+7°C/+12°C	+18°C/+23°C
Pdesignc	3.5 kW	kW
SEER	4.87	
Pdc Tj = 35°C	3.5 kW	kW
EER Tj = 35°C	3	
Pdc Tj = 30°C	2.58 kW	kW
EER Tj = 30°C	4.33	
Cdc Tj = 30 °C	0.98	
Pdc Tj = 25°C	1.72 kW	kW
EER Tj = 25°C	5.86	
Cdc Tj = 25 °C	0.95	
Pdc Tj = 20°C	1.79 kW	kW
EER Tj = 20°C	7.24	
Cdc Tj = 20 °C	0.94	
Poff	14 W	W
РТО	14 W	w
PSB	14 W	w
PCK	o w	w
Annual energy consumption Qce	628 kWh	kWh

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	Medium temperature
Pdesignh	2.84 kW	2.35 kW
η_{S}	239 %	137 %
Prated	2.84 kW	2.35 kW
SCOP	6.06	3.49
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	2.84 kW	2.35 kW
$COP Tj = +2^{\circ}C$	4.00	2.19
Cdh Tj = +2 °C	0.982	0.988
Pdh Tj = +7°C	1.88 kW	1.60 kW
$COP Tj = +7^{\circ}C$	5.57	2.80
Cdh Tj = +7 °C	0.961	0.977
Pdh Tj = 12°C	1.91 kW	1.81 kW
COP Tj = 12°C	7.94	5.10
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Cdh Tj = +12 °C0.946 0.963 2.84 kW 2.35 kW Pdh Tj = TbivCOP Tj = Tbiv4.02 2.19 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 3.03 kW 2.46 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 2.25 1.52 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 0.982 0.988 WTOL 60 °C 60 °C Poff 13 W 13 W PTO 13 W 13 W **PSB** 13 W 13 W **PCK** 13 W 13 W Supplementary Heater: Type of energy input Electricity Electricity

Colder Climate

Backup Heater

Supplementary Heater: PSUP

Annual energy consumption Qhe

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

0.00 kW

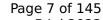
4.00 kW

626 kWh

0.00 kW

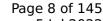
4.00 kW

899 kWh





	Low temperature	Medium temperature
Pdesignh	7.75 kW	7.43 kW
η_{s}	151 %	120 %
Prated	7.75 kW	7.43 kW
SCOP	3.85	3.07
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.69 kW	4.50 kW
COP Tj = -7°C	3.54	2.76
Cdh Tj = -7 °C	0.990	0.992
Pdh Tj = +2°C	2.95 kW	2.94 kW
COP Tj = +2°C	5.16	3.99
Cdh Tj = +2 °C	0.977	0.982
Pdh Tj = +7°C	1.89 kW	1.92 kW
COP Tj = +7°C	7.19	5.35
Cdh Tj = +7 °C	0.950	0.964
Pdh Tj = 12°C	1.92 kW	1.93 kW
COP Tj = 12°C	8.55	6.96
Cdh Tj = +12 °C	0.942	0.953
Pdh Tj = Tbiv	4.69 kW	4.50 kW





	<u> </u>	•
COP Tj = Tbiv	3.54	2.76
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.992
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.34 kW	7.04 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	4964 kWh	5968 kWh
Pdh Tj = -15°C (if TOL<-20°C)		
COP Tj = -15°C (if TOL<-20°C)		
Cdh Tj = -15 °C		

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)



EN 14825

	Low temperature	Medium temperature
Pdesignh	5.20 kW	4.63 kW
η_{s}	192 %	134 %
Prated	5.20 kW	4.63 kW
SCOP	4.89	3.43
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.60 kW	4.10 kW
COP Tj = -7°C	3.21	2.28
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	2.88 kW	2.63 kW
$COP Tj = +2^{\circ}C$	4.66	3.35
Cdh Tj = +2 °C	0.979	0.983
Pdh Tj = +7°C	1.85 kW	1.76 kW
$COP Tj = +7^{\circ}C$	6.56	4.22
Cdh Tj = +7 °C	0.954	0.969
Pdh Tj = 12°C	1.92 kW	1.88 kW
COP Tj = 12°C	8.49	6.30
Cdh Tj = +12 °C	0.942	0.956
Pdh Tj = Tbiv	4.60 kW	4.10 kW



$$\operatorname{\textit{Page}}\ 10$$ of 145 This information was generated by the HP KEYMARK database on 5 Jul 2022

COP Tj = Tbiv	3.21	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.993
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.17 kW	2.17 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	2198 kWh	2790 kWh

Model: NIMBUS PLUS 50 M NET R32

Configure model		
Model name	NIMBUS PLUS 50 M NET R32	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

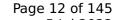
General Data		
Power supply 1x230V 50Hz		

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.00 kW	3.80 kW
El input	1.00 kW	1.36 kW
СОР	5.00	2.80

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

Cooling





EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	1.75 kW	
Cooling capacity	5	
EER	2.85	4.56





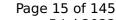
	+7°C/+12°C
Pdesignc	5 kW
SEER	4.85
Pdc Tj = 35°C	5 kW
EER Tj = 35°C	2.85
Pdc Tj = 30°C	3.77 kW
EER Tj = 30°C	4.25
Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	2.32 kW
EER Tj = 25°C	5.38
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	1.87 kW
EER Tj = 20°C	7.85
Cdc Tj = 20 °C	0.94
Poff	14 W
РТО	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	925 kWh

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	Medium temperature
Pdesignh	3.44 kW	2.97 kW
η_{s}	245 %	151 %
Prated	3.44 kW	2.97 kW
SCOP	6.20	3.84
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	3.44 kW	2.97 kW
COP Tj = +2°C	3.88	2.33
Cdh Tj = +2 °C	0.985	0.989
Pdh Tj = $+7^{\circ}$ C	2.22 kW	2.02 kW
COP Tj = +7°C	5.66	3.16
Cdh Tj = +7 °C	0.965	0.979
Pdh Tj = 12°C	1.86 kW	1.76 kW
COP Tj = 12°C	8.01	5.40

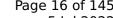




Cdh Tj = +12 °C	0.941	0.958
Pdh Tj = Tbiv	3.44 kW	2.97 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.985	0.989
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	742 kWh	1033 kWh

Colder Climate

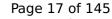
EN 12102-1 Low temperature Medium temperature Sound power level indoor 35 dB(A) 35 dB(A) Sound power level outdoor 55 dB(A) 55 dB(A)





$$\operatorname{\textit{Page}}\ 16$$ of 145 This information was generated by the HP KEYMARK database on 5 Jul 2022

	Low temperature	Medium temperature
Pdesignh	8.26 kW	8.26 kW
η_{s}	150 %	118 %
Prated	8.26 kW	8.26 kW
SCOP	3.85	3.84
ГЬіν	-7 °C	-7 °C
ГОL	-20 °C	-20 °C
Pdh Tj = -7°C	5.00 kW	5.00 kW
COP Tj = -7°C	3.50	2.71
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	3.00 kW	3.11 kW
COP Tj = +2°C	5.15	3.81
Cdh Tj = +2 °C	0.978	0.983
Pdh Tj = +7°C	1.99 kW	2.28 kW
COP Tj = +7°C	7.20	5.29
Cdh Tj = +7 °C	0.953	0.968
Pdh Tj = 12°C	1.87 kW	1.87 kW
COP Tj = 12°C	8.70	6.88
Cdh Tj = +12 °C	0.949	0.950
Pdh Tj = Tbiv	5.00 kW	5.00 kW





COP Tj = Tbiv	3.50	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.993
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.83 kW	7.83 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	5317 kWh	6739 kWh
Pdh Tj = -15°C (if TOL<-20°C)		
COP Tj = -15°C (if TOL<-20°C)		
Cdh Tj = -15 °C		

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)



$$\operatorname{\textit{Page}}\ 18$$ of 145 This information was generated by the HP KEYMARK database on 5 Jul 2022

EN 14825

	Low temperature	Medium temperature
Pdesignh	5.65 kW	5.65 kW
η_{s}	183 %	136 %
Prated	5.65 kW	5.65 kW
SCOP	4.66	3.48
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	5.00 kW	5.00 kW
COP Tj = -7°C	3.10	2.28
Cdh Tj = -7 °C	0.992	0.994
Pdh Tj = +2°C	3.11 kW	3.11 kW
COP Tj = +2°C	4.32	3.30
Cdh Tj = +2 °C	0.981	0.986
Pdh Tj = +7°C	1.96 kW	2.19 kW
COP Tj = +7°C	6.48	4.58
Cdh Tj = +7 °C	0.955	0.972
Pdh Tj = 12°C	1.86 kW	1.84 kW
COP Tj = 12°C	8.41	6.33
Cdh Tj = +12 °C	0.939	0.953
Pdh Tj = Tbiv	5.00 kW	5.00 kW



Page 19 of 145

This information was generated by the HP KEYMARK database on 5 Jul 2022

COP Tj = Tbiv	3.10	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.994
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.96 kW	2.47 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	2505 kWh	3360 kWh

Model: NIMBUS POCKET 35 M NET R32

Configure model		
Model name	NIMBUS POCKET 35 M NET R32	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	3.50 kW	2.95 kW	
El input	0.69 kW	1.09 kW	
СОР	5.10	2.70	

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

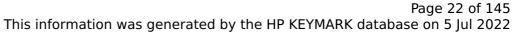
Cooling





EN 14511-2	
	+7°C/+12°C
El input	1.03 kW
Cooling capacity	3.5

EN 14825	





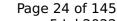
This information was generated by the fill	+7°C/+12°C
Pdesignc	3.5 kW
SEER	4.87
Pdc Tj = 35°C	3.5 kW
EER Tj = 35°C	3
Pdc Tj = 30°C	2.58 kW
EER Tj = 30°C	4.33
Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	1.72 kW
EER Tj = 25°C	5.86
Cdc Tj = 25 °C	0.95
Pdc Tj = 20°C	1.79 kW
EER Tj = 20°C	7.24
Cdc Tj = 20 °C	0.94
Poff	14 W
РТО	14 W
PSB	14 W
PCK	o w
Annual energy consumption Qce	628 kWh

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	Medium temperature
Pdesignh	2.84 kW	2.35 kW
η_{s}	239 %	137 %
Prated	2.84 kW	2.35 kW
SCOP	6.06	3.49
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	2.84 kW	2.35 kW
COP Tj = +2°C	4.00	2.19
Cdh Tj = +2 °C	0.982	0.988
Pdh Tj = +7°C	1.88 kW	1.60 kW
COP Tj = +7°C	5.57	2.80
Cdh Tj = +7 °C	0.961	0.977
Pdh Tj = 12°C	1.91 kW	1.81 kW
COP Tj = 12°C	7.94	5.10

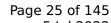




Cdh Tj = +12 °C	0.946	0.963
Pdh Tj = Tbiv	2.84 kW	2.35 kW
COP Tj = Tbiv	4.02	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.982	0.988
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	626 kWh	899 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)





	Low temperature	Medium temperature
Pdesignh	7.75 kW	7.43 kW
η_{s}	151 %	120 %
Prated	7.75 kW	7.43 kW
SCOP	3.85	3.07
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.69 kW	4.50 kW
COP Tj = -7°C	3.54	2.76
Cdh Tj = -7 °C	0.990	0.992
Pdh Tj = +2°C	2.95 kW	2.94 kW
COP Tj = +2°C	5.16	3.99
Cdh Tj = +2 °C	0.977	0.982
Pdh Tj = +7°C	1.89 kW	1.92 kW
COP Tj = +7°C	7.19	5.35
Cdh Tj = +7 °C	0.950	0.964
Pdh Tj = 12°C	1.92 kW	1.93 kW
COP Tj = 12°C	8.55	6.96
Cdh Tj = +12 °C	0.942	0.953
Pdh Tj = Tbiv	4.69 kW	4.50 kW





COP Tj = Tbiv	3.54	2.76
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.992
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.34 kW	7.04 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	4964 kWh	5968 kWh

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	15 dB(A)	15 dB(A)	
Sound power level outdoor	53 dB(A)	53 dB(A)	





	Low temperature	Medium temperature
Pdesignh	5.20 kW	4.63 kW
η_{s}	192 %	134 %
Prated	5.20 kW	4.63 kW
SCOP	4.89	3.43
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.60 kW	4.10 kW
COP Tj = -7°C	3.21	2.28
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	2.88 kW	2.63 kW
COP Tj = +2°C	4.66	3.35
Cdh Tj = +2 °C	0.979	0.983
Pdh Tj = +7°C	1.85 kW	1.76 kW
COP Tj = +7°C	6.56	4.22
Cdh Tj = +7 °C	0.954	0.969
Pdh Tj = 12°C	1.92 kW	1.88 kW
COP Tj = 12°C	8.49	6.30
Cdh Tj = +12 °C	0.942	0.956
Pdh Tj = Tbiv	4.60 kW	4.10 kW
COP Tj = Tbiv	3.21	2.28



Page 28 of 145 This information was generated by the HP KEYMARK database on 5 Jul 2022

	<u> </u>	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.993
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.17 kW	2.17 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	2198 kWh	2790 kWh

Model: NIMBUS POCKET 50 M NET R32

Configure model		
Model name	NIMBUS POCKET 50 M NET R32	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

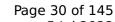
General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	5.00 kW	3.80 kW	
El input	1.00 kW	1.36 kW	
СОР	5.00	2.80	

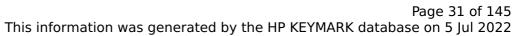
EN 14511-4	
Shutting off the heat transfer medium flow	naccod
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling





EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	1.75 kW	
Cooling capacity	5	
EER	2.85	4.56





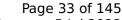
	+7°C/+12°C
Pdesignc	5 kW
SEER	4.85
Pdc Tj = 35°C	5 kW
EER Tj = 35°C	2.85
Pdc Tj = 30°C	3.77 kW
EER Tj = 30°C	4.25
Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	2.32 kW
EER Tj = 25°C	5.38
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	1.87 kW
EER Tj = 20°C	7.85
Cdc Tj = 20 °C	0.94
Poff	14 W
РТО	14 W
PSB	14 W
PCK	o w
Annual energy consumption Qce	925 kWh

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825			
	Low temperature	Medium temperature	
Pdesignh	3.44 kW	2.97 kW	
η_{s}	245 %	151 %	
Prated	3.44 kW	2.97 kW	
SCOP	6.20	3.84	
Tbiv	2 °C	2 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = +2°C	3.44 kW	2.97 kW	
COP Tj = +2°C	3.88	2.33	
Cdh Tj = +2 °C	0.985	0.989	
Pdh Tj = +7°C	2.22 kW	2.02 kW	
COP Tj = +7°C	5.66	3.16	
Cdh Tj = +7 °C	0.965	0.979	
Pdh Tj = 12°C	1.86 kW	1.76 kW	
COP Tj = 12°C	8.01	5.40	

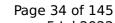




Cdh Tj = +12 °C	0.941	0.958
Pdh Tj = Tbiv	3.44 kW	2.97 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.985	0.989
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	742 kWh	1033 kWh

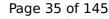
Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	15 dB(A)	15 dB(A)	
Sound power level outdoor	55 dB(A)	55 dB(A)	





	Low temperature	Medium temperature
Pdesignh	8.26 kW	8.26 kW
η_{s}	150 %	118 %
Prated	8.26 kW	8.26 kW
SCOP	3.85	3.84
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	5.00 kW	5.00 kW
COP Tj = -7°C	3.50	2.71
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	3.00 kW	3.11 kW
COP Tj = +2°C	5.15	3.81
Cdh Tj = +2 °C	0.978	0.983
Pdh Tj = +7°C	1.99 kW	2.28 kW
COP Tj = +7°C	7.20	5.29
Cdh Tj = +7 °C	0.953	0.968
Pdh Tj = 12°C	1.87 kW	1.87 kW
COP Tj = 12°C	8.70	6.88
Cdh Tj = +12 °C	0.949	0.950
Pdh Tj = Tbiv	5.00 kW	5.00 kW





COP Tj = Tbiv	3.50	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.993
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.83 kW	7.83 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	5317 kWh	6739 kWh

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	15 dB(A)	15 dB(A)	
Sound power level outdoor	55 dB(A)	55 dB(A)	





	Low temperature	Medium temperature
Pdesignh	5.65 kW	5.65 kW
η_{s}	183 %	136 %
Prated	5.65 kW	5.65 kW
SCOP	4.66	3.48
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	5.00 kW	5.00 kW
COP Tj = -7°C	3.10	2.28
Cdh Tj = -7 °C	0.992	0.994
Pdh Tj = +2°C	3.11 kW	3.11 kW
COP Tj = +2°C	4.32	3.30
Cdh Tj = +2 °C	0.981	0.986
Pdh Tj = +7°C	1.96 kW	2.19 kW
COP Tj = +7°C	6.48	4.58
Cdh Tj = +7 °C	0.955	0.972
Pdh Tj = 12°C	1.86 kW	1.84 kW
COP Tj = 12°C	8.41	6.33
Cdh Tj = +12 °C	0.939	0.953
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.10	2.28



$$\operatorname{\textit{Page}}\xspace$ 37 of 145 This information was generated by the HP KEYMARK database on 5 Jul 2022

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.994
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.96 kW	2.47 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	2505 kWh	3360 kWh

Model: ARIANEXT PLUS 35 M LINK R32

Configure model		
Model name ARIANEXT PLUS 35 M LINK R32		
Application	Heating (medium temp)	
Units Indoor + Outdoor		
Climate Zone Colder Climate + Warmer Climate		
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

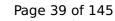
General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	3.50 kW	2.95 kW	
El input	0.69 kW	1.09 kW	
СОР	5.10	2.70	

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

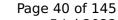
Cooling





EN 14511-2		
+7°C/+12°C		
El input	1.03 kW	
Cooling capacity	3.5	

EN 14825





This information was generated by the HP KEYMARK database on 5 Jul 2022 +7°C/+12°C 3.5 kW **Pdesignc SEER** 4.87 $Pdc Tj = 35^{\circ}C$ 3.5 kW EER Tj = 35°C 3 $Pdc Tj = 30^{\circ}C$ 2.58 kW EER Tj = 30°C 4.33 Cdc Tj = 30 °C0.98 $Pdc Tj = 25^{\circ}C$ 1.72 kW 5.86 EER Tj = 25°C 0.95 Cdc Tj = 25 °C $Pdc Tj = 20^{\circ}C$ 1.79 kW 7.24 EER Tj = 20°C Cdc Tj = $20 \, ^{\circ}$ C 0.94 Poff 14 W PTO 14 W **PSB** 14 W **PCK** 0 W

Warmer Climate

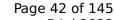
Annual energy consumption Qce

628 kWh



EN 12102-1 Low temperature Medium temperature Sound power level indoor 35 dB(A) Sound power level outdoor 53 dB(A) 53 dB(A) 53 dB(A)

EN 14825		
	Low temperature	Medium temperature
Pdesignh	2.84 kW	2.35 kW
η_{s}	239 %	137 %
Prated	2.84 kW	2.35 kW
SCOP	6.06	3.49
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	2.84 kW	2.35 kW
COP Tj = +2°C	4.00	2.19
Cdh Tj = +2 °C	0.982	0.988
Pdh Tj = +7°C	1.88 kW	1.60 kW
COP Tj = +7°C	5.57	2.80
Cdh Tj = +7 °C	0.961	0.977
Pdh Tj = 12°C	1.91 kW	1.81 kW
COP Tj = 12°C	7.94	5.10

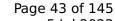




Cdh Tj = +12 °C	0.946	0.963
Pdh Tj = Tbiv	2.84 kW	2.35 kW
COP Tj = Tbiv	4.02	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.982	0.988
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	626 kWh	899 kWh

Colder Climate

EN 12102-1 Low temperature Medium temperature Sound power level indoor 35 dB(A) 35 dB(A) Sound power level outdoor 53 dB(A) 53 dB(A)





EN 14825

	Low temperature	Medium temperature
Pdesignh	7.75 kW	7.43 kW
η_{s}	151 %	120 %
Prated	7.75 kW	7.43 kW
SCOP	3.85	3.07
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.69 kW	4.50 kW
COP Tj = -7°C	3.54	2.76
Cdh Tj = -7 °C	0.990	0.992
Pdh Tj = +2°C	2.95 kW	2.94 kW
COP Tj = +2°C	5.16	3.99
Cdh Tj = +2 °C	0.977	0.982
Pdh Tj = +7°C	1.89 kW	1.92 kW
COP Tj = +7°C	7.19	5.35
Cdh Tj = +7 °C	0.950	0.964
Pdh Tj = 12°C	1.92 kW	1.93 kW
COP Tj = 12°C	8.55	6.96
Cdh Tj = +12 °C	0.942	0.953
Pdh Tj = Tbiv	4.69 kW	4.50 kW





COP Tj = Tbiv	3.54	2.76
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.992
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.34 kW	7.04 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	4964 kWh	5968 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)





	Low temperature	Medium temperature
Pdesignh	5.20 kW	4.63 kW
η_{s}	192 %	134 %
Prated	5.20 kW	4.63 kW
SCOP	4.89	3.43
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.60 kW	4.10 kW
COP Tj = -7°C	3.21	2.28
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	2.88 kW	2.63 kW
COP Tj = +2°C	4.66	3.35
Cdh Tj = +2 °C	0.979	0.983
Pdh Tj = +7°C	1.85 kW	1.76 kW
COP Tj = +7°C	6.56	4.22
Cdh Tj = +7 °C	0.954	0.969
Pdh Tj = 12°C	1.92 kW	1.88 kW
COP Tj = 12°C	8.49	6.30
Cdh Tj = +12 °C	0.942	0.956
Pdh Tj = Tbiv	4.60 kW	4.10 kW
COP Tj = Tbiv	3.21	2.28



Page 46 of 145

This information was generated by the HP KEYMARK database on 5 Jul 2022

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.993
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.17 kW	2.17 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	2198 kWh	2790 kWh

Model: ARIANEXT PLUS 50 M LINK R32

Configure model		
Model name ARIANEXT PLUS 50 M LINK R32		
Application	Heating (medium temp)	
Units Indoor + Outdoor		
Climate Zone Colder Climate + Warmer Climate		
Reversibility Yes		
Cooling mode application (optional)	+7°C/12°C	

General Data		
Power supply 1x230V 50Hz		

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	5.00 kW	3.80 kW	
El input	1.00 kW	1.36 kW	
СОР	5.00	2.80	

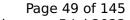
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling





EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	1.75 kW	
Cooling capacity	5	
EER	2.85	4.56





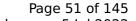
	+7°C/+12°C
Pdesignc	5 kW
SEER	4.85
Pdc Tj = 35°C	5 kW
EER Tj = 35°C	2.85
Pdc Tj = 30°C	3.77 kW
EER Tj = 30°C	4.25
Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	2.32 kW
EER Tj = 25°C	5.38
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	1.87 kW
EER Tj = 20°C	7.85
Cdc Tj = 20 °C	0.94
Poff	14 W
РТО	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	925 kWh

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	Medium temperature
Pdesignh	3.44 kW	2.97 kW
η_{s}	245 %	151 %
Prated	3.44 kW	2.97 kW
SCOP	6.20	3.84
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	3.44 kW	2.97 kW
COP Tj = +2°C	3.88	2.33
Cdh Tj = +2 °C	0.985	0.989
Pdh Tj = $+7^{\circ}$ C	2.22 kW	2.02 kW
COP Tj = +7°C	5.66	3.16
Cdh Tj = +7 °C	0.965	0.979
Pdh Tj = 12°C	1.86 kW	1.76 kW
COP Tj = 12°C	8.01	5.40





This information was generated by the HP KEYMARK database on 5 Jul 20		
Cdh Tj = +12 °C	0.941	0.958
Pdh Tj = Tbiv	3.44 kW	2.97 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.985	0.989
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
РСК	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW

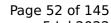
Colder Climate

Annual energy consumption Qhe

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

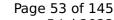
742 kWh

1033 kWh





	Low temperature	Medium temperature
Pdesignh	8.26 kW	8.26 kW
η_{s}	150 %	118 %
Prated	8.26 kW	8.26 kW
SCOP	3.85	3.84
ГЬіν	-7 °C	-7 °C
ГОL	-20 °C	-20 °C
Pdh Tj = -7°C	5.00 kW	5.00 kW
COP Tj = -7°C	3.50	2.71
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	3.00 kW	3.11 kW
COP Tj = +2°C	5.15	3.81
Cdh Tj = +2 °C	0.978	0.983
Pdh Tj = +7°C	1.99 kW	2.28 kW
COP Tj = +7°C	7.20	5.29
Cdh Tj = +7 °C	0.953	0.968
Pdh Tj = 12°C	1.87 kW	1.87 kW
COP Tj = 12°C	8.70	6.88
Cdh Tj = +12 °C	0.949	0.950
Pdh Tj = Tbiv	5.00 kW	5.00 kW

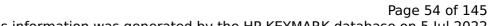




COP Tj = Tbiv	3.50	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.993
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.83 kW	7.83 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	5317 kWh	6739 kWh

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	35 dB(A)	35 dB(A)	
Sound power level outdoor	55 dB(A)	55 dB(A)	





This information was generated by the HP KEYMARK database on 5 Jul 2		
	Low temperature	Medium temperature
Pdesignh	5.65 kW	5.65 kW
η_{S}	183 %	136 %
Prated	5.65 kW	5.65 kW
SCOP	4.66	3.48
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	5.00 kW	5.00 kW
COP Tj = -7°C	3.10	2.28
Cdh Tj = -7 °C	0.992	0.994
Pdh Tj = +2°C	3.11 kW	3.11 kW
COP Tj = +2°C	4.32	3.30
Cdh Tj = +2 °C	0.981	0.986
Pdh Tj = +7°C	1.96 kW	2.19 kW
$COP Tj = +7^{\circ}C$	6.48	4.58
Cdh Tj = +7 °C	0.955	0.972
Pdh Tj = 12°C	1.86 kW	1.84 kW
COP Tj = 12°C	8.41	6.33
Cdh Tj = +12 °C	0.939	0.953
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.10	2.28



$$\operatorname{\textit{Page}}\xspace$ 55 of 145 This information was generated by the HP KEYMARK database on 5 Jul 2022

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.994
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.96 kW	2.47 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	2505 kWh	3360 kWh

Model: ARIANEXT LITE 35 M LINK R32

Configure model		
Model name	ARIANEXT LITE 35 M LINK R32	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone Colder Climate + Warmer Climate		
Reversibility Yes		
Cooling mode application (optional)	+7°C/12°C	

General Data		
Power supply	1x230V 50Hz	

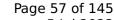
Heating

CEN heat pump

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	3.50 kW	2.95 kW	
El input	0.69 kW	1.09 kW	
СОР	5.10	2.70	

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

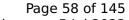
Cooling





EN 14511-2			
+7°C/+12°C			
El input	1.03 kW		
Cooling capacity	3.5		

E	EN 14825





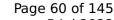
	+7°C/+12°C
Pdesignc	3.5 kW
SEER	4.87
Pdc Tj = 35°C	3.5 kW
EER Tj = 35°C	3
Pdc Tj = 30°C	2.58 kW
EER Tj = 30°C	4.33
Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	1.72 kW
EER Tj = 25°C	5.86
Cdc Tj = 25 °C	0.95
Pdc Tj = 20°C	1.79 kW
EER Tj = 20°C	7.24
Cdc Tj = 20 °C	0.94
Poff	14 W
РТО	14 W
PSB	14 W
РСК	o w
Annual energy consumption Qce	628 kWh

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	Medium temperature
Pdesignh	2.84 kW	2.35 kW
η_{s}	239 %	137 %
Prated	2.84 kW	2.35 kW
SCOP	6.06	3.49
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	2.84 kW	2.35 kW
COP Tj = +2°C	4.00	2.19
Cdh Tj = +2 °C	0.982	0.988
Pdh Tj = +7°C	1.88 kW	1.60 kW
COP Tj = +7°C	5.57	2.80
Cdh Tj = +7 °C	0.961	0.977
Pdh Tj = 12°C	1.91 kW	1.81 kW
COP Tj = 12°C	7.94	5.10

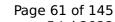




Cdh Tj = +12 °C	0.946	0.963
Pdh Tj = Tbiv	2.84 kW	2.35 kW
COP Tj = Tbiv	4.02	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.982	0.988
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	626 kWh	899 kWh

Colder Climate

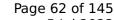
EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	15 dB(A)	15 dB(A)	
Sound power level outdoor	53 dB(A)	53 dB(A)	





EN 14825

	Low temperature	Medium temperature
Pdesignh	7.75 kW	7.43 kW
η_{s}	151 %	120 %
Prated	7.75 kW	7.43 kW
SCOP	3.85	3.07
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.69 kW	4.50 kW
COP Tj = -7°C	3.54	2.76
Cdh Tj = -7 °C	0.990	0.992
Pdh Tj = +2°C	2.95 kW	2.94 kW
COP Tj = +2°C	5.16	3.99
Cdh Tj = +2 °C	0.977	0.982
Pdh Tj = +7°C	1.89 kW	1.92 kW
COP Tj = +7°C	7.19	5.35
Cdh Tj = +7 °C	0.950	0.964
Pdh Tj = 12°C	1.92 kW	1.93 kW
COP Tj = 12°C	8.55	6.96
Cdh Tj = +12 °C	0.942	0.953
Pdh Tj = Tbiv	4.69 kW	4.50 kW





COP Tj = Tbiv	3.54	2.76
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.992
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.34 kW	7.04 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	4964 kWh	5968 kWh

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	15 dB(A)	15 dB(A)	
Sound power level outdoor	53 dB(A)	53 dB(A)	





	Low temperature	Medium temperature
Pdesignh	5.20 kW	4.63 kW
η_{s}	192 %	134 %
Prated	5.20 kW	4.63 kW
SCOP	4.89	3.43
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.60 kW	4.10 kW
COP Tj = -7°C	3.21	2.28
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	2.88 kW	2.63 kW
COP Tj = +2°C	4.66	3.35
Cdh Tj = +2 °C	0.979	0.983
Pdh Tj = +7°C	1.85 kW	1.76 kW
COP Tj = +7°C	6.56	4.22
Cdh Tj = +7 °C	0.954	0.969
Pdh Tj = 12°C	1.92 kW	1.88 kW
COP Tj = 12°C	8.49	6.30
Cdh Tj = +12 °C	0.942	0.956
Pdh Tj = Tbiv	4.60 kW	4.10 kW
COP Tj = Tbiv	3.21	2.28



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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.993
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.17 kW	2.17 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	2198 kWh	2790 kWh



Model: ARIANEXT LITE 50 M LINK R32

Configure model		
Model name	ARIANEXT LITE 50 M LINK R32	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

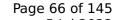
General Data		
Power supply 1x230V 50Hz		

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	5.00 kW	3.80 kW	
El input	1.00 kW	1.36 kW	
СОР	5.00	2.80	

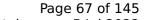
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling





EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	1.75 kW	
Cooling capacity	5	
EER	2.85	4.56





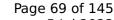
	+7°C/+12°C
Pdesignc	5 kW
SEER	4.85
Pdc Tj = 35°C	5 kW
EER Tj = 35°C	2.85
Pdc Tj = 30°C	3.77 kW
EER Tj = 30°C	4.25
Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	2.32 kW
EER Tj = 25°C	5.38
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	1.87 kW
EER Tj = 20°C	7.85
Cdc Tj = 20 °C	0.94
Poff	14 W
РТО	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Qce	925 kWh

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	Medium temperature
Pdesignh	3.44 kW	2.97 kW
η_{s}	245 %	151 %
Prated	3.44 kW	2.97 kW
SCOP	6.20	3.84
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	3.44 kW	2.97 kW
COP Tj = +2°C	3.88	2.33
Cdh Tj = +2 °C	0.985	0.989
Pdh Tj = $+7^{\circ}$ C	2.22 kW	2.02 kW
$COP Tj = +7^{\circ}C$	5.66	3.16
Cdh Tj = +7 °C	0.965	0.979
Pdh Tj = 12°C	1.86 kW	1.76 kW
COP Tj = 12°C	8.01	5.40

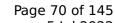




Cdh Tj = +12 °C	0.941	0.958
Pdh Tj = Tbiv	3.44 kW	2.97 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.985	0.989
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	742 kWh	1033 kWh

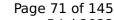
Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)





	Low temperature	Medium temperature
Pdesignh	8.26 kW	8.26 kW
η_{s}	150 %	118 %
Prated	8.26 kW	8.26 kW
SCOP	3.85	3.84
ГЬіν	-7 °C	-7 °C
ГОL	-20 °C	-20 °C
Pdh Tj = -7°C	5.00 kW	5.00 kW
COP Tj = -7°C	3.50	2.71
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	3.00 kW	3.11 kW
COP Tj = +2°C	5.15	3.81
Cdh Tj = +2 °C	0.978	0.983
Pdh Tj = +7°C	1.99 kW	2.28 kW
COP Tj = +7°C	7.20	5.29
Cdh Tj = +7 °C	0.953	0.968
Pdh Tj = 12°C	1.87 kW	1.87 kW
COP Tj = 12°C	8.70	6.88
Cdh Tj = +12 °C	0.949	0.950
Pdh Tj = Tbiv	5.00 kW	5.00 kW

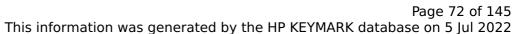




COP Tj = Tbiv	3.50	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.993
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.83 kW	7.83 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	5317 kWh	6739 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)





	Low temperature	Medium temperature
Pdesignh	5.65 kW	5.65 kW
η_{s}	183 %	136 %
Prated	5.65 kW	5.65 kW
SCOP	4.66	3.48
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	5.00 kW	5.00 kW
COP Tj = -7°C	3.10	2.28
Cdh Tj = -7 °C	0.992	0.994
Pdh Tj = $+2$ °C	3.11 kW	3.11 kW
COP Tj = +2°C	4.32	3.30
Cdh Tj = +2 °C	0.981	0.986
Pdh Tj = $+7^{\circ}$ C	1.96 kW	2.19 kW
$COPTj = +7^{\circ}C$	6.48	4.58
Cdh Tj = +7 °C	0.955	0.972
Pdh Tj = 12°C	1.86 kW	1.84 kW
COP Tj = 12°C	8.41	6.33
Cdh Tj = +12 °C	0.939	0.953
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.10	2.28



$$\operatorname{Page}\ 73$$ of 145 This information was generated by the HP KEYMARK database on 5 Jul 2022

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.994
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.96 kW	2.47 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	2505 kWh	3360 kWh



Model: AEROTOP MONO 04.2 M-RX

Configure model		
Model name	AEROTOP MONO 04.2 M-RX	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

General Data		
Power supply	1x230V 50Hz	

Heating

COP

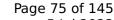
5.10

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	3.50 kW	2.95 kW	
El input	0.69 kW	1.09 kW	
El input	0.69 kW	1.09 kW	

2.70

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

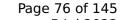
Cooling





EN 14511-2		
+7°C/+12°C		
El input	1.03 kW	
Cooling capacity	3.5	

EN 14825





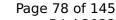
	+7°C/+12°C
Pdesignc	3.5 kW
SEER	4.87
Pdc Tj = 35°C	3.5 kW
EER Tj = 35°C	3
Pdc Tj = 30°C	2.58 kW
EER Tj = 30°C	4.33
Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	1.72 kW
EER Tj = 25°C	5.86
Cdc Tj = 25 °C	0.95
Pdc Tj = 20°C	1.79 kW
EER Tj = 20°C	7.24
Cdc Tj = 20 °C	0.94
Poff	14 W
PTO	14 W
PSB	14 W
PCK	o w
Annual energy consumption Qce	628 kWh

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825			
Low temperature Medium temp			
Pdesignh	2.84 kW	2.35 kW	
η_{s}	239 %	137 %	
Prated	2.84 kW	2.35 kW	
SCOP	6.06	3.49	
Tbiv	2 °C	2 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = +2°C	2.84 kW	2.35 kW	
COP Tj = +2°C	4.00	2.19	
Cdh Tj = +2 °C	0.982	0.988	
Pdh Tj = +7°C	1.88 kW	1.60 kW	
COP Tj = +7°C	5.57	2.80	
Cdh Tj = +7 °C	0.961	0.977	
Pdh Tj = 12°C	1.91 kW	1.81 kW	
COP Tj = 12°C	7.94	5.10	

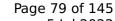




Cdh Tj = +12 °C	0.946	0.963
Pdh Tj = Tbiv	2.84 kW	2.35 kW
COP Tj = Tbiv	4.02	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.982	0.988
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	626 kWh	899 kWh

Colder Climate

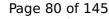
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)





EN 14825

	Low temperature	Medium temperature
Pdesignh	7.75 kW	7.43 kW
η_{s}	151 %	120 %
Prated	7.75 kW	7.43 kW
SCOP	3.85	3.07
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.69 kW	4.50 kW
COP Tj = -7°C	3.54	2.76
Cdh Tj = -7 °C	0.990	0.992
Pdh Tj = +2°C	2.95 kW	2.94 kW
COP Tj = +2°C	5.16	3.99
Cdh Tj = +2 °C	0.977	0.982
Pdh Tj = +7°C	1.89 kW	1.92 kW
COP Tj = +7°C	7.19	5.35
Cdh Tj = +7 °C	0.950	0.964
Pdh Tj = 12°C	1.92 kW	1.93 kW
COP Tj = 12°C	8.55	6.96
Cdh Tj = +12 °C	0.942	0.953
Pdh Tj = Tbiv	4.69 kW	4.50 kW





COP Tj = Tbiv	3.54	2.76
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.992
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.34 kW	7.04 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	4964 kWh	5968 kWh

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	35 dB(A)	35 dB(A)	
Sound power level outdoor	53 dB(A)	53 dB(A)	



Page 81 of 145 This information was generated by the HP KEYMARK database on 5 Jul 2022

	Low temperature	Medium temperature
Pdesignh	5.20 kW	4.63 kW
η_{S}	192 %	134 %
Prated	5.20 kW	4.63 kW
SCOP	4.89	3.43
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.60 kW	4.10 kW
$COPTj = -7^{\circ}C$	3.21	2.28
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	2.88 kW	2.63 kW
$COPTj = +2^{\circ}C$	4.66	3.35
Cdh Tj = +2 °C	0.979	0.983
Pdh Tj = +7°C	1.85 kW	1.76 kW
$COP Tj = +7^{\circ}C$	6.56	4.22
Cdh Tj = +7 °C	0.954	0.969
Pdh Tj = 12°C	1.92 kW	1.88 kW
COP Tj = 12°C	8.49	6.30
Cdh Tj = +12 °C	0.942	0.956
Pdh Tj = Tbiv	4.60 kW	4.10 kW
COP Tj = Tbiv	3.21	2.28



Page 82 of 145

This information was generated by the HP KEYMARK database on 5 Jul 2022

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.993
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.17 kW	2.17 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	2198 kWh	2790 kWh

Model: AERAEROTOP MONO 05.2 M-RX

Configure model		
Model name AERAEROTOP MONO 05.2 M-RX		
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone Colder Climate + Warmer Climate		
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

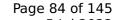
General Data		
Power supply 1x230V 50Hz		

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	5.00 kW	3.80 kW	
El input	1.00 kW	1.36 kW	
СОР	5.00	2.80	

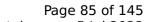
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling





EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	1.75 kW	
Cooling capacity	5	
EER	2.85	4.56





	Page 85 of 145 This information was generated by the HP KEYMARK database on 5 Jul 2022	
		+7°C/+12°C
Pdesignc		5 kW
SEER		4.85
Pdc Tj = 35°C		5 kW
EER Tj = 35°C		2.85
Pdc Tj = 30°C		3.77 kW
EER Tj = 30°C		4.25
Cdc Tj = 30 °C		0.98
Pdc Tj = 25°C		2.32 kW
EER Tj = 25°C		5.38
Cdc Tj = 25 °C		0.97
Pdc Tj = 20°C		1.87 kW
EER Tj = 20°C		7.85
Cdc Tj = 20 °C		0.94
Poff		14 W
РТО		14 W
PSB		14 W
PCK		o w

Warmer Climate

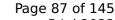
Annual energy consumption Qce

925 kWh



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	Medium temperature
Pdesignh	3.44 kW	2.97 kW
η_{s}	245 %	151 %
Prated	3.44 kW	2.97 kW
SCOP	6.20	3.84
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	3.44 kW	2.97 kW
COP Tj = +2°C	3.88	2.33
Cdh Tj = +2 °C	0.985	0.989
Pdh Tj = $+7^{\circ}$ C	2.22 kW	2.02 kW
COP Tj = +7°C	5.66	3.16
Cdh Tj = +7 °C	0.965	0.979
Pdh Tj = 12°C	1.86 kW	1.76 kW
COP Tj = 12°C	8.01	5.40

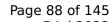




Cdh Tj = +12 °C	0.941	0.958
Pdh Tj = Tbiv	3.44 kW	2.97 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.985	0.989
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	742 kWh	1033 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)





	Low temperature	Medium temperature
Pdesignh	8.26 kW	8.26 kW
η_{s}	150 %	118 %
Prated	8.26 kW	8.26 kW
SCOP	3.85	3.84
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	5.00 kW	5.00 kW
COP Tj = -7°C	3.50	2.71
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	3.00 kW	3.11 kW
COP Tj = +2°C	5.15	3.81
Cdh Tj = +2 °C	0.978	0.983
Pdh Tj = +7°C	1.99 kW	2.28 kW
COP Tj = +7°C	7.20	5.29
Cdh Tj = +7 °C	0.953	0.968
Pdh Tj = 12°C	1.87 kW	1.87 kW
COP Tj = 12°C	8.70	6.88
Cdh Tj = +12 °C	0.949	0.950
Pdh Tj = Tbiv	5.00 kW	5.00 kW





COP Tj = Tbiv	3.50	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.993
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.83 kW	7.83 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	5317 kWh	6739 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)





	Low temperature	Medium temperature
Pdesignh	5.65 kW	5.65 kW
η_{S}	183 %	136 %
Prated	5.65 kW	5.65 kW
SCOP	4.66	3.48
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	5.00 kW	5.00 kW
$COP Tj = -7^{\circ}C$	3.10	2.28
Cdh Tj = -7 °C	0.992	0.994
Pdh Tj = $+2^{\circ}$ C	3.11 kW	3.11 kW
COP Tj = +2°C	4.32	3.30
Cdh Tj = +2 °C	0.981	0.986
Pdh Tj = $+7^{\circ}$ C	1.96 kW	2.19 kW
$COP Tj = +7^{\circ}C$	6.48	4.58
Cdh Tj = +7 °C	0.955	0.972
Pdh Tj = 12°C	1.86 kW	1.84 kW
COP Tj = 12°C	8.41	6.33
Cdh Tj = +12 °C	0.939	0.953
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.10	2.28



Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.994
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.96 kW	2.47 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	2505 kWh	3360 kWh

Model: AEROTOP MONO 04.2 M-RXL

Configure model		
Model name	AEROTOP MONO 04.2 M-RXL	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

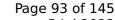
General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	3.50 kW	2.95 kW	
El input	0.69 kW	1.09 kW	
СОР	5.10	2.70	

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

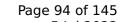
Cooling





EN 14511-2		
+7°C/+12°C		
El input	1.03 kW	
Cooling capacity	3.5	

E	EN 14825





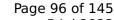
	+7°C/+12°C
Pdesignc	3.5 kW
SEER	4.87
Pdc Tj = 35°C	3.5 kW
EER Tj = 35°C	3
Pdc Tj = 30°C	2.58 kW
EER Tj = 30°C	4.33
Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	1.72 kW
EER Tj = 25°C	5.86
Cdc Tj = 25 °C	0.95
Pdc Tj = 20°C	1.79 kW
EER Tj = 20°C	7.24
Cdc Tj = 20 °C	0.94
Poff	14 W
PTO	14 W
PSB	14 W
PCK	o w
Annual energy consumption Qce	628 kWh

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	Medium temperature
Pdesignh	2.84 kW	2.35 kW
η_{s}	239 %	137 %
Prated	2.84 kW	2.35 kW
SCOP	6.06	3.49
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	2.84 kW	2.35 kW
COP Tj = +2°C	4.00	2.19
Cdh Tj = +2 °C	0.982	0.988
Pdh Tj = +7°C	1.88 kW	1.60 kW
COP Tj = +7°C	5.57	2.80
Cdh Tj = +7 °C	0.961	0.977
Pdh Tj = 12°C	1.91 kW	1.81 kW
COP Tj = 12°C	7.94	5.10

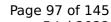




Cdh Tj = +12 °C	0.946	0.963
Pdh Tj = Tbiv	2.84 kW	2.35 kW
COP Tj = Tbiv	4.02	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.982	0.988
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	626 kWh	899 kWh

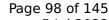
Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)





	Low temperature	Medium temperature
Pdesignh	7.75 kW	7.43 kW
η_{s}	151 %	120 %
Prated	7.75 kW	7.43 kW
SCOP	3.85	3.07
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.69 kW	4.50 kW
COP Tj = -7°C	3.54	2.76
Cdh Tj = -7 °C	0.990	0.992
Pdh Tj = +2°C	2.95 kW	2.94 kW
COP Tj = +2°C	5.16	3.99
Cdh Tj = +2 °C	0.977	0.982
Pdh Tj = +7°C	1.89 kW	1.92 kW
COP Tj = +7°C	7.19	5.35
Cdh Tj = +7 °C	0.950	0.964
Pdh Tj = 12°C	1.92 kW	1.93 kW
COP Tj = 12°C	8.55	6.96
Cdh Tj = +12 °C	0.942	0.953
Pdh Tj = Tbiv	4.69 kW	4.50 kW





COP Tj = Tbiv	3.54	2.76
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.992
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.34 kW	7.04 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	4964 kWh	5968 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)





	Low temperature	Medium temperature
Pdesignh	5.20 kW	4.63 kW
η_{s}	192 %	134 %
Prated	5.20 kW	4.63 kW
SCOP	4.89	3.43
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.60 kW	4.10 kW
COP Tj = -7°C	3.21	2.28
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	2.88 kW	2.63 kW
COP Tj = +2°C	4.66	3.35
Cdh Tj = +2 °C	0.979	0.983
Pdh Tj = +7°C	1.85 kW	1.76 kW
COP Tj = +7°C	6.56	4.22
Cdh Tj = +7 °C	0.954	0.969
Pdh Tj = 12°C	1.92 kW	1.88 kW
COP Tj = 12°C	8.49	6.30
Cdh Tj = +12 °C	0.942	0.956
Pdh Tj = Tbiv	4.60 kW	4.10 kW
COP Tj = Tbiv	3.21	2.28



Page 100 of 145

This information was generated by the HP KEYMARK database on 5 Jul 2022

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.993
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.17 kW	2.17 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	2198 kWh	2790 kWh

Model: AEROTOP MONO 05.2 M-RXL

Configure model		
Model name	AEROTOP MONO 05.2 M-RXL	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	5.00 kW	3.80 kW	
El input	1.00 kW	1.36 kW	
СОР	5.00	2.80	

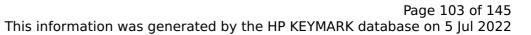
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Cooling





EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	1.75 kW	
Cooling capacity	5	
EER	2.85	4.56





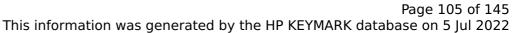
	+7°C/+12°C
Pdesignc	5 kW
SEER	4.85
Pdc Tj = 35°C	5 kW
EER Tj = 35°C	2.85
Pdc Tj = 30°C	3.77 kW
EER Tj = 30°C	4.25
Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	2.32 kW
EER Tj = 25°C	5.38
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	1.87 kW
EER Tj = 20°C	7.85
Cdc Tj = 20 °C	0.94
Poff	14 W
РТО	14 W
PSB	14 W
PCK	o w
Annual energy consumption Qce	925 kWh

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	Medium temperature
Pdesignh	3.44 kW	2.97 kW
η_{s}	245 %	151 %
Prated	3.44 kW	2.97 kW
SCOP	6.20	3.84
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	3.44 kW	2.97 kW
COP Tj = +2°C	3.88	2.33
Cdh Tj = +2 °C	0.985	0.989
Pdh Tj = +7°C	2.22 kW	2.02 kW
COP Tj = +7°C	5.66	3.16
Cdh Tj = +7 °C	0.965	0.979
Pdh Tj = 12°C	1.86 kW	1.76 kW
COP Tj = 12°C	8.01	5.40

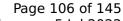




		·
Cdh Tj = +12 °C	0.941	0.958
Pdh Tj = Tbiv	3.44 kW	2.97 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.985	0.989
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	742 kWh	1033 kWh

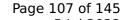
Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)





	Low temperature	Medium temperature
Pdesignh	8.26 kW	8.26 kW
η_{s}	150 %	118 %
Prated	8.26 kW	8.26 kW
SCOP	3.85	3.84
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	5.00 kW	5.00 kW
COP Tj = -7°C	3.50	2.71
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	3.00 kW	3.11 kW
COP Tj = +2°C	5.15	3.81
Cdh Tj = +2 °C	0.978	0.983
Pdh Tj = +7°C	1.99 kW	2.28 kW
COP Tj = +7°C	7.20	5.29
Cdh Tj = +7 °C	0.953	0.968
Pdh Tj = 12°C	1.87 kW	1.87 kW
COP Tj = 12°C	8.70	6.88
Cdh Tj = +12 °C	0.949	0.950
Pdh Tj = Tbiv	5.00 kW	5.00 kW

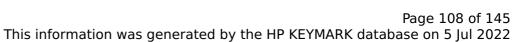




COP Tj = Tbiv	3.50	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.993
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.83 kW	7.83 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	5317 kWh	6739 kWh

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	15 dB(A)	15 dB(A)	
Sound power level outdoor	55 dB(A)	55 dB(A)	





	Low temperature	Medium temperature
Pdesignh	5.65 kW	5.65 kW
η_{S}	183 %	136 %
Prated	5.65 kW	5.65 kW
SCOP	4.66	3.48
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	5.00 kW	5.00 kW
COP Tj = -7°C	3.10	2.28
Cdh Tj = -7 °C	0.992	0.994
Pdh Tj = $+2$ °C	3.11 kW	3.11 kW
COP Tj = +2°C	4.32	3.30
Cdh Tj = +2 °C	0.981	0.986
Pdh Tj = $+7^{\circ}$ C	1.96 kW	2.19 kW
COP Tj = +7°C	6.48	4.58
Cdh Tj = +7 °C	0.955	0.972
Pdh Tj = 12°C	1.86 kW	1.84 kW
COP Tj = 12°C	8.41	6.33
Cdh Tj = +12 °C	0.939	0.953
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.10	2.28



Page 109 of 145

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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.994
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.96 kW	2.47 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	2505 kWh	3360 kWh

Model: ENERGION M PLUS 40

Configure model		
Model name	ENERGION M PLUS 40	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

General Data		
Power supply 1x230V 50Hz		

Heating

COP

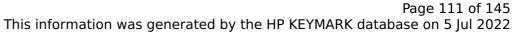
5.10

EN 14511-2			
Low temperature Medium temperature			
Heat output	3.50 kW	2.95 kW	
El input	0.69 kW	1.09 kW	

2.70

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

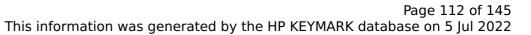
Cooling





EN 14511-2		
+7°C/+12°C		
El input	1.03 kW	
Cooling capacity 3.5		

EN 14825





	+7°C/+12°C
Pdesignc	3.5 kW
SEER	4.87
Pdc Tj = 35°C	3.5 kW
EER Tj = 35°C	3
Pdc Tj = 30°C	2.58 kW
EER Tj = 30°C	4.33
Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	1.72 kW
EER Tj = 25°C	5.86
Cdc Tj = 25 °C	0.95
Pdc Tj = 20°C	1.79 kW
EER Tj = 20°C	7.24
Cdc Tj = 20 °C	0.94
Poff	14 W
PTO	14 W
PSB	14 W
PCK	o w
Annual energy consumption Qce	628 kWh

Warmer Climate



EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	35 dB(A)	35 dB(A)	
Sound power level outdoor	53 dB(A)	53 dB(A)	

EN 14825		
	Low temperature	Medium temperature
Pdesignh	2.84 kW	2.35 kW
η_{s}	239 %	137 %
Prated	2.84 kW	2.35 kW
SCOP	6.06	3.49
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	2.84 kW	2.35 kW
COP Tj = +2°C	4.00	2.19
Cdh Tj = +2 °C	0.982	0.988
Pdh Tj = +7°C	1.88 kW	1.60 kW
COP Tj = +7°C	5.57	2.80
Cdh Tj = +7 °C	0.961	0.977
Pdh Tj = 12°C	1.91 kW	1.81 kW
COP Tj = 12°C	7.94	5.10

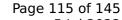




Cdh Tj = +12 °C	0.946	0.963
Pdh Tj = Tbiv	2.84 kW	2.35 kW
COP Tj = Tbiv	4.02	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.982	0.988
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	626 kWh	899 kWh

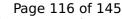
Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	35 dB(A)	35 dB(A)	
Sound power level outdoor 53 dB(A) 53 dB(A)			





	Low temperature	Medium temperature
Pdesignh	7.75 kW	7.43 kW
η_{s}	151 %	120 %
Prated	7.75 kW	7.43 kW
SCOP	3.85	3.07
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.69 kW	4.50 kW
COP Tj = -7°C	3.54	2.76
Cdh Tj = -7 °C	0.990	0.992
Pdh Tj = +2°C	2.95 kW	2.94 kW
COP Tj = +2°C	5.16	3.99
Cdh Tj = +2 °C	0.977	0.982
Pdh Tj = +7°C	1.89 kW	1.92 kW
COP Tj = +7°C	7.19	5.35
Cdh Tj = +7 °C	0.950	0.964
Pdh Tj = 12°C	1.92 kW	1.93 kW
COP Tj = 12°C	8.55	6.96
Cdh Tj = +12 °C	0.942	0.953
Pdh Tj = Tbiv	4.69 kW	4.50 kW





COP Tj = Tbiv 3.54 2.76 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 3.03 kW 2.46 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 2.25 1.52 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 0.990 0.992 WTOL 60 °C 60 °C Poff 13 W 13 W PTO 13 W 13 W PSB 13 W 13 W PCK 13 W 13 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 7.34 kW 7.04 kW Backup Heater 4.00 kW 4.00 kW Annual energy consumption Qhe 4964 kWh 5968 kWh			
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	COP Tj = Tbiv	3.54	2.76
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
WTOL 60 °C 60 °C 60 °C 70	COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Poff 13 W 13 W PTO 13 W 13 W PSB 13 W 13 W PCK 13 W 13 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 7.34 kW 7.04 kW Backup Heater 4.00 kW 4.00 kW	Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.992
PTO 13 W 13 W PSB 13 W 13 W PCK 13 W 13 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 7.34 kW 7.04 kW Backup Heater 4.00 kW 4.00 kW	WTOL	60 °C	60 °C
PSB 13 W 13 W PCK 13 W 13 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 7.34 kW 7.04 kW Backup Heater 4.00 kW 4.00 kW	Poff	13 W	13 W
PCK 13 W 13 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 7.34 kW 7.04 kW Backup Heater 4.00 kW 4.00 kW	РТО	13 W	13 W
Supplementary Heater: Type of energy input Electricity Electricity 7.34 kW Augustian Augusti	PSB	13 W	13 W
Supplementary Heater: PSUP 7.34 kW 7.04 kW Backup Heater 4.00 kW 4.00 kW	PCK	13 W	13 W
Backup Heater 4.00 kW 4.00 kW	Supplementary Heater: Type of energy input	Electricity	Electricity
	Supplementary Heater: PSUP	7.34 kW	7.04 kW
Annual energy consumption Qhe 4964 kWh 5968 kWh	Backup Heater	4.00 kW	4.00 kW
	Annual energy consumption Qhe	4964 kWh	5968 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)



Page 117 of 145
This information was generated by the HP KEYMARK database on 5 Jul 2022

	Low temperature	Medium temperature
Pdesignh	5.20 kW	4.63 kW
η_{s}	192 %	134 %
Prated	5.20 kW	4.63 kW
SCOP	4.89	3.43
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.60 kW	4.10 kW
COP Tj = -7°C	3.21	2.28
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	2.88 kW	2.63 kW
COP Tj = +2°C	4.66	3.35
Cdh Tj = +2 °C	0.979	0.983
Pdh Tj = +7°C	1.85 kW	1.76 kW
COP Tj = +7°C	6.56	4.22
Cdh Tj = +7 °C	0.954	0.969
Pdh Tj = 12°C	1.92 kW	1.88 kW
COP Tj = 12°C	8.49	6.30
Cdh Tj = +12 °C	0.942	0.956
Pdh Tj = Tbiv	4.60 kW	4.10 kW
COP Tj = Tbiv	3.21	2.28



Page 118 of 145

This information was generated by the HP KEYMARK database on 5 Jul 2022

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.993
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.17 kW	2.17 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	2198 kWh	2790 kWh

Model: ENERGION M PLUS 50

Configure model		
Model name	ENERGION M PLUS 50	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

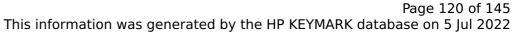
General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.00 kW	3.80 kW
El input	1.00 kW	1.36 kW
СОР	5.00	2.80

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

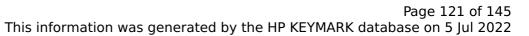
Cooling





EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	1.75 kW	
Cooling capacity	5	
EER	2.85	4.56

	+7°C/+12°C	+18°C/+23°C
El input	1.75 kW	
Cooling capacity	5	
EER	2.85	4.56
	EN 14825	





	+7°C/+12°C
Pdesignc	5 kW
SEER	4.85
Pdc Tj = 35°C	5 kW
EER Tj = 35°C	2.85
Pdc Tj = 30°C	3.77 kW
EER Tj = 30°C	4.25
Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	2.32 kW
EER Tj = 25°C	5.38
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	1.87 kW
EER Tj = 20°C	7.85
Cdc Tj = 20 °C	0.94
Poff	14 W
РТО	14 W
PSB	14 W
PCK	o w
Annual energy consumption Qce	925 kWh

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	Medium temperature
Pdesignh	3.44 kW	2.97 kW
η_{s}	245 %	151 %
Prated	3.44 kW	2.97 kW
SCOP	6.20	3.84
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	3.44 kW	2.97 kW
COP Tj = +2°C	3.88	2.33
Cdh Tj = +2 °C	0.985	0.989
Pdh Tj = +7°C	2.22 kW	2.02 kW
COP Tj = +7°C	5.66	3.16
Cdh Tj = +7 °C	0.965	0.979
Pdh Tj = 12°C	1.86 kW	1.76 kW
COP Tj = 12°C	8.01	5.40

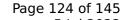




		<u> </u>
Cdh Tj = +12 °C	0.941	0.958
Pdh Tj = Tbiv	3.44 kW	2.97 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.985	0.989
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	742 kWh	1033 kWh

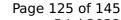
Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)





	Low temperature	Medium temperature
Pdesignh	8.26 kW	8.26 kW
η_{s}	150 %	118 %
Prated	8.26 kW	8.26 kW
SCOP	3.85	3.84
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	5.00 kW	5.00 kW
COP Tj = -7°C	3.50	2.71
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	3.00 kW	3.11 kW
COP Tj = +2°C	5.15	3.81
Cdh Tj = +2 °C	0.978	0.983
Pdh Tj = +7°C	1.99 kW	2.28 kW
COP Tj = +7°C	7.20	5.29
Cdh Tj = +7 °C	0.953	0.968
Pdh Tj = 12°C	1.87 kW	1.87 kW
COP Tj = 12°C	8.70	6.88
Cdh Tj = +12 °C	0.949	0.950
Pdh Tj = Tbiv	5.00 kW	5.00 kW

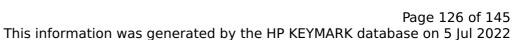




COP Tj = Tbiv	3.50	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.993
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.83 kW	7.83 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	5317 kWh	6739 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)





	Low temperature	Medium temperature
Pdesignh	5.65 kW	5.65 kW
η_{s}	183 %	136 %
Prated	5.65 kW	5.65 kW
SCOP	4.66	3.48
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	5.00 kW	5.00 kW
COP Tj = -7°C	3.10	2.28
Cdh Tj = -7 °C	0.992	0.994
Pdh Tj = +2°C	3.11 kW	3.11 kW
COP Tj = +2°C	4.32	3.30
Cdh Tj = +2 °C	0.981	0.986
Pdh Tj = +7°C	1.96 kW	2.19 kW
COP Tj = +7°C	6.48	4.58
Cdh Tj = +7 °C	0.955	0.972
Pdh Tj = 12°C	1.86 kW	1.84 kW
COP Tj = 12°C	8.41	6.33
Cdh Tj = +12 °C	0.939	0.953
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.10	2.28



Page 127 of 145

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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.994
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.96 kW	2.47 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	2505 kWh	3360 kWh



Model: ENERGION M LIGHT 40

Configure model		
Model name	ENERGION M LIGHT 40	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

General Data		
Power supply 1x230V 50Hz		

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	3.50 kW	2.95 kW
El input	0.69 kW	1.09 kW
СОР	5.10	2.70

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

Cooling





EN 14511-2		
+7°C/+12°C		
El input	1.03 kW	
Cooling capacity	3.5	

EN 14825





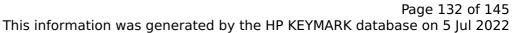
This information was generated by the file	+7°C/+12°C
Pdesignc	3.5 kW
SEER	4.87
Pdc Tj = 35°C	3.5 kW
EER Tj = 35°C	3
Pdc Tj = 30°C	2.58 kW
EER Tj = 30°C	4.33
Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	1.72 kW
EER Tj = 25°C	5.86
Cdc Tj = 25 °C	0.95
Pdc Tj = 20°C	1.79 kW
EER Tj = 20°C	7.24
Cdc Tj = 20 °C	0.94
Poff	14 W
РТО	14 W
PSB	14 W
PCK	o w
Annual energy consumption Qce	628 kWh

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	Medium temperature
Pdesignh	2.84 kW	2.35 kW
η_{s}	239 %	137 %
Prated	2.84 kW	2.35 kW
SCOP	6.06	3.49
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	2.84 kW	2.35 kW
COP Tj = +2°C	4.00	2.19
Cdh Tj = +2 °C	0.982	0.988
Pdh Tj = +7°C	1.88 kW	1.60 kW
COP Tj = +7°C	5.57	2.80
Cdh Tj = +7 °C	0.961	0.977
Pdh Tj = 12°C	1.91 kW	1.81 kW
COP Tj = 12°C	7.94	5.10

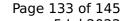




Pdh Tj = Tbiv 2.84 kW 2.35 kW COP Tj = Tbiv 4.02 2.19 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 3.03 kW 2.46 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 2.25 1.52 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 0.982 0.988 WTOL 60 °C 60 °C Poff 13 W 13 W PTO 13 W 13 W PSB 13 W 13 W PCK 13 W 13 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0.00 kW 0.00 kW Backup Heater 4.00 kW 4.00 kW		-	
COP Tj = Tbiv 4.02 2.19 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Cdh Tj = +12 °C	0.946	0.963
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Pdh Tj = Tbiv	2.84 kW	2.35 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	COP Tj = Tbiv	4.02	2.19
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
WTOL 60 °C 60 °C 60 °C 70 FOFF 13 W 13 W 13 W 13 W PSB 13 W 13 W 13 W PCK 13 W 13 W 13 W PCK 13 W 13 W 10 W 10 W 10 W 11 W 12 W 13 W 13 W 13 W 13 W 14 W 15 W 16 W 17 W 18 W 18 W 19 W 19 W 10 W 11 W 12 W 13 W 13 W 13 W 14 W 15 W 16 W 17 W 18 W 18 W 18 W 18 W 19 W 19 W 10	COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Poff 13 W 13 W PTO 13 W 13 W PSB 13 W 13 W PCK 13 W 13 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0.00 kW 0.00 kW Backup Heater 4.00 kW 4.00 kW	Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.982	0.988
PTO 13 W 13 W PSB 13 W 13 W PCK 13 W 13 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0.00 kW 0.00 kW Backup Heater 4.00 kW 4.00 kW	WTOL	60 °C	60 °C
PSB 13 W 13 W PCK 13 W 13 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0.00 kW 0.00 kW Backup Heater 4.00 kW 4.00 kW	Poff	13 W	13 W
PCK 13 W 13 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0.00 kW 0.00 kW Backup Heater 4.00 kW 4.00 kW	РТО	13 W	13 W
Supplementary Heater: Type of energy input Electricity Electricity O.00 kW Backup Heater 4.00 kW 4.00 kW	PSB	13 W	13 W
Supplementary Heater: PSUP 0.00 kW 0.00 kW Backup Heater 4.00 kW 4.00 kW	PCK	13 W	13 W
Backup Heater 4.00 kW 4.00 kW	Supplementary Heater: Type of energy input	Electricity	Electricity
	Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe 626 kWh 899 kWh	Backup Heater	4.00 kW	4.00 kW
	Annual energy consumption Qhe	626 kWh	899 kWh

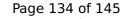
Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)





	Low temperature	Medium temperature
Pdesignh	7.75 kW	7.43 kW
η_{s}	151 %	120 %
Prated	7.75 kW	7.43 kW
SCOP	3.85	3.07
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.69 kW	4.50 kW
COP Tj = -7°C	3.54	2.76
Cdh Tj = -7 °C	0.990	0.992
Pdh Tj = +2°C	2.95 kW	2.94 kW
COP Tj = +2°C	5.16	3.99
Cdh Tj = +2 °C	0.977	0.982
Pdh Tj = +7°C	1.89 kW	1.92 kW
COP Tj = +7°C	7.19	5.35
Cdh Tj = +7 °C	0.950	0.964
Pdh Tj = 12°C	1.92 kW	1.93 kW
COP Tj = 12°C	8.55	6.96
Cdh Tj = +12 °C	0.942	0.953
Pdh Tj = Tbiv	4.69 kW	4.50 kW





COP Tj = Tbiv	3.54	2.76
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.992
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.34 kW	7.04 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	4964 kWh	5968 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)



Page 135 of 145 This information was generated by the HP KEYMARK database on 5 Jul 2022

	Low temperature	Medium temperature
Pdesignh	5.20 kW	4.63 kW
η_{S}	192 %	134 %
Prated	5.20 kW	4.63 kW
SCOP	4.89	3.43
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.60 kW	4.10 kW
$COPTj = -7^{\circ}C$	3.21	2.28
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	2.88 kW	2.63 kW
$COPTj = +2^{\circ}C$	4.66	3.35
Cdh Tj = +2 °C	0.979	0.983
Pdh Tj = +7°C	1.85 kW	1.76 kW
$COP Tj = +7^{\circ}C$	6.56	4.22
Cdh Tj = +7 °C	0.954	0.969
Pdh Tj = 12°C	1.92 kW	1.88 kW
COP Tj = 12°C	8.49	6.30
Cdh Tj = +12 °C	0.942	0.956
Pdh Tj = Tbiv	4.60 kW	4.10 kW
COP Tj = Tbiv	3.21	2.28



Page 136 of 145

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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.993
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.17 kW	2.17 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	2198 kWh	2790 kWh

Model: ENERGION M LIGHT 50

Configure model		
Model name	ENERGION M LIGHT 50	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

General Data	
Power supply 1x230V 50Hz	

Heating

EN 14511-2		
Low temperature Medium temperature		Medium temperature
Heat output	5.00 kW	3.80 kW
El input	1.00 kW	1.36 kW
СОР	5.00	2.80

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

Cooling





EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	1.75 kW	
Cooling capacity	5	
EER	2.85	4.56

	+7°C/+12°C	+18°C/+23°C
El input	1.75 kW	
Cooling capacity	5	
EER	2.85	4.56
	EN 14825	





	+7°C/+12°C
Pdesignc	5 kW
SEER	4.85
Pdc Tj = 35°C	5 kW
EER Tj = 35°C	2.85
Pdc Tj = 30°C	3.77 kW
EER Tj = 30°C	4.25
Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	2.32 kW
EER Tj = 25°C	5.38
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	1.87 kW
EER Tj = 20°C	7.85
Cdc Tj = 20 °C	0.94
Poff	14 W
РТО	14 W
PSB	14 W
PCK	o w
Annual energy consumption Qce	925 kWh

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	Medium temperature
Pdesignh	3.44 kW	2.97 kW
η_{s}	245 %	151 %
Prated	3.44 kW	2.97 kW
SCOP	6.20	3.84
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	3.44 kW	2.97 kW
COP Tj = +2°C	3.88	2.33
Cdh Tj = +2 °C	0.985	0.989
Pdh Tj = +7°C	2.22 kW	2.02 kW
COP Tj = +7°C	5.66	3.16
Cdh Tj = +7 °C	0.965	0.979
Pdh Tj = 12°C	1.86 kW	1.76 kW
COP Tj = 12°C	8.01	5.40

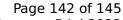




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Cdh Tj = +12 °C	0.941	0.958
Pdh Tj = Tbiv	3.44 kW	2.97 kW
COP Tj = Tbiv	3.88	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.985	0.989
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	742 kWh	1033 kWh

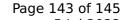
Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	15 dB(A)	15 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)





	Low temperature	Medium temperature
Pdesignh	8.26 kW	8.26 kW
η_{s}	150 %	118 %
Prated	8.26 kW	8.26 kW
SCOP	3.85	3.84
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	5.00 kW	5.00 kW
COP Tj = -7°C	3.50	2.71
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	3.00 kW	3.11 kW
COP Tj = +2°C	5.15	3.81
Cdh Tj = +2 °C	0.978	0.983
Pdh Tj = +7°C	1.99 kW	2.28 kW
COP Tj = +7°C	7.20	5.29
Cdh Tj = +7 °C	0.953	0.968
Pdh Tj = 12°C	1.87 kW	1.87 kW
COP Tj = 12°C	8.70	6.88
Cdh Tj = +12 °C	0.949	0.950
Pdh Tj = Tbiv	5.00 kW	5.00 kW





COP Tj = Tbiv	3.50	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.991	0.993
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.83 kW	7.83 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	5317 kWh	6739 kWh

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	15 dB(A)	15 dB(A)	
Sound power level outdoor	55 dB(A)	55 dB(A)	



Page 144 of 145
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	Low temperature	Medium temperature
Pdesignh	5.65 kW	5.65 kW
η_{s}	183 %	136 %
Prated	5.65 kW	5.65 kW
SCOP	4.66	3.48
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	5.00 kW	5.00 kW
COP Tj = -7°C	3.10	2.28
Cdh Tj = -7 °C	0.992	0.994
Pdh Tj = +2°C	3.11 kW	3.11 kW
COP Tj = +2°C	4.32	3.30
Cdh Tj = +2 °C	0.981	0.986
Pdh Tj = +7°C	1.96 kW	2.19 kW
COP Tj = +7°C	6.48	4.58
Cdh Tj = +7 °C	0.955	0.972
Pdh Tj = 12°C	1.86 kW	1.84 kW
COP Tj = 12°C	8.41	6.33
Cdh Tj = +12 °C	0.939	0.953
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.10	2.28



Page 145 of 145 This information was generated by the HP KEYMARK database on 5 Jul 2022

	<u> </u>	<u> </u>
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.69 kW	3.18 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.994
WTOL	60 °C	60 °C
Poff	13 W	13 W
РТО	13 W	13 W
PSB	13 W	13 W
PCK	13 W	13 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.96 kW	2.47 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	2505 kWh	3360 kWh