

Subtype VWL 45/7.2 AS 230V S3 / VWL 65/7.2 AS230V S3

Certificate Holder	Vaillant Deutschland GmbH & Co KG
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Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	VWL 45/7.2 AS 230V S3 / VWL 65/7.2 AS230V S3
Registration number	011-1W0553
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 45/7.2 AS 230V S3 + VWL 108/7.2 IS

Model name	VWL 45/7.2 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
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}	110.1 %
COP	2.65
Heating up time	01:05 h:min
Standby power input	31.0 W
Reference hot water temperature	51.3 °C
Mixed water at 40°C	235.37 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	89.3 %
COP	2.16
Heating up time	01:10 h:min
Standby power input	33.7 W
Reference hot water temperature	51.06 °C
Mixed water at 40°C	233.99 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	131.3 %
COP	3.14
Heating up time	01:00 h:min
Standby power input	29.1 W
Reference hot water temperature	51.6 °C
Mixed water at 40°C	237.7 l

Model VWL 45/7.2 AS 230V S3 + VWL 108/7.2 IS S5

Model name	VWL 45/7.2 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}	110.1 %
COP	2.65
Heating up time	01:05 h:min
Standby power input	31.0 W
Reference hot water temperature	51.3 °C
Mixed water at 40°C	235.37 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	89.3 %
COP	2.16
Heating up time	01:10 h:min
Standby power input	33.7 W
Reference hot water temperature	51.06 °C
Mixed water at 40°C	233.99 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	131.3 %
COP	3.14
Heating up time	01:00 h:min
Standby power input	29.1 W
Reference hot water temperature	51.6 °C
Mixed water at 40°C	237.7 l

Model VWL 45/7.2 AS 230V S3 + VWL 107/7.2 IS

Model name	VWL 45/7.2 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	182 %	133 %
Prated	4.75 kW	5.09 kW
SCOP	4.62	3.41
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.20 kW	4.50 kW
COP Tj = -7°C	3.08	2.19
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	2.66 kW	2.76 kW
COP Tj = +2°C	4.51	3.35
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.72 kW	2.46 kW
COP Tj = +7°C	6.19	4.45
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.01 kW	2.65 kW
COP Tj = 12°C	6.46	5.38
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	4.20 kW	4.50 kW

COP Tj = Tbiv	3.08	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.67 kW	3.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.54	1.60
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	1.08 kW	1.71 kW
Annual energy consumption Qhe	2126 kWh	3084 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 %	102 %
Prated	4.12 kW	3.68 kW
SCOP	3.71	2.63
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	2.58 kW	2.26 kW
COP Tj = -7°C	2.88	1.97
Cdh Tj = -7 °C	0.99	1.00
Pdh Tj = +2°C	2.20 kW	2.09 kW
COP Tj = +2°C	4.80	3.58
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.74 kW	2.72 kW
COP Tj = +7°C	6.40	4.79
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	2.80 kW	2.69 kW
COP Tj = 12°C	6.64	5.61
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	3.36 kW	3.00 kW
COP Tj = Tbiv	2.20	1.58
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.72 kW	3.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.74	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	4.12 kW	3.68 kW
Annual energy consumption Qhe	2742 kWh	3440 kWh
Pdh Tj = -15°C (if TOL	3.36	3.00
COP Tj = -15°C (if TOL	2.20	1.58
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	4.42 kW	4.27 kW
SCOP	5.71	3.97
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.42 kW	4.27 kW
COP Tj = +2°C	3.49	2.17
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	2.57 kW	2.75 kW
COP Tj = +7°C	5.53	3.54
Cdh Tj = +7 °C	1.00	0.99
Pdh Tj = 12°C	2.76 kW	2.61 kW
COP Tj = 12°C	6.45	4.89
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	4.42 kW	4.27 kW
COP Tj = Tbiv	3.49	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.42 kW	4.27 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.49	2.17
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 Q _{he}	1033 kWh	1438 kWh

Model VWL 45/7.2 AS 230V S3 + VWL 107/7.2 IS S1

Model name	VWL 45/7.2 AS 230V S3 + VWL 107/7.2 IS S1
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer, Warmer Climate
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	38 dB(A)	38 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	182 %	134 %
Prated	3.67 kW	3.37 kW
SCOP	4.63	3.41
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.20 kW	4.50 kW
COP Tj = -7°C	3.08	2.19
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.66 kW	2.76 kW
COP Tj = +2°C	4.51	3.35
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	2.72 kW	2.46 kW
COP Tj = +7°C	6.19	4.45
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	3.01 kW	2.65 kW
COP Tj = 12°C	6.46	5.38
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	3.67 kW	3.37 kW

COP Tj = Tbiv	2.54	1.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.67 kW	3.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.54	1.60
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	1635 kWh	2042 kWh

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	Low temperature	Medium temperature
η_s	225 %	156 %
Prated	4.42 kW	4.39 kW
SCOP	5.71	3.97
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.42 kW	4.39 kW
COP Tj = +2°C	3.49	2.21
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.57 kW	2.75 kW
COP Tj = +7°C	5.53	3.54
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.76 kW	2.61 kW
COP Tj = 12°C	6.45	4.89
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	4.42 kW	4.39 kW
COP Tj = Tbiv	3.49	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.42 kW	4.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.49	2.21
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	1033 kWh	1477 kWh

Model VWL 45/7.2 AS 230V S3 + VWL 108/7.2 IS C2

Model name	VWL 45/7.2 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}	110.1 %
COP	2.65
Heating up time	01:05 h:min
Standby power input	31.0 W
Reference hot water temperature	51.3 °C
Mixed water at 40°C	235.37 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	89.3 %
COP	2.16
Heating up time	01:10 h:min
Standby power input	33.7 W
Reference hot water temperature	51.06 °C
Mixed water at 40°C	233.99 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	131.3 %
COP	3.14
Heating up time	01:00 h:min
Standby power input	29.1 W
Reference hot water temperature	51.6 °C
Mixed water at 40°C	237.7 l

Model VWL 65/7.2 AS 230V S3 + VWL 108/7.2 IS

Model name	VWL 65/7.2 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}	110.1 %
COP	2.65
Heating up time	01:05 h:min
Standby power input	31.0 W
Reference hot water temperature	51.3 °C
Mixed water at 40°C	235.37 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	89.3 %
COP	2.16
Heating up time	01:10 h:min
Standby power input	33.7 W
Reference hot water temperature	51.06 °C
Mixed water at 40°C	233.99 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	131.3 %
COP	3.14
Heating up time	01:00 h:min
Standby power input	29.1 W
Reference hot water temperature	51.6 °C
Mixed water at 40°C	237.7 l

Model VWL 65/7.2 AS 230V S3 + VWL 108/7.2 IS S5

Model name	VWL 65/7.2 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}	110.1 %
COP	2.65
Heating up time	01:05 h:min
Standby power input	31.0 W
Reference hot water temperature	51.3 °C
Mixed water at 40°C	235.37 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	89.3 %
COP	2.16
Heating up time	01:10 h:min
Standby power input	33.7 W
Reference hot water temperature	51.06 °C
Mixed water at 40°C	233.99 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	131.3 %
COP	3.14
Heating up time	01:00 h:min
Standby power input	29.1 W
Reference hot water temperature	51.6 °C
Mixed water at 40°C	237.7 l

Model VWL 65/7.2 AS 230V S3 + VWL 107/7.2 IS

Model name	VWL 65/7.2 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	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

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	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	3.66	3.22
COP Tj = -15°C (if TOL	2.09	1.51
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	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 Q _{he}	1102 kWh	1536 kWh

Model VWL 65/7.2 AS 230V S3 + VWL 107/7.2 IS S1

Model name	VWL 65/7.2 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	38 dB(A)	38 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825 | Average Climate

	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

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	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

Model VWL 65/7.2 AS 230V S3 + VWL 108/7.2 IS C2

Model name	VWL 65/7.2 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}	110.1 %
COP	2.65
Heating up time	01:05 h:min
Standby power input	31.0 W
Reference hot water temperature	51.3 °C
Mixed water at 40°C	235.37 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	89.3 %
COP	2.16
Heating up time	01:10 h:min
Standby power input	33.7 W
Reference hot water temperature	51.06 °C
Mixed water at 40°C	233.99 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	131.3 %
COP	3.14
Heating up time	01:00 h:min
Standby power input	29.1 W
Reference hot water temperature	51.6 °C
Mixed water at 40°C	237.7 l