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Summary of	Matrix series 8 10 kW	Reg. No.	041-K014-02
Certificate Holder			
Name	Inventor A.G. Electric Appliances S.A.		
Address	2 Thoukididou str. & 24th km National Road Athens - Lamia	Zip	14565
City	Agios Stefanos	Country	Greece
Certification Body	BRE Global Limited		
Subtype title	Matrix series 8 10 kW		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	1.65 kg		
Certification Date	10.05.2021		
Testing basis	Heat Pump Keymark Scheme Rules Rev 08		

Model: ATS08S / HU100S3

Configure model	
Model name	ATS08S / HU100S3
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8.30 kW	7.50 kW
El input	1.60 kW	2.36 kW
COP	5.20	3.18

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

Warmer Climate

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EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	273 %	177 %
Prated	8.12 kW	8.37 kW
SCOP	6.99	4.50
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.57 kW	7.55 kW
COP Tj = +2°C	3.98	2.59
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.22 kW	5.38 kW
COP Tj = +7°C	6.26	4.01
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.45 kW	2.32 kW
COP Tj = 12°C	9.02	5.55
Cdh Tj = +12 °C	0.900	0.900

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Pdh Tj = Tbiv	5.22 kW	5.38 kW
COP Tj = Tbiv	6.26	4.01
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.57 kW	7.55 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.98	2.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.82 kW
Annual energy consumption Qhe	1569 kWh	2485 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825

This information was generated by the HP KEYMARK database on 23 Jun 2022

	Low temperature	Medium temperature
η_s	170 %	112 %
Prated	6.98 kW	5.78 kW
SCOP	4.32	2.88
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.46 kW	3.86 kW
COP Tj = -7°C	3.66	2.48
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.70 kW	2.21 kW
COP Tj = +2°C	5.20	3.35
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	1.66 kW	1.44 kW
COP Tj = +7°C	6.53	4.11
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.66 kW	1.47 kW
COP Tj = 12°C	7.96	5.92
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	5.69 kW	4.71 kW
COP Tj = Tbiv	2.83	1.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.06 kW	2.80 kW

This information was generated by the HP KEYMARK database on 23 Jun 2022

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.95	1.22
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.91 kW	2.99 kW
Annual energy consumption Qhe	3978 kWh	4950 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.69	4.71
COP Tj = -15°C (if TOL<-20°C)	2.83	1.90
Cdh Tj = -15 °C	0.90	0.90

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 23 Jun 2022

η_s	205 %	132 %
Prated	8.12 kW	6.60 kW
SCOP	5.21	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.19 kW	5.84 kW
COP Tj = -7°C	3.35	2.16
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	4.65 kW	3.76 kW
COP Tj = +2°C	5.09	3.30
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	2.90 kW	2.43 kW
COP Tj = +7°C	6.82	4.34
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.63 kW	1.40 kW
COP Tj = 12°C	8.35	5.33
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.19 kW	5.84 kW
COP Tj = Tbiv	3.35	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.45 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.04	1.84

This information was generated by the HP KEYMARK database on 23 Jun 2022

WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.68 kW	1.69 kW
Annual energy consumption Qhe	3223 kWh	4056 kWh

Model: ATS10S / HU100S3

Configure model	
Model name	ATS10S / HU100S3
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	10.00 kW	9.50 kW
El input	2.00 kW	3.06 kW
COP	5.00	3.10

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

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	279 %	180 %
Prated	8.58 kW	8.63 kW
SCOP	7.12	4.58
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.44 kW	8.06 kW
COP Tj = +2°C	3.84	2.59
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.52 kW	5.55 kW
COP Tj = +7°C	6.18	4.10
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	2.62 kW	2.53 kW
COP Tj = 12°C	9.04	5.82
Cdh Tj = +12 °C	0.90	0.90

This information was generated by the HP KEYMARK database on 23 Jun 2022

Pdh Tj = Tbiv	5.52 kW	5.55 kW
COP Tj = Tbiv	6.18	4.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.44 kW	8.16 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.84	2.61
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.14 kW	0.48 kW
Annual energy consumption Qhe	1628 kWh	2516 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 23 Jun 2022

η_s	170 %	116 %
Prated	7.75 kW	6.71 kW
SCOP	4.32	2.99
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.83 kW	4.27 kW
COP Tj = -7°C	3.60	2.54
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.94 kW	2.57 kW
COP Tj = +2°C	5.26	3.51
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	1.92 kW	1.66 kW
COP Tj = +7°C	7.08	4.37
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.66 kW	1.48 kW
COP Tj = 12°C	7.96	5.96
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.32 kW	5.48 kW
COP Tj = Tbiv	2.64	2.00
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.63 kW	2.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.97	1.22

This information was generated by the HP KEYMARK database on 23 Jun 2022

WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.13 kW	3.91 kW
Annual energy consumption Q _{he}	4424 kWh	5540 kWh
P _{dh} T _j = -15°C (if TOL<-20°C)	6.32	5.48
COP T _j = -15°C (if TOL<-20°C)	2.64	2.00
C _{dh} T _j = -15 °C	0.90	0.90

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
η _s	205 %	137 %

This information was generated by the HP KEYMARK database on 23 Jun 2022

Prated	9.17 kW	7.67 kW
SCOP	5.19	3.49
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.11 kW	6.78 kW
COP Tj = -7°C	3.23	2.24
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.18 kW	4.29 kW
COP Tj = +2°C	5.01	3.42
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.32 kW	2.77 kW
COP Tj = +7°C	7.08	4.52
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.65 kW	1.58 kW
COP Tj = 12°C	8.58	5.68
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	8.11 kW	6.78 kW
COP Tj = Tbiv	3.23	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.40 kW	5.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	1.83
WTOL	65 °C	65 °C

This information was generated by the HP KEYMARK database on 23 Jun 2022

Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.76 kW	2.28 kW
Annual energy consumption Qhe	3647 kWh	4539 kWh

Model: ATM*08S*

Configure model	
Model name	ATM*08S*
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8.40 kW	7.50 kW
El input	1.63 kW	2.36 kW
COP	5.15	3.18

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

Warmer Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

EN 12102-1

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

EN 14825

	Low temperature	Medium temperature
η_s	273 %	177 %
Prated	8.12 kW	8.37 kW
SCOP	6.99	4.50
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.57 kW	7.55 kW
COP Tj = +2°C	3.98	2.59
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.22 kW	5.38 kW
COP Tj = +7°C	6.26	4.01
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.45 kW	2.32 kW
COP Tj = 12°C	9.02	5.55
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	5.22 kW	5.38 kW

This information was generated by the HP KEYMARK database on 23 Jun 2022

COP $T_j = T_{biv}$	6.26	4.01
P _{dh} $T_j = TOL$ or P _{dh} $T_j = T_{designh}$ if $TOL < T_{designh}$	7.57 kW	7.55 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	3.98	2.59
C _{dh} $T_j = TOL$ or P _{dh} $T_j = T_{designh}$ if $TOL < T_{designh}$		
WTOL	65 °C	65 °C
P _{off}	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.82 kW
Annual energy consumption Q _{he}	1569 kWh	2485 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	170 %	112 %

This information was generated by the HP KEYMARK database on 23 Jun 2022

Prated	6.98 kW	5.78 kW
SCOP	4.32	2.88
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.46 kW	3.86 kW
COP Tj = -7°C	3.66	2.48
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.70 kW	2.21 kW
COP Tj = +2°C	5.20	3.35
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	1.66 kW	1.44 kW
COP Tj = +7°C	6.53	4.11
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.66 kW	1.47 kW
COP Tj = 12°C	7.96	5.92
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	5.69 kW	4.71 kW
COP Tj = Tbiv	2.83	1.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.06 kW	2.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.95	1.22
WTOL	65 °C	65 °C

This information was generated by the HP KEYMARK database on 23 Jun 2022

Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.91 kW	2.99 kW
Annual energy consumption Qhe	3978 kWh	4950 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.69	4.71
COP Tj = -15°C (if TOL<-20°C)	2.83	1.90
Cdh Tj = -15 °C	0.90	0.90

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	205 %	132 %
Prated	8.12 kW	6.60 kW
SCOP	5.21	3.36

This information was generated by the HP KEYMARK database on 23 Jun 2022

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.19 kW	5.84 kW
COP Tj = -7°C	3.35	2.16
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	4.65 kW	3.76 kW
COP Tj = +2°C	5.09	3.30
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	2.90 kW	2.43 kW
COP Tj = +7°C	6.82	4.34
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.63 kW	1.40 kW
COP Tj = 12°C	8.35	5.33
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.19 kW	5.84 kW
COP Tj = Tbiv	3.35	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.45 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.04	1.84
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W

This information was generated by the HP KEYMARK database on 23 Jun 2022

PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.68 kW	1.69 kW
Annual energy consumption Q _{he}	3223 kWh	4056 kWh

Model: ATM*10S*

Configure model	
Model name	ATM*10S*
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	10.00 kW	9.50 kW
El input	2.02 kW	3.06 kW
COP	4.95	3.10

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

Warmer Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

EN 12102-1

	Low temperature	Medium temperature
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	279 %	180 %
Prated	8.58 kW	8.63 kW
SCOP	7.12	4.58
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.44 kW	8.06 kW
COP Tj = +2°C	3.84	2.59
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.52 kW	5.55 kW
COP Tj = +7°C	6.18	4.10
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	2.62 kW	2.53 kW
COP Tj = 12°C	9.04	5.82
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	5.52 kW	5.55 kW

This information was generated by the HP KEYMARK database on 23 Jun 2022

COP $T_j = T_{biv}$	6.18	4.10
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	8.44 kW	8.16 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	3.84	2.61
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.14 kW	0.48 kW
Annual energy consumption Q_{he}	1628 kWh	2516 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	170 %	116 %
Prated	7.75 kW	6.71 kW

This information was generated by the HP KEYMARK database on 23 Jun 2022

SCOP	4.32	2.99
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.83 kW	4.27 kW
COP Tj = -7°C	3.60	2.54
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.94 kW	2.57 kW
COP Tj = +2°C	5.26	3.51
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	1.92 kW	1.66 kW
COP Tj = +7°C	7.08	4.37
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.66 kW	1.48 kW
COP Tj = 12°C	7.96	5.96
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.32 kW	5.48 kW
COP Tj = Tbiv	2.64	2.00
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.63 kW	2.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.97	1.22
WTOL	65 °C	65 °C
Poff	14 W	14 W

This information was generated by the HP KEYMARK database on 23 Jun 2022

PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.13 kW	3.91 kW
Annual energy consumption Q _{he}	4424 kWh	5540 kWh
P _{dh} T _j = -15°C (if TOL<-20°C)	6.32	5.48
COP T _j = -15°C (if TOL<-20°C)	2.64	2.00
C _{dh} T _j = -15 °C	0.90	0.90

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	205 %	137 %
Prated	9.17 kW	7.67 kW
SCOP	5.19	3.49
T _{biv}	-7 °C	-7 °C

This information was generated by the HP KEYMARK database on 23 Jun 2022

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.11 kW	6.78 kW
COP Tj = -7°C	3.23	2.24
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.18 kW	4.29 kW
COP Tj = +2°C	5.01	3.42
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.32 kW	2.77 kW
COP Tj = +7°C	7.08	4.52
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.65 kW	1.58 kW
COP Tj = 12°C	8.58	5.68
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	8.11 kW	6.78 kW
COP Tj = Tbiv	3.23	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.40 kW	5.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	1.83
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W

This information was generated by the HP KEYMARK database on 23 Jun 2022

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.76 kW	2.28 kW
Annual energy consumption Q _{he}	3647 kWh	4539 kWh