

Subtype VWL 85/7.2 AS 230V S3 / VWL 105/7.2 AS 230V S3

Certificate Holder	Vaillant Deutschland GmbH & Co KG
Address	Berghauser Straße 40
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Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	VWL 85/7.2 AS 230V S3 / VWL 105/7.2 AS 230V S3
Registration number	011-1W0554
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 85/7.2 AS 230V S3 + VWL 108/7.2 IS

Model name	VWL 85/7.2 AS 230V S3 + VWL 108/7.2 IS
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

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

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	98.5 %
COP	2.36
Heating up time	00:54 h:min
Standby power input	39.0 W
Reference hot water temperature	51.53 °C
Mixed water at 40°C	236.2 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	83 %
COP	2.00
Heating up time	00:57 h:min
Standby power input	40.9 W
Reference hot water temperature	51.45 °C
Mixed water at 40°C	235.28 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	113.9 %
COP	2.72
Heating up time	00:51 h:min
Standby power input	34.9 W
Reference hot water temperature	51.68 °C
Mixed water at 40°C	236.73 l

Model VWL 85/7.2 AS 230V S3 + VWL 108/7.2 IS S5

Model name	VWL 85/7.2 AS 230V S3 + VWL 108/7.2 IS S5
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

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

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	98.5 %
COP	2.36
Heating up time	00:54 h:min
Standby power input	39.0 W
Reference hot water temperature	51.53 °C
Mixed water at 40°C	236.2 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	83 %
COP	2.00
Heating up time	00:57 h:min
Standby power input	40.9 W
Reference hot water temperature	51.45 °C
Mixed water at 40°C	235.28 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	113.9 %
COP	2.72
Heating up time	00:51 h:min
Standby power input	34.9 W
Reference hot water temperature	51.68 °C
Mixed water at 40°C	236.73 l

Model VWL 85/7.2 AS 230V S3 + VWL 107/7.2 IS

Model name	VWL 85/7.2 AS 230V S3 + VWL 107/7.2 IS
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
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 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
η_s	175 %	131 %
Prated	7.46 kW	7.68 kW
SCOP	4.46	3.34
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.60 kW	6.80 kW
COP Tj = -7°C	2.84	2.16
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	3.89 kW	4.12 kW
COP Tj = +2°C	4.46	3.26
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	4.40 kW	4.31 kW
COP Tj = +7°C	5.72	4.29
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.08 kW	5.16 kW
COP Tj = 12°C	7.39	5.81
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	6.60 kW	6.80 kW

COP Tj = Tbiv	2.84	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.75 kW	6.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.45	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	1.71 kW	1.18 kW
Annual energy consumption Qhe	3457 kWh	4755 kWh

EN 12102-1 | Colder Climate

	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 | Colder Climate

	Low temperature	Medium temperature
η_s	145 %	109 %
Prated	7.74 kW	8.13 kW
SCOP	3.71	2.81
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	4.97 kW	4.50 kW
COP Tj = -7°C	3.05	2.31
Cdh Tj = -7 °C	0.99	1.00
Pdh Tj = +2°C	3.38 kW	3.71 kW
COP Tj = +2°C	4.40	3.65
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	4.57 kW	4.37 kW
COP Tj = +7°C	6.37	4.73
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.06 kW	5.02 kW
COP Tj = 12°C	7.71	6.07
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	6.31 kW	6.63 kW
COP Tj = Tbiv	2.50	1.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.25 kW	6.63 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.94	1.73

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	7.74 kW	8.13 kW
Annual energy consumption Qhe	5141 kWh	7129 kWh
Pdh Tj = -15°C (if TOL	6.31	6.63
COP Tj = -15°C (if TOL	2.50	1.73
Cdh Tj = -15 °C	1.00	1.00

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	Low temperature	Medium temperature
η_s	225 %	156 %
Prated	8.03 kW	7.02 kW
SCOP	5.71	3.96
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.03 kW	7.02 kW
COP Tj = +2°C	3.35	2.16
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	5.51 kW	4.73 kW
COP Tj = +7°C	5.21	3.40
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	5.41 kW	5.27 kW
COP Tj = 12°C	7.05	5.22
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	8.03 kW	7.02 kW
COP Tj = Tbiv	3.35	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.03 kW	7.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.35	2.16
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 Q _{he}	1878 kWh	2367 kWh

Model VWL 85/7.2 AS 230V S3 + VWL 107/7.2 IS S1

Model name	VWL 85/7.2 AS 230V S3 + VWL 107/7.2 IS S1
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer, Warmer Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
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 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
η_s	175 %	130 %
Prated	5.75 kW	6.51 kW
SCOP	4.45	3.33
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.60 kW	6.80 kW
COP Tj = -7°C	2.84	2.16
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.89 kW	4.12 kW
COP Tj = +2°C	4.46	3.26
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.40 kW	4.31 kW
COP Tj = +7°C	5.72	4.29
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	5.08 kW	5.16 kW
COP Tj = 12°C	7.39	5.81
Cdh Tj = +12 °C	0.970	0.980

Pdh Tj = Tbiv	5.75 kW	6.51 kW
COP Tj = Tbiv	2.45	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.75 kW	6.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.45	1.72
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	2669 kWh	4032 kWh

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	Low temperature	Medium temperature
η_s	225 %	156 %
Prated	8.03 kW	7.02 kW
SCOP	5.71	3.96
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.03 kW	7.02 kW
COP Tj = +2°C	3.35	2.16
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	5.51 kW	4.73 kW
COP Tj = +7°C	5.21	3.40
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	5.41 kW	5.27 kW
COP Tj = 12°C	7.05	5.22
Cdh Tj = +12 °C	0.970	0.980
Pdh Tj = Tbiv	8.03 kW	7.02 kW
COP Tj = Tbiv	3.35	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.03 kW	7.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.35	2.16
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	2367 kWh

Model VWL 85/7.2 AS 230V S3 + VWL 108/7.2 IS C2

Model name	VWL 85/7.2 AS 230V S3 + VWL 108/7.2 IS C2
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

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

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	98.5 %
COP	2.36
Heating up time	00:54 h:min
Standby power input	39.0 W
Reference hot water temperature	51.53 °C
Mixed water at 40°C	236.2 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	83 %
COP	2.00
Heating up time	00:57 h:min
Standby power input	40.9 W
Reference hot water temperature	51.45 °C
Mixed water at 40°C	235.28 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	113.9 %
COP	2.72
Heating up time	00:51 h:min
Standby power input	34.9 W
Reference hot water temperature	51.68 °C
Mixed water at 40°C	236.73 l

Model VWL 105/7.2 AS 230V S3 + VWL 108/7.2 IS

Model name	VWL 105/7.2 AS 230V S3 + VWL 108/7.2 IS
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

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

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	98.5 %
COP	2.36
Heating up time	00:54 h:min
Standby power input	39.0 W
Reference hot water temperature	51.53 °C
Mixed water at 40°C	236.2 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	83 %
COP	2.00
Heating up time	00:57 h:min
Standby power input	40.9 W
Reference hot water temperature	51.45 °C
Mixed water at 40°C	235.28 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	113.9 %
COP	2.72
Heating up time	00:51 h:min
Standby power input	34.9 W
Reference hot water temperature	51.68 °C
Mixed water at 40°C	236.73 l

Model VWL 105/7.2 AS 230V S3 + VWL 108/7.2 IS S5

Model name	VWL 105/7.2 AS 230V S3 + VWL 108/7.2 IS S5
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

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

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	98.5 %
COP	2.36
Heating up time	00:54 h:min
Standby power input	39.0 W
Reference hot water temperature	51.53 °C
Mixed water at 40°C	236.2 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	83 %
COP	2.00
Heating up time	00:57 h:min
Standby power input	40.9 W
Reference hot water temperature	51.45 °C
Mixed water at 40°C	235.28 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	113.9 %
COP	2.72
Heating up time	00:51 h:min
Standby power input	34.9 W
Reference hot water temperature	51.68 °C
Mixed water at 40°C	236.73 l

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

Model name	VWL 105/7.2 AS 230V S3 + VWL 107/7.2 IS
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
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 12102-1 | Average Climate

	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 | Average Climate

	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

EN 12102-1 | Colder Climate

	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 | Colder Climate

	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	5.60	6.64
COP Tj = -15°C (if TOL	2.20	1.72
Cdh Tj = -15 °C	1.00	1.00

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	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 Q _{he}	1878 kWh	2396 kWh

Model VWL 105/7.2 AS 230V S3 + VWL 108/7.2 IS C2

Model name	VWL 105/7.2 AS 230V S3 + VWL 108/7.2 IS C2
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

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

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	98.5 %
COP	2.36
Heating up time	00:54 h:min
Standby power input	39.0 W
Reference hot water temperature	51.53 °C
Mixed water at 40°C	236.2 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	83 %
COP	2.00
Heating up time	00:57 h:min
Standby power input	40.9 W
Reference hot water temperature	51.45 °C
Mixed water at 40°C	235.28 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	113.9 %
COP	2.72
Heating up time	00:51 h:min
Standby power input	34.9 W
Reference hot water temperature	51.68 °C
Mixed water at 40°C	236.73 l

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

Model name	VWL 105/7.2 AS 230V S3 + VWL 107/7.2 IS S1
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer, Warmer Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
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 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
η_s	177 %	130 %
Prated	6.08 kW	7.07 kW
SCOP	4.51	3.33
Tbiv	-10 °C	-10 °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	0.990	0.990
Pdh Tj = +2°C	4.10 kW	4.39 kW
COP Tj = +2°C	4.43	3.10
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	4.47 kW	4.45 kW
COP Tj = +7°C	6.09	4.51
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	5.12 kW	5.34 kW
COP Tj = 12°C	7.95	6.07
Cdh Tj = +12 °C	0.970	0.980

Pdh Tj = Tbiv	6.08 kW	7.07 kW
COP Tj = Tbiv	2.40	1.98
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

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	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