Login

Summary of	VWL 45/7.2 AS 230V S3 / VWL 65/7.2 AS230V S3	Reg. No.	011-1W0553
Certificate Holder			
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)		

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
COP	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

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

	+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
PTO	6 W	6 W
PSB	12 W	12 W
PCK	0 W	0 W
Annual energy consumption Qce	669 kWh	473 kWh

Warmer 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		
	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	1.00	1.00
Pdh Tj = +7°C	3.10 kW	2.75 kW
COP Tj = +7°C	5.63	3.54
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	2.82 kW	2.61 kW
COP Tj = 12°C	6.65	4.89
Cdh Tj = +12 °C	0.99	0.99

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
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	0.00 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

	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

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
WTOL	60 °C	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

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

	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

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
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	0.97 kW	1.22 kW
Annual energy consumption Qhe	2246 kWh	3109 kWh

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
COP	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

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

	+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
PTO	6 W	6 W
PSB	12 W	12 W
PCK	0 W	0 W
Annual energy consumption Qce	669 kWh	473 kWh

Warmer 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

	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

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
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	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

	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

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
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	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1804 kWh	2375 kWh