

Subtype VWL 85/3 A 230V

Certificate Holder	Vaillant Deutschland GmbH & Co KG
Address	Berghauser Straße 40
ZIP	42859
City	Remscheid
Country	DE
Certification Body	VDE Testing and Certification Institute GmbH
Subtype title	VWL 85/3 A 230V
Registration number	40045831
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	1.95 kg
Certification Date	22.02.2017

Model VWL 85/3 A 230V

Model name	VWL 85/3 A 230V
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	7.07 kW	6.34 kW
El input	1.74 kW	2.38 kW
COP	4.07	2.66

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	60 dB(A)	60 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	153 %	120 %
Prated	6.45 kW	3.73 kW
SCOP	3.90	3.07
Tbiv	-7 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.71 kW	3.25 kW
COP Tj = -7°C	2.34	1.99
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	3.57 kW	2.22 kW
COP Tj = +2°C	3.83	2.91
Cdh Tj = +2 °C	0.990	0.990

Pdh Tj = +7°C	2.98 kW	2.81 kW
COP Tj = +7°C	5.10	4.02
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	3.54 kW	3.49 kW
COP Tj = 12°C	6.70	5.69
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	5.71 kW	3.73 kW
COP Tj = Tbiv	2.34	1.76
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	3.73 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.76
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	63 °C	63 °C
Poff	4 W	4 W
PTO	4 W	4 W
PSB	5 W	5 W
PCK	6 W	6 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.94 kW	0.00 kW
Annual energy consumption Qhe	3420 kWh	2508 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	60 dB(A)	60 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	208 %	152 %
Prated	6.94 kW	5.49 kW
SCOP	5.27	3.87
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.94 kW	5.49 kW
COP Tj = +2°C	2.75	2.08
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.58 kW	3.65 kW
COP Tj = +7°C	4.84	3.29
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.49 kW	3.27 kW
COP Tj = 12°C	6.35	5.03
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	6.94 kW	5.49 kW
COP Tj = Tbiv	2.75	2.08

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.94 kW	5.49 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.75	2.08
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	63 °C	63 °C
Poff	4 W	4 W
PTO	4 W	4 W
PSB	5 W	5 W
PCK	6 W	6 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1760 kWh	1894 kWh