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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	
СОР	4.68	3.19	

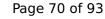
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

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	

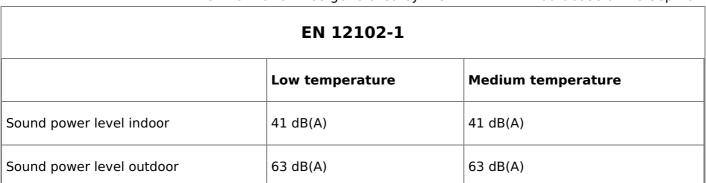




Time illustration was gener	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.69 kW	8.44 kW
SEER	3.97	5.94
Pdc Tj = 35°C	7.69 kW	8.44 kW
EER Tj = 35°C	2.39	3.61
Cdc Tj = 35 °C	1.000	1.000
Pdc Tj = 30°C	5.34 kW	5.98 kW
EER Tj = 30°C	3.43	5.01
Cdc Tj = 30 °C	1.000	1.000
Pdc Tj = 25°C	3.32 kW	4.48 kW
EER Tj = 25°C	4.44	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
РТО	20 W	20 W
PSB	15 W	15 W
PCK	o w	0 W
Annual energy consumption Qce	1161 kWh	853 kWh

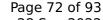
Warmer Climate





CEN heat pump

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
$COP Tj = +7^{\circ}C$	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

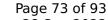




Pdh Tj = Tbiv	8.03 kW	7.39 kW
COP Tj = Tbiv	3.35	2.08
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.03 kW	7.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.35	2.08
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	20 W	20 W
PSB	15 W	15 W
PCK	o w	o 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)





	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
$COPTj = +7^{\circ}C$	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

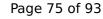




2.09	1.72
1.00	1.00
60 °C	60 °C
15 W	15 W
20 W	20 W
15 W	15 W
o w	0 W
Electricity	Electricity
6.86 kW	8.14 kW
4587 kWh	7362 kWh
5.60	6.64
2.20	1.72
1.00	1.00
	1.00 60 °C 15 W 20 W 15 W 0 W Electricity 6.86 kW 4587 kWh 5.60 2.20

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)	





This information was gener	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 = $+7^{\circ}$ C	4.47 kW	4.45 kW
$COP Tj = +7^{\circ}C$	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
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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
РТО	20 W	20 W
PSB	15 W	15 W
PCK	o 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		
Model name VWL 105/7.2 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		

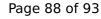
General Data		
Power supply 1x230V 50Hz		

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	9.85 kW	7.40 kW	
El input	2.11 kW	2.32 kW	
СОР	4.68	3.19	

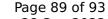
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

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





This information was generated by the HP KEYMARK database on 28 Sep 2022 +7°C/+12°C +18°C/+23°C 7.69 kW 8.44 kW **Pdesignc SEER** 3.97 5.94 $Pdc Tj = 35^{\circ}C$ 7.69 kW 8.44 kW 2.39 3.61 EER Tj = 35°C Cdc Tj = 35 °C1.000 1.000 5.34 kW $Pdc Tj = 30^{\circ}C$ 5.98 kW EER Tj = 30°C 3.43 5.01 Cdc Tj = 30 °C1.000 1.000 $Pdc Tj = 25^{\circ}C$ 3.32 kW 4.48 kW EER Tj = 25°C 4.44 6.84 Cdc Tj = 25 °C1.000 0.972 3.65 kW $Pdc Tj = 20^{\circ}C$ 4.82 kW 5.50 8.57 EER Tj = 20°C Cdc Tj = 20 °C0.972 0.967 Poff 15 W 15 W PTO 20 W 20 W **PSB** 15 W 15 W **PCK** 0 W 0 W

Warmer Climate

Annual energy consumption Qce

1161 kWh

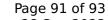
853 kWh





EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 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	1.000	1.000
Pdh Tj = +7°C	5.51 kW	5.16 kW
COP Tj = +7°C	5.21	3.50
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	5.41 kW	5.40 kW
COP Tj = 12°C	7.05	5.55
Cdh Tj = +12 °C	0.970	0.980

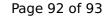




Pdh Tj = Tbiv	8.03 kW	7.39 kW
COP Tj = Tbiv	3.35	2.08
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.03 kW	7.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.35	2.08
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	20 W	20 W
PSB	15 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	1878 kWh	2396 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)





.77 % 5.08 kW 5.51 10 °C 10 °C 5.86 kW	130 % 7.07 kW 3.33 -10 °C -10 °C 7.38 kW
6.51 10 °C 10 °C 5.86 kW	3.33 -10 °C -10 °C 7.38 kW
10 °C 10 °C 5.86 kW	-10 °C -10 °C 7.38 kW
10 °C 5.86 kW	-10 °C 7.38 kW
5.86 kW	7.38 kW
2.80	2.24
0.990	0.990
.10 kW	4.39 kW
·.43	3.10
0.980	0.990
.47 kW	4.45 kW
5.09	4.51
0.970	0.980
5.12 kW	5.34 kW
7.95	6.07
).970	0.980
5.08 kW	7.07 kW
2.40	1.98
5.08 kW	7.07 kW
	10 kW 13 980 17 kW 99 970 12 kW 95 970 08 kW



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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	o 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