

This information was generated by the HP KEYMARK database on 15 Mar 2021

Summary of	VWL 75/5 AS 230V	Reg. No.	40049303
Certificate Holder			
Name	Vaillant Deutschland GmbH & Co KG		
Address	Berghauser Straße 40	Zip	42859
City	Remscheid	Country	Germany
Certification Body	VDE Prüf- und Zertifizierungsinstitut GmbH		
Subtype title	VWL 75/5 AS 230V		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	2.39 kg		
Certification Date	10.03.2021		

Model: VWL 75/5 AS 230V + VWL 77/5 IS

General Data

Power supply	1x230V 50Hz
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Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	5.78 kW	4.95 kW
El input	1.26 kW	1.84 kW
COP	4.58	2.69

EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 15 Mar 2021

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	173 %	133 %
Prated	7.08 kW	6.36 kW
SCOP	4.40	3.39
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.30 kW	5.62 kW
COP Tj = -7°C	2.58	2.00
Cdh	1.00	1.00
Pdh Tj = +2°C	3.90 kW	3.31 kW
COP Tj = +2°C	4.37	3.29
Cdh	0.99	0.99
Pdh Tj = +7°C	2.72 kW	2.69 kW
COP Tj = +7°C	5.86	4.62
Cdh	0.98	0.98

This information was generated by the HP KEYMARK database on 15 Mar 2021

Pdh Tj = 12°C	3.28 kW	3.21 kW
COP Tj = 12°C	7.54	6.27
Cdh	0.98	0.98
Pdh Tj = Tbiv	6.26 kW	5.62 kW
COP Tj = Tbiv	2.57	2.00
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.66 kW	4.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.38	1.84
Cdh	1.00	1.00
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3324 kWh	3869 kWh

Warmer Climate

This information was generated by the HP KEYMARK database on 15 Mar 2021

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	239 %	159 %
Prated	4.51 kW	3.94 kW
SCOP	6.04	4.05
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.51 kW	3.94 kW
COP Tj = +2°C	3.68	2.30
Cdh	0.99	0.99
Pdh Tj = +7°C	2.81 kW	2.45 kW
COP Tj = +7°C	5.55	3.38
Cdh	0.98	0.99
Pdh Tj = 12°C	3.20 kW	3.15 kW
COP Tj = 12°C	7.35	5.43
Cdh	0.98	0.98

This information was generated by the HP KEYMARK database on 15 Mar 2021

Pdh Tj = Tbiv	4.51 kW	3.94 kW
COP Tj = Tbiv	3.68	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.51 kW	3.94 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.68	2.30
Cdh	0.99	0.99
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	997 kWh	1300 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 15 Mar 2021

η_s	156 %	117 %
Prated	6.60 kW	5.36 kW
SCOP	3.96	3.00
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	3.89 kW	3.55 kW
COP Tj = -7°C	3.51	2.53
Cdh	0.99	0.99
Pdh Tj = +2°C	2.31 kW	2.33 kW
COP Tj = +2°C	4.66	3.78
Cdh	0.98	0.98
Pdh Tj = +7°C	2.77 kW	2.77 kW
COP Tj = +7°C	6.19	6.19
Cdh	0.98	0.98
Pdh Tj = 12°C	3.20 kW	3.25 kW
COP Tj = 12°C	7.55	6.81
Cdh	0.98	0.98
Pdh Tj = Tbiv	5.39 kW	4.37 kW
COP Tj = Tbiv	2.48	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.75 kW	4.37 kW

This information was generated by the HP KEYMARK database on 15 Mar 2021

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.09	1.72
Cdh	0.99	1.00
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4106 kWh	4401 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.36	4.37
COP Tj = -15°C (if TOL<-20°C)	1.94	1.72
Cdh	0.99	1.00

Model: VWL 75/5 AS 230V + VWL 78/5 IS

General Data

Power supply	1x230V 50Hz
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Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	5.78 kW	4.95 kW
El input	1.26 kW	1.84 kW
COP	4.58	2.69

EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	44 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	173 %	133 %
Prated	7.08 kW	6.36 kW
SCOP	4.40	3.39
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.30 kW	5.62 kW
COP Tj = -7°C	2.58	2.00
Cdh	1.00	1.00
Pdh Tj = +2°C	3.90 kW	3.31 kW
COP Tj = +2°C	4.37	3.29
Cdh	0.99	0.99
Pdh Tj = +7°C	2.72 kW	2.69 kW
COP Tj = +7°C	5.86	4.62
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This information was generated by the HP KEYMARK database on 15 Mar 2021

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Pdh Tj = Tbiv	6.26 kW	5.62 kW
COP Tj = Tbiv	2.57	2.00
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.66 kW	4.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.38	1.84
Cdh	1.00	1.00
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3324 kWh	3869 kWh

Warmer Climate

This information was generated by the HP KEYMARK database on 15 Mar 2021

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	44 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	239 %	159 %
Prated	4.51 kW	3.94 kW
SCOP	6.04	4.05
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TOL	2 °C	2 °C
Pdh Tj = +2°C	4.51 kW	3.94 kW
COP Tj = +2°C	3.68	2.30
Cdh	0.99	0.99
Pdh Tj = +7°C	2.81 kW	2.45 kW
COP Tj = +7°C	5.55	3.38
Cdh	0.98	0.99
Pdh Tj = 12°C	3.20 kW	3.15 kW
COP Tj = 12°C	7.35	5.43
Cdh	0.98	0.98

This information was generated by the HP KEYMARK database on 15 Mar 2021

Pdh Tj = Tbiv	4.51 kW	3.94 kW
COP Tj = Tbiv	3.68	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.51 kW	3.94 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.68	2.30
Cdh	0.99	0.99
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	997 kWh	1300 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	44 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 15 Mar 2021

η_s	156 %	117 %
Prated	6.60 kW	5.36 kW
SCOP	3.96	3.00
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	3.89 kW	3.55 kW
COP Tj = -7°C	3.51	2.53
Cdh	0.99	0.99
Pdh Tj = +2°C	2.31 kW	2.33 kW
COP Tj = +2°C	4.66	3.78
Cdh	0.98	0.98
Pdh Tj = +7°C	2.77 kW	2.77 kW
COP Tj = +7°C	6.19	6.19
Cdh	0.98	0.98
Pdh Tj = 12°C	3.20 kW	3.25 kW
COP Tj = 12°C	7.55	6.81
Cdh	0.98	0.98
Pdh Tj = Tbiv	5.39 kW	4.37 kW
COP Tj = Tbiv	2.48	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.75 kW	4.37 kW

This information was generated by the HP KEYMARK database on 15 Mar 2021

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.09	1.72
Cdh	0.99	1.00
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4106 kWh	4401 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.36	4.37
COP Tj = -15°C (if TOL<-20°C)	1.94	1.72
Cdh	0.99	1.00

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	112 %
COP	2.73
Heating up time	01:45 h:min
Standby power input	80.0 W
Reference hot water temperature	50.7 °C
Mixed water at 40°C	246 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	134 %
COP	3.26
Heating up time	01:28 h:min
Standby power input	70.0 W
Reference hot water temperature	51.2 °C
Mixed water at 40°C	242 l

Colder Climate

This information was generated by the HP KEYMARK database on 15 Mar 2021

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	102 %
COP	2.48
Heating up time	02:03 h:min
Standby power input	90.0 W
Reference hot water temperature	46.9 °C
Mixed water at 40°C	246 l

Model: VWL 75/5 AS 230V S2 + VWL 77/5 IS

General Data

Power supply	1x230V 50Hz
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Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	5.78 kW	4.95 kW
El input	1.26 kW	1.84 kW
COP	4.58	2.69

EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	171 %	131 %
Prated	7.08 kW	6.36 kW
SCOP	4.35	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.30 kW	5.62 kW
COP Tj = -7°C	2.58	2.00
Cdh	1.00	1.00
Pdh Tj = +2°C	3.90 kW	3.31 kW
COP Tj = +2°C	4.37	3.29
Cdh	0.99	0.99
Pdh Tj = +7°C	2.72 kW	2.69 kW
COP Tj = +7°C	5.86	4.62
Cdh	0.98	0.98

This information was generated by the HP KEYMARK database on 15 Mar 2021

Pdh Tj = 12°C	3.28 kW	3.21 kW
COP Tj = 12°C	7.54	6.27
Cdh	0.98	0.98
Pdh Tj = Tbiv	6.26 kW	5.62 kW
COP Tj = Tbiv	2.57	2.00
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.66 kW	4.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.38	1.84
Cdh	1.00	1.00
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3364 kWh	3909 kWh

Warmer Climate

This information was generated by the HP KEYMARK database on 15 Mar 2021

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	228 %	153 %
Prated	4.51 kW	3.94 kW
SCOP	5.76	3.90
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.51 kW	3.94 kW
COP Tj = +2°C	3.68	2.30
Cdh	0.99	0.99
Pdh Tj = +7°C	2.81 kW	2.45 kW
COP Tj = +7°C	5.55	3.38
Cdh	0.98	0.99
Pdh Tj = 12°C	3.20 kW	3.15 kW
COP Tj = 12°C	7.35	5.43
Cdh	0.98	0.98

This information was generated by the HP KEYMARK database on 15 Mar 2021

Pdh Tj = Tbiv	4.51 kW	3.94 kW
COP Tj = Tbiv	3.68	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.51 kW	3.94 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.68	2.30
Cdh	0.99	0.99
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1045 kWh	1349 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 15 Mar 2021

η_s	155 %	116 %
Prated	6.60 kW	5.36 kW
SCOP	3.94	2.98
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	3.89 kW	3.55 kW
COP Tj = -7°C	3.51	2.53
Cdh	0.99	0.99
Pdh Tj = +2°C	2.31 kW	2.33 kW
COP Tj = +2°C	4.66	3.78
Cdh	0.98	0.98
Pdh Tj = +7°C	2.77 kW	2.77 kW
COP Tj = +7°C	6.19	6.19
Cdh	0.98	0.98
Pdh Tj = 12°C	3.20 kW	3.25 kW
COP Tj = 12°C	7.55	6.81
Cdh	0.98	0.98
Pdh Tj = Tbiv	5.39 kW	4.37 kW
COP Tj = Tbiv	2.48	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.75 kW	4.37 kW

This information was generated by the HP KEYMARK database on 15 Mar 2021

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.09	1.72
Cdh	0.99	1.00
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4130 kWh	4425 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.39	4.37
COP Tj = -15°C (if TOL<-20°C)	2.48	1.72
Cdh	1.00	1.00

Model: VWL 75/5 AS 230V S2 + VWL 78/5 IS

General Data

Power supply	1x230V 50Hz
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Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	5.78 kW	4.95 kW
El input	1.26 kW	1.84 kW
COP	4.58	2.69

EN 14511-4

Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

Average Climate

This information was generated by the HP KEYMARK database on 15 Mar 2021

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	44 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	171 %	131 %
Prated	7.08 kW	6.36 kW
SCOP	4.35	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.30 kW	5.62 kW
COP Tj = -7°C	2.58	2.00
Cdh	1.00	1.00
Pdh Tj = +2°C	3.90 kW	3.31 kW
COP Tj = +2°C	4.37	3.29
Cdh	0.99	0.99
Pdh Tj = +7°C	2.72 kW	2.69 kW
COP Tj = +7°C	5.86	4.62
Cdh	0.98	0.98

This information was generated by the HP KEYMARK database on 15 Mar 2021

Pdh Tj = 12°C	3.28 kW	3.21 kW
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Cdh	0.98	0.98
Pdh Tj = Tbiv	6.26 kW	5.62 kW
COP Tj = Tbiv	2.57	2.00
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.66 kW	4.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.38	1.84
Cdh	1.00	1.00
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3364 kWh	3909 kWh

Warmer Climate

This information was generated by the HP KEYMARK database on 15 Mar 2021

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	44 dB(A)
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EN 14825

	Low temperature	Medium temperature
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SCOP	5.76	3.90
Tbiv	2 °C	2 °C
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Pdh Tj = +7°C	2.81 kW	2.45 kW
COP Tj = +7°C	5.55	3.38
Cdh	0.98	0.99
Pdh Tj = 12°C	3.20 kW	3.15 kW
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Cdh	0.98	0.98

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Pdh Tj = Tbiv	4.51 kW	3.94 kW
COP Tj = Tbiv	3.68	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.51 kW	3.94 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.68	2.30
Cdh	0.99	0.99
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1045 kWh	1349 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	44 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825		
	Low temperature	Medium temperature

This information was generated by the HP KEYMARK database on 15 Mar 2021

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SCOP	3.94	2.98
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TOL	-20 °C	-15 °C
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COP Tj = -7°C	3.51	2.53
Cdh	0.99	0.99
Pdh Tj = +2°C	2.31 kW	2.33 kW
COP Tj = +2°C	4.66	3.78
Cdh	0.98	0.98
Pdh Tj = +7°C	2.77 kW	2.77 kW
COP Tj = +7°C	6.19	6.19
Cdh	0.98	0.98
Pdh Tj = 12°C	3.20 kW	3.25 kW
COP Tj = 12°C	7.55	6.81
Cdh	0.98	0.98
Pdh Tj = Tbiv	5.39 kW	4.37 kW
COP Tj = Tbiv	2.48	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.75 kW	4.37 kW

This information was generated by the HP KEYMARK database on 15 Mar 2021

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.09	1.72
Cdh	0.99	1.00
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4130 kWh	4425 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.39	4.37
COP Tj = -15°C (if TOL<-20°C)	2.48	1.72
Cdh	1.00	1.00

Domestic Hot Water (DHW)

Average Climate

This information was generated by the HP KEYMARK database on 15 Mar 2021

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	112 %
COP	2.73
Heating up time	01:45 h:min
Standby power input	80.0 W
Reference hot water temperature	50.7 °C
Mixed water at 40°C	246 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	134 %
COP	3.26
Heating up time	01:28 h:min
Standby power input	70.0 W
Reference hot water temperature	51.2 °C
Mixed water at 40°C	242 l

Colder Climate

This information was generated by the HP KEYMARK database on 15 Mar 2021

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	102 %
COP	2.48
Heating up time	02:03 h:min
Standby power input	90.0 W
Reference hot water temperature	46.9 °C
Mixed water at 40°C	246 l