

This information was generated by the HP KEYMARK database on 5 Apr 2023

Summary of	NIMBUS/ARIANEXT/AEROTOP/ENERGION 120/150 M - COMPACT	Reg. No.	ICIM-PDC-000106
Certificate Holder			
Name	Ariston Thermo Group		
Address	Viale Aristide Merloni 45	ZIP	I-60044
City	Fabriano (AN)	Country	Italy
Certification Body	ICIM S.p.A.		
Subtype title	NIMBUS/ARIANEXT/AEROTOP/ENERGION 120/150 M - COMPACT		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	2.1 kg		
Certification Date	05.07.2022		
Testing basis	Heat Pump KEYMARK rev9		

# Model: NIMBUS COMPACT 120 M NET R32

## Configure model

Model name	NIMBUS COMPACT 120 M NET R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

### EN 14511-4

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	9.05 kW
SEER	5.40
P <sub>dc</sub> T <sub>j</sub> = 35°C	9.05 kW
EER T <sub>j</sub> = 35°C	3.15
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.86 kW
EER T <sub>j</sub> = 30°C	4.72
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	4.31 kW
EER T <sub>j</sub> = 25°C	6.14
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.98
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.45 kW
EER T <sub>j</sub> = 20°C	7.5
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1541 kWh

## Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

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

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	10.84 kW	9.42 kW
$\eta_s$	204 %	143 %
P <sub>rated</sub>	10.84 kW	9.42 kW
SCOP	5.16	3.65
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	9.59 kW	8.33 kW
COP T <sub>j</sub> = -7°C	3.42	2.43
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.995	0.996
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.74 kW	5.47 kW
COP T <sub>j</sub> = +2°C	5.10	3.33
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.988	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.16 kW	3.98 kW
COP T <sub>j</sub> = +7°C	6.88	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: NIMBUS COMPACT 120 M-T NET R32

Configure model	
Model name	NIMBUS COMPACT 120 M-T NET R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

## Heating

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

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

## Cooling



### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	9.05 kW
SEER	5.40
P <sub>dc</sub> T <sub>j</sub> = 35°C	9.05 kW
EER T <sub>j</sub> = 35°C	3.15
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.86 kW
EER T <sub>j</sub> = 30°C	4.72
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	4.31 kW
EER T <sub>j</sub> = 25°C	6.14
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.98
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.45 kW
EER T <sub>j</sub> = 20°C	7.5
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1541 kWh

## Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

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

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	10.84 kW	9.42 kW
$\eta_s$	204 %	143 %
P <sub>rated</sub>	10.84 kW	9.42 kW
SCOP	5.16	3.65
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	9.59 kW	8.33 kW
COP T <sub>j</sub> = -7°C	3.42	2.43
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.995	0.996
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.74 kW	5.47 kW
COP T <sub>j</sub> = +2°C	5.10	3.33
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.988	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.16 kW	3.98 kW
COP T <sub>j</sub> = +7°C	6.88	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: NIMBUS COMPACT 150 M NET R32

## Configure model

Model name	NIMBUS COMPACT 150 M NET R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

### EN 14511-4

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

## Cooling

## EN 14511-2

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

## EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	11 kW
SEER	5.22
P <sub>dc</sub> T <sub>j</sub> = 35°C	11 kW
EER T <sub>j</sub> = 35°C	2.93
P <sub>dc</sub> T <sub>j</sub> = 30°C	8.18 kW
EER T <sub>j</sub> = 30°C	4.4
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	5.23 kW
EER T <sub>j</sub> = 25°C	5.77
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.5 kW
EER T <sub>j</sub> = 20°C	7.53
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1951 kWh

## Average Climate



### EN 12102-1

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

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.48 kW	11.59 kW
$\eta_s$	202 %	151 %
P <sub>rated</sub>	12.48 kW	11.59 kW
SCOP	5.12	3.85
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	11.04 kW	10.25 kW
COP T <sub>j</sub> = -7°C	3.29	2.50
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.996	0.997
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.98 kW	6.50 kW
COP T <sub>j</sub> = +2°C	4.92	3.67
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.990	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.39 kW	3.96 kW
COP T <sub>j</sub> = +7°C	6.76	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: NIMBUS COMPACT 150 M-T NET R32

Configure model	
Model name	NIMBUS COMPACT 150 M-T NET R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

## Heating

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

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

## Cooling

## EN 14511-2

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

## EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	11 kW
SEER	5.22
P <sub>dc</sub> T <sub>j</sub> = 35°C	11 kW
EER T <sub>j</sub> = 35°C	2.93
P <sub>dc</sub> T <sub>j</sub> = 30°C	8.18 kW
EER T <sub>j</sub> = 30°C	4.4
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	5.23 kW
EER T <sub>j</sub> = 25°C	5.77
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.5 kW
EER T <sub>j</sub> = 20°C	7.53
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1951 kWh

## Average Climate

### EN 12102-1

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

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.48 kW	11.59 kW
$\eta_s$	202 %	151 %
P <sub>rated</sub>	12.48 kW	11.59 kW
SCOP	5.12	3.85
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	11.04 kW	10.25 kW
COP T <sub>j</sub> = -7°C	3.29	2.50
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.996	0.997
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.98 kW	6.50 kW
COP T <sub>j</sub> = +2°C	4.92	3.67
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.990	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.39 kW	3.96 kW
COP T <sub>j</sub> = +7°C	6.76	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

## Domestic Hot Water (DHW)

### Average Climate



<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: NIMBUS COMPACT 120 M 2Z NET R32

Configure model	
Model name	NIMBUS COMPACT 120 M 2Z NET R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

## Heating

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

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	9.05 kW
SEER	5.40
P <sub>dc</sub> T <sub>j</sub> = 35°C	9.05 kW
EER T <sub>j</sub> = 35°C	3.15
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.86 kW
EER T <sub>j</sub> = 30°C	4.72
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	4.31 kW
EER T <sub>j</sub> = 25°C	6.14
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.98
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.45 kW
EER T <sub>j</sub> = 20°C	7.5
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1541 kWh

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	10.84 kW	9.42 kW
$\eta_s$	204 %	143 %
P <sub>rated</sub>	10.84 kW	9.42 kW
SCOP	5.16	3.65
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	9.59 kW	8.33 kW
COP T <sub>j</sub> = -7°C	3.42	2.43
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.995	0.996
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.74 kW	5.47 kW
COP T <sub>j</sub> = +2°C	5.10	3.33
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.988	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.16 kW	3.98 kW
COP T <sub>j</sub> = +7°C	6.88	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: NIMBUS COMPACT 120 M-T 2Z NET R32

Configure model	
Model name	NIMBUS COMPACT 120 M-T 2Z NET R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

## Heating

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

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

## Cooling



### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	9.05 kW
SEER	5.40
P <sub>dc</sub> T <sub>j</sub> = 35°C	9.05 kW
EER T <sub>j</sub> = 35°C	3.15
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.86 kW
EER T <sub>j</sub> = 30°C	4.72
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	4.31 kW
EER T <sub>j</sub> = 25°C	6.14
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.98
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.45 kW
EER T <sub>j</sub> = 20°C	7.5
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1541 kWh

## Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	10.84 kW	9.42 kW
$\eta_s$	204 %	143 %
P <sub>rated</sub>	10.84 kW	9.42 kW
SCOP	5.16	3.65
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	9.59 kW	8.33 kW
COP T <sub>j</sub> = -7°C	3.42	2.43
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.995	0.996
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.74 kW	5.47 kW
COP T <sub>j</sub> = +2°C	5.10	3.33
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.988	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.16 kW	3.98 kW
COP T <sub>j</sub> = +7°C	6.88	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: NIMBUS COMPACT 150 M 2Z NET R32

Configure model	
Model name	NIMBUS COMPACT 150 M 2Z NET R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

## Heating

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

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	11 kW
SEER	5.22
P <sub>dc</sub> T <sub>j</sub> = 35°C	11 kW
EER T <sub>j</sub> = 35°C	2.93
P <sub>dc</sub> T <sub>j</sub> = 30°C	8.18 kW
EER T <sub>j</sub> = 30°C	4.4
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	5.23 kW
EER T <sub>j</sub> = 25°C	5.77
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.5 kW
EER T <sub>j</sub> = 20°C	7.53
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1951 kWh

## Average Climate



This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.48 kW	11.59 kW
$\eta_s$	202 %	151 %
P <sub>rated</sub>	12.48 kW	11.59 kW
SCOP	5.12	3.85
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	11.04 kW	10.25 kW
COP T <sub>j</sub> = -7°C	3.29	2.50
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.996	0.997
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.98 kW	6.50 kW
COP T <sub>j</sub> = +2°C	4.92	3.67
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.990	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.39 kW	3.96 kW
COP T <sub>j</sub> = +7°C	6.76	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: NIMBUS COMPACT 150 M-T 2Z NET R32

Configure model	
Model name	NIMBUS COMPACT 150 M-T 2Z NET R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

## Heating

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

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	11 kW
SEER	5.22
P <sub>dc</sub> T <sub>j</sub> = 35°C	11 kW
EER T <sub>j</sub> = 35°C	2.93
P <sub>dc</sub> T <sub>j</sub> = 30°C	8.18 kW
EER T <sub>j</sub> = 30°C	4.4
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	5.23 kW
EER T <sub>j</sub> = 25°C	5.77
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.5 kW
EER T <sub>j</sub> = 20°C	7.53
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1951 kWh

## Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.48 kW	11.59 kW
$\eta_s$	202 %	151 %
P <sub>rated</sub>	12.48 kW	11.59 kW
SCOP	5.12	3.85
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	11.04 kW	10.25 kW
COP T <sub>j</sub> = -7°C	3.29	2.50
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.996	0.997
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.98 kW	6.50 kW
COP T <sub>j</sub> = +2°C	4.92	3.67
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.990	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.39 kW	3.96 kW
COP T <sub>j</sub> = +7°C	6.76	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

## Domestic Hot Water (DHW)

### Average Climate



<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: ARIANEXT COMPACT 120 M 2Z LINK R32

Configure model	
Model name	ARIANEXT COMPACT 120 M 2Z LINK R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

## Heating

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

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	9.05 kW
SEER	5.40
P <sub>dc</sub> T <sub>j</sub> = 35°C	9.05 kW
EER T <sub>j</sub> = 35°C	3.15
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.86 kW
EER T <sub>j</sub> = 30°C	4.72
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	4.31 kW
EER T <sub>j</sub> = 25°C	6.14
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.98
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.45 kW
EER T <sub>j</sub> = 20°C	7.5
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1541 kWh

## Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	10.84 kW	9.42 kW
$\eta_s$	204 %	143 %
P <sub>rated</sub>	10.84 kW	9.42 kW
SCOP	5.16	3.65
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	9.59 kW	8.33 kW
COP T <sub>j</sub> = -7°C	3.42	2.43
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.995	0.996
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.74 kW	5.47 kW
COP T <sub>j</sub> = +2°C	5.10	3.33
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.988	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.16 kW	3.98 kW
COP T <sub>j</sub> = +7°C	6.88	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: ARIANEXT COMPACT 120 M LINK R32

## Configure model

Model name	ARIANEXT COMPACT 120 M LINK R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

### EN 14511-4

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

## Cooling



### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	9.05 kW
SEER	5.40
P <sub>dc</sub> T <sub>j</sub> = 35°C	9.05 kW
EER T <sub>j</sub> = 35°C	3.15
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.86 kW
EER T <sub>j</sub> = 30°C	4.72
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	4.31 kW
EER T <sub>j</sub> = 25°C	6.14
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.98
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.45 kW
EER T <sub>j</sub> = 20°C	7.5
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1541 kWh

## Average Climate

### EN 12102-1

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

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	10.84 kW	9.42 kW
$\eta_s$	204 %	143 %
P <sub>rated</sub>	10.84 kW	9.42 kW
SCOP	5.16	3.65
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	9.59 kW	8.33 kW
COP T <sub>j</sub> = -7°C	3.42	2.43
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.995	0.996
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.74 kW	5.47 kW
COP T <sub>j</sub> = +2°C	5.10	3.33
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.988	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.16 kW	3.98 kW
COP T <sub>j</sub> = +7°C	6.88	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: ARIANEXT COMPACT 120 M-T 2Z LINK R32

## Configure model

Model name	ARIANEXT COMPACT 120 M-T 2Z LINK R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

### EN 14511-4

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	9.05 kW
SEER	5.40
P <sub>dc</sub> T <sub>j</sub> = 35°C	9.05 kW
EER T <sub>j</sub> = 35°C	3.15
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.86 kW
EER T <sub>j</sub> = 30°C	4.72
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	4.31 kW
EER T <sub>j</sub> = 25°C	6.14
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.98
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.45 kW
EER T <sub>j</sub> = 20°C	7.5
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1541 kWh

## Average Climate



### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	10.84 kW	9.42 kW
$\eta_s$	204 %	143 %
P <sub>rated</sub>	10.84 kW	9.42 kW
SCOP	5.16	3.65
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	9.59 kW	8.33 kW
COP T <sub>j</sub> = -7°C	3.42	2.43
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.995	0.996
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.74 kW	5.47 kW
COP T <sub>j</sub> = +2°C	5.10	3.33
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.988	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.16 kW	3.98 kW
COP T <sub>j</sub> = +7°C	6.88	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: ARIANEXT COMPACT 120 M-T LINK R32

Configure model	
Model name	ARIANEXT COMPACT 120 M-T LINK R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

## Heating

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

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	9.05 kW
SEER	5.40
P <sub>dc</sub> T <sub>j</sub> = 35°C	9.05 kW
EER T <sub>j</sub> = 35°C	3.15
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.86 kW
EER T <sub>j</sub> = 30°C	4.72
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	4.31 kW
EER T <sub>j</sub> = 25°C	6.14
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.98
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.45 kW
EER T <sub>j</sub> = 20°C	7.5
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1541 kWh

## Average Climate

### EN 12102-1

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

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	10.84 kW	9.42 kW
$\eta_s$	204 %	143 %
P <sub>rated</sub>	10.84 kW	9.42 kW
SCOP	5.16	3.65
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	9.59 kW	8.33 kW
COP T <sub>j</sub> = -7°C	3.42	2.43
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.995	0.996
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.74 kW	5.47 kW
COP T <sub>j</sub> = +2°C	5.10	3.33
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.988	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.16 kW	3.98 kW
COP T <sub>j</sub> = +7°C	6.88	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

## Domestic Hot Water (DHW)

### Average Climate



<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: ARIANEXT COMPACT 150 M 2Z LINK R32

## Configure model

Model name	ARIANEXT COMPACT 150 M 2Z LINK R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

### EN 14511-4

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	11 kW
SEER	5.22
P <sub>dc</sub> T <sub>j</sub> = 35°C	11 kW
EER T <sub>j</sub> = 35°C	2.93
P <sub>dc</sub> T <sub>j</sub> = 30°C	8.18 kW
EER T <sub>j</sub> = 30°C	4.4
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	5.23 kW
EER T <sub>j</sub> = 25°C	5.77
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.5 kW
EER T <sub>j</sub> = 20°C	7.53
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1951 kWh

## Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.48 kW	11.59 kW
$\eta_s$	202 %	151 %
P <sub>rated</sub>	12.48 kW	11.59 kW
SCOP	5.12	3.85
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	11.04 kW	10.25 kW
COP T <sub>j</sub> = -7°C	3.29	2.50
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.996	0.997
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.98 kW	6.50 kW
COP T <sub>j</sub> = +2°C	4.92	3.67
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.990	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.39 kW	3.96 kW
COP T <sub>j</sub> = +7°C	6.76	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: ARIANEXT COMPACT 150 M LINK R32

## Configure model

Model name	ARIANEXT COMPACT 150 M LINK R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

### EN 14511-4

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

## Cooling



### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	11 kW
SEER	5.22
P <sub>dc</sub> T <sub>j</sub> = 35°C	11 kW
EER T <sub>j</sub> = 35°C	2.93
P <sub>dc</sub> T <sub>j</sub> = 30°C	8.18 kW
EER T <sub>j</sub> = 30°C	4.4
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	5.23 kW
EER T <sub>j</sub> = 25°C	5.77
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.5 kW
EER T <sub>j</sub> = 20°C	7.53
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1951 kWh

## Average Climate

### EN 12102-1

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

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.48 kW	11.59 kW
$\eta_s$	202 %	151 %
P <sub>rated</sub>	12.48 kW	11.59 kW
SCOP	5.12	3.85
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	11.04 kW	10.25 kW
COP T <sub>j</sub> = -7°C	3.29	2.50
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.996	0.997
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.98 kW	6.50 kW
COP T <sub>j</sub> = +2°C	4.92	3.67
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.990	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.39 kW	3.96 kW
COP T <sub>j</sub> = +7°C	6.76	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: ARIANEXT COMPACT 150 M-T 2Z LINK R32

Configure model	
Model name	ARIANEXT COMPACT 150 M-T 2Z LINK R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

## Heating

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

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	11 kW
SEER	5.22
P <sub>dc</sub> T <sub>j</sub> = 35°C	11 kW
EER T <sub>j</sub> = 35°C	2.93
P <sub>dc</sub> T <sub>j</sub> = 30°C	8.18 kW
EER T <sub>j</sub> = 30°C	4.4
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	5.23 kW
EER T <sub>j</sub> = 25°C	5.77
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.5 kW
EER T <sub>j</sub> = 20°C	7.53
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1951 kWh

## Average Climate



### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.48 kW	11.59 kW
$\eta_s$	202 %	151 %
P <sub>rated</sub>	12.48 kW	11.59 kW
SCOP	5.12	3.85
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	11.04 kW	10.25 kW
COP T <sub>j</sub> = -7°C	3.29	2.50
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.996	0.997
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.98 kW	6.50 kW
COP T <sub>j</sub> = +2°C	4.92	3.67
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.990	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.39 kW	3.96 kW
COP T <sub>j</sub> = +7°C	6.76	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: ARIANEXT COMPACT 150 M-T LINK R32

Configure model	
Model name	ARIANEXT COMPACT 150 M-T LINK R32
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

## Heating

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

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	11 kW
SEER	5.22
P <sub>dc</sub> T <sub>j</sub> = 35°C	11 kW
EER T <sub>j</sub> = 35°C	2.93
P <sub>dc</sub> T <sub>j</sub> = 30°C	8.18 kW
EER T <sub>j</sub> = 30°C	4.4
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	5.23 kW
EER T <sub>j</sub> = 25°C	5.77
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.5 kW
EER T <sub>j</sub> = 20°C	7.53
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1951 kWh

## Average Climate

### EN 12102-1

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

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.48 kW	11.59 kW
$\eta_s$	202 %	151 %
P <sub>rated</sub>	12.48 kW	11.59 kW
SCOP	5.12	3.85
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	11.04 kW	10.25 kW
COP T <sub>j</sub> = -7°C	3.29	2.50
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.996	0.997
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.98 kW	6.50 kW
COP T <sub>j</sub> = +2°C	4.92	3.67
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.990	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.39 kW	3.96 kW
COP T <sub>j</sub> = +7°C	6.76	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

## Domestic Hot Water (DHW)

### Average Climate



This information was generated by the HP KEYMARK database on 5 Apr 2023

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: AEROTOP MONO 12.2 M-CRX 2Z

Configure model	
Model name	AEROTOP MONO 12.2 M-CRX 2Z
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

## Heating

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

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	9.05 kW
SEER	5.40
P <sub>dc</sub> T <sub>j</sub> = 35°C	9.05 kW
EER T <sub>j</sub> = 35°C	3.15
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.86 kW
EER T <sub>j</sub> = 30°C	4.72
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	4.31 kW
EER T <sub>j</sub> = 25°C	6.14
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.98
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.45 kW
EER T <sub>j</sub> = 20°C	7.5
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1541 kWh

## Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	10.84 kW	9.42 kW
$\eta_s$	204 %	143 %
P <sub>rated</sub>	10.84 kW	9.42 kW
SCOP	5.16	3.65
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	9.59 kW	8.33 kW
COP T <sub>j</sub> = -7°C	3.42	2.43
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.995	0.996
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.74 kW	5.47 kW
COP T <sub>j</sub> = +2°C	5.10	3.33
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.988	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.16 kW	3.98 kW
COP T <sub>j</sub> = +7°C	6.88	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

## Domestic Hot Water (DHW)

### Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: AEROTOP MONO 12.2 M-CRX 1Z

## Configure model

Model name	AEROTOP MONO 12.2 M-CRX 1Z
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

### EN 14511-4

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

## Cooling



## EN 14511-2

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

## EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	9.05 kW
SEER	5.40
P <sub>dc</sub> T <sub>j</sub> = 35°C	9.05 kW
EER T <sub>j</sub> = 35°C	3.15
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.86 kW
EER T <sub>j</sub> = 30°C	4.72
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	4.31 kW
EER T <sub>j</sub> = 25°C	6.14
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.98
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.45 kW
EER T <sub>j</sub> = 20°C	7.5
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1541 kWh

## Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

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

### EN 14825

	Low temperature	Medium temperature
$P_{designh}$	10.84 kW	9.42 kW
$\eta_s$	204 %	143 %
$P_{rated}$	10.84 kW	9.42 kW
SCOP	5.16	3.65
$T_{biv}$	-7 °C	-7 °C
TOL	-20 °C	-20 °C
$P_{dh} T_j = -7^{\circ}C$	9.59 kW	8.33 kW
$COP T_j = -7^{\circ}C$	3.42	2.43
$C_{dh} T_j = -7^{\circ}C$	0.995	0.996
$P_{dh} T_j = +2^{\circ}C$	5.74 kW	5.47 kW
$COP T_j = +2^{\circ}C$	5.10	3.33
$C_{dh} T_j = +2^{\circ}C$	0.988	0.992
$P_{dh} T_j = +7^{\circ}C$	4.16 kW	3.98 kW
$COP T_j = +7^{\circ}C$	6.88	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: AEROTOP MONO 12.2 M-CR 2Z

Configure model	
Model name	AEROTOP MONO 12.2 M-CR 2Z
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

## Heating

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

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	9.05 kW
SEER	5.40
P <sub>dc</sub> T <sub>j</sub> = 35°C	9.05 kW
EER T <sub>j</sub> = 35°C	3.15
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.86 kW
EER T <sub>j</sub> = 30°C	4.72
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	4.31 kW
EER T <sub>j</sub> = 25°C	6.14
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.98
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.45 kW
EER T <sub>j</sub> = 20°C	7.5
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1541 kWh

## Average Climate



This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	10.84 kW	9.42 kW
$\eta_s$	204 %	143 %
P <sub>rated</sub>	10.84 kW	9.42 kW
SCOP	5.16	3.65
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	9.59 kW	8.33 kW
COP T <sub>j</sub> = -7°C	3.42	2.43
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.995	0.996
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.74 kW	5.47 kW
COP T <sub>j</sub> = +2°C	5.10	3.33
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.988	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.16 kW	3.98 kW
COP T <sub>j</sub> = +7°C	6.88	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: AEROTOP MONO 12.2 M-CR 1Z

## Configure model

Model name	AEROTOP MONO 12.2 M-CR 1Z
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

### EN 14511-4

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	9.05 kW
SEER	5.40
P <sub>dc</sub> T <sub>j</sub> = 35°C	9.05 kW
EER T <sub>j</sub> = 35°C	3.15
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.86 kW
EER T <sub>j</sub> = 30°C	4.72
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	4.31 kW
EER T <sub>j</sub> = 25°C	6.14
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.98
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.45 kW
EER T <sub>j</sub> = 20°C	7.5
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1541 kWh

## Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

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

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	10.84 kW	9.42 kW
$\eta_s$	204 %	143 %
P <sub>rated</sub>	10.84 kW	9.42 kW
SCOP	5.16	3.65
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	9.59 kW	8.33 kW
COP T <sub>j</sub> = -7°C	3.42	2.43
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.995	0.996
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.74 kW	5.47 kW
COP T <sub>j</sub> = +2°C	5.10	3.33
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.988	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.16 kW	3.98 kW
COP T <sub>j</sub> = +7°C	6.88	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

## Domestic Hot Water (DHW)

### Average Climate



<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: AEROTOP MONO 15.2 M-CRX 2Z

Configure model	
Model name	AEROTOP MONO 15.2 M-CRX 2Z
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

## Heating

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

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	11 kW
SEER	5.22
P <sub>dc</sub> T <sub>j</sub> = 35°C	11 kW
EER T <sub>j</sub> = 35°C	2.93
P <sub>dc</sub> T <sub>j</sub> = 30°C	8.18 kW
EER T <sub>j</sub> = 30°C	4.4
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	5.23 kW
EER T <sub>j</sub> = 25°C	5.77
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.5 kW
EER T <sub>j</sub> = 20°C	7.53
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1951 kWh

## Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.48 kW	11.59 kW
$\eta_s$	202 %	151 %
P <sub>rated</sub>	12.48 kW	11.59 kW
SCOP	5.12	3.85
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	11.04 kW	10.25 kW
COP T <sub>j</sub> = -7°C	3.29	2.50
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.996	0.997
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.98 kW	6.50 kW
COP T <sub>j</sub> = +2°C	4.92	3.67
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.990	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.39 kW	3.96 kW
COP T <sub>j</sub> = +7°C	6.76	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: AEROTOP MONO 15.2 M-CRX 1Z

## Configure model

Model name	AEROTOP MONO 15.2 M-CRX 1Z
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

### EN 14511-4

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

## Cooling



### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	11 kW
SEER	5.22
P <sub>dc</sub> T <sub>j</sub> = 35°C	11 kW
EER T <sub>j</sub> = 35°C	2.93
P <sub>dc</sub> T <sub>j</sub> = 30°C	8.18 kW
EER T <sub>j</sub> = 30°C	4.4
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	5.23 kW
EER T <sub>j</sub> = 25°C	5.77
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.5 kW
EER T <sub>j</sub> = 20°C	7.53
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1951 kWh

## Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

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

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.48 kW	11.59 kW
$\eta_s$	202 %	151 %
P <sub>rated</sub>	12.48 kW	11.59 kW
SCOP	5.12	3.85
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	11.04 kW	10.25 kW
COP T <sub>j</sub> = -7°C	3.29	2.50
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.996	0.997
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.98 kW	6.50 kW
COP T <sub>j</sub> = +2°C	4.92	3.67
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.990	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.39 kW	3.96 kW
COP T <sub>j</sub> = +7°C	6.76	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

## Domestic Hot Water (DHW)

### Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: AEROTOP MONO 15.2 M-CR 2Z

## Configure model

Model name	AEROTOP MONO 15.2 M-CR 2Z
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

### EN 14511-4

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	11 kW
SEER	5.22
P <sub>dc</sub> T <sub>j</sub> = 35°C	11 kW
EER T <sub>j</sub> = 35°C	2.93
P <sub>dc</sub> T <sub>j</sub> = 30°C	8.18 kW
EER T <sub>j</sub> = 30°C	4.4
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	5.23 kW
EER T <sub>j</sub> = 25°C	5.77
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.5 kW
EER T <sub>j</sub> = 20°C	7.53
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1951 kWh

## Average Climate



This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.48 kW	11.59 kW
$\eta_s$	202 %	151 %
P <sub>rated</sub>	12.48 kW	11.59 kW
SCOP	5.12	3.85
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	11.04 kW	10.25 kW
COP T <sub>j</sub> = -7°C	3.29	2.50
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.996	0.997
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.98 kW	6.50 kW
COP T <sub>j</sub> = +2°C	4.92	3.67
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.990	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.39 kW	3.96 kW
COP T <sub>j</sub> = +7°C	6.76	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

## Domestic Hot Water (DHW)

### Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: AEROTOP MONO 15.2 M-CR 1Z

## Configure model

Model name	AEROTOP MONO 15.2 M-CR 1Z
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

### EN 14511-4

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	11 kW
SEER	5.22
P <sub>dc</sub> T <sub>j</sub> = 35°C	11 kW
EER T <sub>j</sub> = 35°C	2.93
P <sub>dc</sub> T <sub>j</sub> = 30°C	8.18 kW
EER T <sub>j</sub> = 30°C	4.4
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	5.23 kW
EER T <sub>j</sub> = 25°C	5.77
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.5 kW
EER T <sub>j</sub> = 20°C	7.53
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1951 kWh

## Average Climate

### EN 12102-1

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

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.48 kW	11.59 kW
$\eta_s$	202 %	151 %
P <sub>rated</sub>	12.48 kW	11.59 kW
SCOP	5.12	3.85
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	11.04 kW	10.25 kW
COP T <sub>j</sub> = -7°C	3.29	2.50
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.996	0.997
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.98 kW	6.50 kW
COP T <sub>j</sub> = +2°C	4.92	3.67
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.990	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.39 kW	3.96 kW
COP T <sub>j</sub> = +7°C	6.76	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

## Domestic Hot Water (DHW)

### Average Climate



This information was generated by the HP KEYMARK database on 5 Apr 2023

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: ENERGION M COMPACT 120 T 2Z

Configure model	
Model name	ENERGION M COMPACT 120 T 2Z
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

## Heating

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

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	9.05 kW
SEER	5.40
P <sub>dc</sub> T <sub>j</sub> = 35°C	9.05 kW
EER T <sub>j</sub> = 35°C	3.15
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.86 kW
EER T <sub>j</sub> = 30°C	4.72
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	4.31 kW
EER T <sub>j</sub> = 25°C	6.14
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.98
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.45 kW
EER T <sub>j</sub> = 20°C	7.5
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1541 kWh

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	10.84 kW	9.42 kW
$\eta_s$	204 %	143 %
P <sub>rated</sub>	10.84 kW	9.42 kW
SCOP	5.16	3.65
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	9.59 kW	8.33 kW
COP T <sub>j</sub> = -7°C	3.42	2.43
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.995	0.996
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.74 kW	5.47 kW
COP T <sub>j</sub> = +2°C	5.10	3.33
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.988	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.16 kW	3.98 kW
COP T <sub>j</sub> = +7°C	6.88	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

## Domestic Hot Water (DHW)

### Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: ENERGION M COMPACT 120 T

## Configure model

Model name	ENERGION M COMPACT 120 T
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

### EN 14511-4

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

## Cooling



### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	9.05 kW
SEER	5.40
P <sub>dc</sub> T <sub>j</sub> = 35°C	9.05 kW
EER T <sub>j</sub> = 35°C	3.15
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.86 kW
EER T <sub>j</sub> = 30°C	4.72
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	4.31 kW
EER T <sub>j</sub> = 25°C	6.14
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.98
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.45 kW
EER T <sub>j</sub> = 20°C	7.5
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1541 kWh

## Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

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

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	10.84 kW	9.42 kW
$\eta_s$	204 %	143 %
P <sub>rated</sub>	10.84 kW	9.42 kW
SCOP	5.16	3.65
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	9.59 kW	8.33 kW
COP T <sub>j</sub> = -7°C	3.42	2.43
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.995	0.996
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.74 kW	5.47 kW
COP T <sub>j</sub> = +2°C	5.10	3.33
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.988	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.16 kW	3.98 kW
COP T <sub>j</sub> = +7°C	6.88	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: ENERGION M COMPACT 150 T 2Z

Configure model	
Model name	ENERGION M COMPACT 150 T 2Z
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

## Heating

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

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	11 kW
SEER	5.22
P <sub>dc</sub> T <sub>j</sub> = 35°C	11 kW
EER T <sub>j</sub> = 35°C	2.93
P <sub>dc</sub> T <sub>j</sub> = 30°C	8.18 kW
EER T <sub>j</sub> = 30°C	4.4
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	5.23 kW
EER T <sub>j</sub> = 25°C	5.77
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.5 kW
EER T <sub>j</sub> = 20°C	7.53
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1951 kWh

## Average Climate



This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.48 kW	11.59 kW
$\eta_s$	202 %	151 %
P <sub>rated</sub>	12.48 kW	11.59 kW
SCOP	5.12	3.85
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	11.04 kW	10.25 kW
COP T <sub>j</sub> = -7°C	3.29	2.50
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.996	0.997
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.98 kW	6.50 kW
COP T <sub>j</sub> = +2°C	4.92	3.67
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.990	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.39 kW	3.96 kW
COP T <sub>j</sub> = +7°C	6.76	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

## Domestic Hot Water (DHW)

### Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: ENERGION M COMPACT 150 T

## Configure model

Model name	ENERGION M COMPACT 150 T
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	15.00 kW	9.50 kW
El input	3.19 kW	3.02 kW
COP	4.70	3.15

### EN 14511-4

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	11 kW
SEER	5.22
P <sub>dc</sub> T <sub>j</sub> = 35°C	11 kW
EER T <sub>j</sub> = 35°C	2.93
P <sub>dc</sub> T <sub>j</sub> = 30°C	8.18 kW
EER T <sub>j</sub> = 30°C	4.4
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	5.23 kW
EER T <sub>j</sub> = 25°C	5.77
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.5 kW
EER T <sub>j</sub> = 20°C	7.53
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1951 kWh

## Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

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

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.48 kW	11.59 kW
$\eta_s$	202 %	151 %
P <sub>rated</sub>	12.48 kW	11.59 kW
SCOP	5.12	3.85
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	11.04 kW	10.25 kW
COP T <sub>j</sub> = -7°C	3.29	2.50
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.996	0.997
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.98 kW	6.50 kW
COP T <sub>j</sub> = +2°C	4.92	3.67
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.990	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.39 kW	3.96 kW
COP T <sub>j</sub> = +7°C	6.76	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

## Domestic Hot Water (DHW)

### Average Climate



<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: AEROTOP MONO 12.2 M-C2R

## Configure model

Model name	AEROTOP MONO 12.2 M-C2R
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	12.00 kW	7.67 kW
El input	2.45 kW	2.39 kW
COP	4.90	3.21

### EN 14511-4

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

## Cooling

### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	9.05 kW
SEER	5.40
P <sub>dc</sub> T <sub>j</sub> = 35°C	9.05 kW
EER T <sub>j</sub> = 35°C	3.15
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.86 kW
EER T <sub>j</sub> = 30°C	4.72
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	4.31 kW
EER T <sub>j</sub> = 25°C	6.14
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.98
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.45 kW
EER T <sub>j</sub> = 20°C	7.5
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1541 kWh

## Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

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

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	10.84 kW	9.42 kW
$\eta_s$	204 %	143 %
P <sub>rated</sub>	10.84 kW	9.42 kW
SCOP	5.16	3.65
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	9.59 kW	8.33 kW
COP T <sub>j</sub> = -7°C	3.42	2.43
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.995	0.996
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.74 kW	5.47 kW
COP T <sub>j</sub> = +2°C	5.10	3.33
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.988	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.16 kW	3.98 kW
COP T <sub>j</sub> = +7°C	6.88	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.978	0.983
Pdh Tj = 12°C	4.71 kW	4.75 kW
COP Tj = 12°C	8.66	6.86
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	9.59 kW	8.33 kW
COP Tj = Tbiv	3.42	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.11 kW	8.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	2.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.73 kW	0.74 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	4338 kWh	5335 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l

# Model: AEROTOP MONO 15.2 M-C2R

Configure model	
Model name	AEROTOP MONO 15.2 M-C2R
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	3x400V 50Hz

## Heating

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

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

## Cooling



### EN 14511-2

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

### EN 14825

This information was generated by the HP KEYMARK database on 5 Apr 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	11 kW
SEER	5.22
P <sub>dc</sub> T <sub>j</sub> = 35°C	11 kW
EER T <sub>j</sub> = 35°C	2.93
P <sub>dc</sub> T <sub>j</sub> = 30°C	8.18 kW
EER T <sub>j</sub> = 30°C	4.4
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 25°C	5.23 kW
EER T <sub>j</sub> = 25°C	5.77
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.99
P <sub>dc</sub> T <sub>j</sub> = 20°C	4.5 kW
EER T <sub>j</sub> = 20°C	7.53
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.98
P <sub>off</sub>	14 W
PTO	14 W
PSB	14 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	1951 kWh

## Average Climate

This information was generated by the HP KEYMARK database on 5 Apr 2023

### EN 12102-1

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

### EN 14825

	Low temperature	Medium temperature
P <sub>designh</sub>	12.48 kW	11.59 kW
$\eta_s$	202 %	151 %
P <sub>rated</sub>	12.48 kW	11.59 kW
SCOP	5.12	3.85
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	11.04 kW	10.25 kW
COP T <sub>j</sub> = -7°C	3.29	2.50
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.996	0.997
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.98 kW	6.50 kW
COP T <sub>j</sub> = +2°C	4.92	3.67
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.990	0.992
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.39 kW	3.96 kW
COP T <sub>j</sub> = +7°C	6.76	5.04

This information was generated by the HP KEYMARK database on 5 Apr 2023

Cdh Tj = +7 °C	0.979	0.983
Pdh Tj = 12°C	4.71 kW	4.69 kW
COP Tj = 12°C	8.55	6.97
Cdh Tj = +12 °C	0.975	0.980
Pdh Tj = Tbiv	11.04 kW	10.25 kW
COP Tj = Tbiv	3.29	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	10.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.06
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.07 kW
Backup Heater	6.00 kW	6.00 kW
Annual energy consumption Qhe	5035 kWh	6217 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	131 %
COP	3.10
Heating up time	00:55 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	233 l