

Page 1 of 93 This information was generated by the HP KEYMARK database on 28 Sep 2022

La alta	5 ,		•
<u>Login</u> Summary of	VWL 45/7.2 AS 230V S3 / VWL 65/7.2 AS230V S3	Reg. No.	011-1W0553
Certificate Holder		1	1
Name	Vaillant Deutschland GmbH & Co KG		
Address	Berghauser Straße 40	Zip	42859
City	Remscheid	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Subtype title	VWL 45/7.2 AS 230V S3 / VWL 65/7.2 AS230V S3		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	1 kg		
Certification Date	26.09.2022		
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 10 (as of 2022-06)		

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com



Page 68 of 93 This information was generated by the HP KEYMARK database on 28 Sep 2022

Model: VWL 65/7.2 AS 230V S3 + VWL 107/7.2 IS

Configure model		
Model name	VWL 65/7.2 AS 230V S3 + VWL 107/7.2 IS	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility Yes		
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C	

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2				
Low temperature Medium temperature				
Heat output	6.07 kW	6.09 kW		
El input	1.20 kW	1.85 kW		
СОР	5.05	3.28		

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

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com



EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	1.79 kW	1.39 kW
Cooling capacity	5.14	5.90
EER	2.87	4.25

EN 14825

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com



Page 70 of 93 This information was generated by the HP KEYMARK database on 28 Sep 2022

	+7°C/+12°C	+18°C/+23°C
Pdesignc	5.22 kW	5.71 kW
SEER	4.68	7.24
Pdc Tj = 35°C	5.22 kW	5.71 kW
EER Tj = 35°C	2.81	4.30
Cdc Tj = 35 °C	1.000	1.000
Pdc Tj = 30°C	3.99 kW	4.07 kW
EER Tj = 30°C	3.58	5.93
Cdc Tj = 30 °C	0.987	1.000
Pdc Tj = 25°C	2.35 kW	3.31 kW
EER Tj = 25°C	5.42	8.58
Cdc Tj = 25 °C	0.967	0.963
Pdc Tj = 20°C	2.71 kW	3.58 kW
EER Tj = 20°C	7.71	11.87
Cdc Tj = 20 °C	0.959	0.953
Poff	12 W	12 W
РТО	6 W	6 W
PSB	12 W	12 W
РСК	0 W	0 W
Annual energy consumption Qce	669 kWh	473 kWh

Warmer Climate

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

	Medium temperature 156 %
	156 %
.81 kW	
	4.57 kW
.83	3.97
°C	2 °C
°C	2 °C
81 kW	4.57 kW
.30	2.20
.00	1.00
.10 kW	2.75 kW
.63	3.54
.99	0.99
82 kW	2.61 kW
.65	4.89
.99	0.99
	10 kW 63 99 82 kW 65

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com



Page 72 of 93 an 2022

This information was genera	ted by the HP KEYMAF	RK database on 28 Sep 2022
Pdh Tj = Tbiv	4.81 kW	4.57 kW
COP Tj = Tbiv	3.30	2.20
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.81 kW	4.57 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.30	2.20
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	12 W	12 W
РТО	6 W	6 W
PSB	12 W	12 W
РСК	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	1102 kWh	1536 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	41 dB(A)	41 dB(A)	
Sound power level outdoor	63 dB(A)	63 dB(A)	

EN 14825

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com



Page 73 of 93 This information was generated by the HP KEYMARK database on 28 Sep 2022

	Low temperature	Medium temperature
η _s	147 %	101 %
Prated	4.48 kW	3.95 kW
SCOP	3.75	2.61
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	2.74 kW	2.51 kW
COP Tj = -7°C	2.86	1.97
Cdh Tj = -7 °C	0.99	1.00
Pdh Tj = +2°C	2.26 kW	2.00 kW
COP Tj = +2°C	5.04	3.50
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.68 kW	2.68 kW
COP Tj = +7°C	6.36	4.82
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	2.83 kW	2.73 kW
COP Tj = 12°C	6.79	5.79
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	3.66 kW	3.22 kW
COP Tj = Tbiv	2.09	1.51
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.99 kW	3.22 kW

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com



COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 1.70 1.51 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 1.00 1.00 60 °C WTOL 60 °C Poff 12 W 12 W PTO 6 W 6 W PSB 12 W 12 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 4.48 kW 3.95 kW Annual energy consumption Qhe 2949 kWh 3733 kWh Pdh Tj = -15° C (if TOL< -20° C) 3.66 3.22 COP Tj = -15° C (if TOL< -20° C) 2.09 1.51 Cdh Tj = -15 °C 1.00 1.00

This information was generated by the HP KEYMARK database on 28 Sep 2022

Page 74 of 93

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com

Disclaimer: this document is a summary of the certified performance.

The authoritative source of this information is the heat pump certificate as executed by the certification body and the related technical data.



Page 75 of 93 This information was generated by the HP KEYMARK database on 28 Sep 2022

	Low temperature	Medium temperature
η _s	181 %	136 %
Prated	5.01 kW	5.21 kW
SCOP	4.61	3.46
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.43 kW	4.61 kW
COP Tj = -7°C	3.06	2.20
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	2.81 kW	2.81 kW
COP Tj = +2°C	4.46	3.43
Cdh Tj = +2 °C	0.99	1.00
Pdh Tj = +7°C	2.74 kW	2.42 kW
COP Tj = +7°C	6.25	4.45
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.01 kW	2.68 kW
COP Tj = 12°C	6.44	5.53
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	4.43 kW	4.61 kW
COP Tj = Tbiv	3.06	2.20
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.04 kW	3.99 kW

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com



COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 2.69 1.58 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 1.00 1.00 WTOL 60 °C 60 °C 12 W Poff 12 W PTO 6 W 6 W PSB 12 W 12 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0.97 kW 1.22 kW Annual energy consumption Qhe 2246 kWh 3109 kWh

This information was generated by the HP KEYMARK database on 28 Sep 2022

Page 76 of 93



 $$\mathrm{Page}\ 77\ of\ 93$$ This information was generated by the HP KEYMARK database on 28 Sep 2022

Model: VWL 65/7.2 AS 230V S3 + VWL 107/7.2 IS S1

Configure model		
Model name	VWL 65/7.2 AS 230V S3 + VWL 107/7.2 IS S1	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Warmer Climate	
Reversibility Yes		
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C	

General Data	
Power supply 1x230V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	6.07 kW	6.09 kW
El input	1.20 kW	1.85 kW
СОР	5.05	3.28

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

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com



EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	1.79 kW	1.39 kW
Cooling capacity	5.14	5.90
EER	2.87	4.25

EN 14825

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com



Page 79 of 93 This information was generated by the HP KEYMARK database on 28 Sep 2022

	+7°C/+12°C	+18°C/+23°C
Pdesignc	5.22 kW	5.71 kW
SEER	4.68	7.24
Pdc Tj = 35°C	5.22 kW	5.71 kW
EER Tj = 35°C	2.81	4.30
Cdc Tj = 35 °C	1.000	1.000
Pdc Tj = 30°C	3.99 kW	4.07 kW
EER Tj = 30°C	3.58	5.93
Cdc Tj = 30 °C	0.987	1.000
Pdc Tj = 25°C	2.35 kW	3.31 kW
EER Tj = 25°C	5.42	8.58
Cdc Tj = 25 °C	0.967	0.963
Pdc Tj = 20°C	2.71 kW	3.58 kW
EER Tj = 20°C	7.71	11.87
Cdc Tj = 20 °C	0.959	0.953
Poff	12 W	12 W
РТО	6 W	6 W
PSB	12 W	12 W
РСК	0 W	0 W
Annual energy consumption Qce	669 kWh	473 kWh

Warmer Climate

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
η _s	230 %	156 %
Prated	4.81 kW	4.57 kW
SCOP	5.83	3.97
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.81 kW	4.57 kW
COP Tj = +2°C	3.30	2.20
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	3.10 kW	2.75 kW
COP Tj = +7°C	5.63	3.54
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	2.82 kW	2.61 kW
COP Tj = 12°C	6.65	4.89
Cdh Tj = +12 °C	0.990	0.990

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com



Page 81 of 93

This information was	generated by the HP KEY	MARK database on 28 Sep 2022
----------------------	-------------------------	------------------------------

Pdh Tj = Tbiv	4.81 kW	4.57 kW
COP Tj = Tbiv	3.30	2.20
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.81 kW	4.57 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.30	2.20
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	60 °C	60 °C
Poff	12 W	12 W
РТО	6 W	6 W
PSB	12 W	12 W
РСК	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1102 kWh	1536 kWh

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	38 dB(A)	38 dB(A)	
Sound power level outdoor	63 dB(A)	63 dB(A)	

EN 14825

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com



Page 82 of 93 This information was generated by the HP KEYMARK database on 28 Sep 2022

	Low temperature	Medium temperature
η _s	182 %	136 %
Prated	4.04 kW	3.99 kW
SCOP	4.62	3.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.43 kW	4.61 kW
COP Tj = -7°C	3.06	2.20
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.81 kW	2.81 kW
COP Tj = +2°C	4.46	3.43
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	2.74 kW	2.42 kW
COP Tj = +7°C	6.25	4.45
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	3.01 kW	2.68 kW
COP Tj = 12°C	6.44	5.53
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	4.04 kW	3.99 kW
COP Tj = Tbiv	2.69	1.58
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.04 kW	3.99 kW

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com



COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 2.69 1.58 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 1.000 1.000 WTOL 60 °C 60 °C 12 W Poff 12 W PTO 6 W 6 W PSB 12 W 12 W PCK 0 W 0 W Supplementary Heater: Type of energy input n/a n/a Supplementary Heater: PSUP 0.00 kW 0.00 kW Annual energy consumption Qhe 1804 kWh 2375 kWh

This information was generated by the HP KEYMARK database on 28 Sep 2022

Page 83 of 93