Login

Summary of	VWL 85/7.2 AS 230V S3 / VWL 105/7.2 AS 230V S3	Reg. No.	011-1W0554
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 85/7.2 AS 230V S3 / VWL 105/7.2 AS 230V S3		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	1.6 kg		
Certification Date	26.09.2022		
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 10 (as of 2022-06)		

Model: VWL 105/7.2 AS 230V S3 + VWL 107/7.2 IS

Configure model	
Model name	VWL 105/7.2 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	9.85 kW	7.40 kW
El input	2.11 kW	2.32 kW
COP	4.68	3.19

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	3.00 kW	1.90 kW
Cooling capacity	7.32	7.16
EER	2.44	3.76

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	7.69 kW	8.44 kW
SEER	3.97	5.94
Pdc Tj = 35°C	7.69 kW	8.44 kW
EER Tj = 35°C	2.39	3.61
Cdc Tj = 35 °C	1.000	1.000
Pdc Tj = 30°C	5.34 kW	5.98 kW
EER Tj = 30°C	3.43	5.01
Cdc Tj = 30 °C	1.000	1.000
Pdc Tj = 25°C	3.32 kW	4.48 kW
EER Tj = 25°C	4.44	6.84
Cdc Tj = 25 °C	0.975	0.972
Pdc Tj = 20°C	3.65 kW	4.82 kW
EER Tj = 20°C	5.50	8.57
Cdc Tj = 20 °C	0.972	0.967
Poff	15 W	15 W
PTO	20 W	20 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	1161 kWh	853 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	225 %	162 %
Prated	8.03 kW	7.39 kW
SCOP	5.71	4.12
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.03 kW	7.39 kW
COP Tj = +2°C	3.35	2.08
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	5.51 kW	5.16 kW
COP Tj = +7°C	5.21	3.50
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	5.41 kW	5.40 kW
COP Tj = 12°C	7.05	5.55
Cdh Tj = +12 °C	0.97	0.98

Pdh Tj = Tbiv	8.03 kW	7.39 kW
COP Tj = Tbiv	3.35	2.08
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.03 kW	7.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.35	2.08
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	20 W	20 W
PSB	15 W	15 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	1878 kWh	2396 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	144 %	106 %
Prated	6.86 kW	8.14 kW
SCOP	3.69	2.72
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	4.31 kW	4.73 kW
COP Tj = -7°C	3.00	2.20
Cdh Tj = -7 °C	0.99	1.00
Pdh Tj = +2°C	3.62 kW	3.34 kW
COP Tj = +2°C	4.54	3.48
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	4.44 kW	4.42 kW
COP Tj = +7°C	6.02	5.02
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.08 kW	5.18 kW
COP Tj = 12°C	7.37	5.62
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	5.60 kW	6.64 kW
COP Tj = Tbiv	2.20	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.80 kW	6.64 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.09	1.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	20 W	20 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.86 kW	8.14 kW
Annual energy consumption Qhe	4587 kWh	7362 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.60	6.64
COP Tj = -15°C (if TOL<-20°C)	2.20	1.72
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	178 %	130 %
Prated	7.75 kW	8.35 kW
SCOP	4.51	3.34
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.86 kW	7.38 kW
COP Tj = -7°C	2.80	2.24
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	4.10 kW	4.39 kW
COP Tj = +2°C	4.43	3.10
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	4.47 kW	4.45 kW
COP Tj = +7°C	6.09	4.51
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.12 kW	5.34 kW
COP Tj = 12°C	7.95	6.07
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	6.86 kW	7.38 kW
COP Tj = Tbiv	2.80	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.08 kW	7.07 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.40	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	20 W	20 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.67 kW	1.28 kW
Annual energy consumption Qhe	3548 kWh	5170 kWh

Model: VWL 105/7.2 AS 230V S3 + VWL 107/7.2 IS S1

Configure model	
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Units	Indoor + Outdoor
Climate Zone	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C

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Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1878 kWh	2396 kWh

Average Climate

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EN 14825

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COP Tj = -7°C	2.80	2.24
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.10 kW	4.39 kW
COP Tj = +2°C	4.43	3.10
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Pdh Tj = 12°C	5.12 kW	5.34 kW
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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.08 kW	7.07 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.40	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	20 W	20 W
PSB	15 W	15 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	2787 kWh	4379 kWh