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#### **Login**

Summary of	VWL 35/5 AS 230V / VWL 55/5 AS 230V	Reg. No.	40049302	
Certificate Holder				
Name Vaillant Deutschland GmbH & Co KG				
Address	Berghauser Straße 40	Zip	42859	
City	Remscheid	Country	Germany	
Certification Body	VDE Prüf- und Zertifizierungsinstitut GmbH			
Subtype title	VWL 35/5 AS 230V / VWL 55/5 AS 230V			
Heat Pump Type	Outdoor Air/Water			
Refrigerant	R410A			
Mass of Refrigerant	1.5 kg			
Certification Date	10.03.2021			



## Model: VWL 35/5 AS 230V + VWL 57/5 IS

Configure model		
Model name	VWL 35/5 AS 230V + VWL 57/5 IS	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

## Heating

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	

EN 14511-2			
Low temperature Medium temperature			
Heat output	3.13 kW	2.73 kW	
El input	0.64 kW	1.05 kW	
СОР	4.89	2.62	

### Warmer Climate



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	41 dB(A)	41 dB(A)	
Sound power level outdoor	51 dB(A)	53 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	253 %	156 %
Prated	3.76 kW	3.31 kW
SCOP	6.41	3.98
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.76 kW	3.31 kW
COP Tj = +2°C	3.69	2.24
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.25 kW	2.06 kW
COP Tj = +7°C	5.81	3.36
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	2.70 kW	2.41 kW
COP Tj = 12°C	8.08	5.31
Cdh Tj = +12 °C	0.97	0.98





Pdh Tj = Tbiv	3.76 kW	3.31 kW
COP Tj = Tbiv	3.69	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.76 kW	3.31 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.69	2.24
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	783 kWh	1111 kWh

### Colder Climate

EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	41 dB(A)	41 dB(A)	
Sound power level outdoor	51 dB(A)	53 dB(A)	



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	Low temperature	Medium temperature
$\eta_{S}$	155 %	107 %
Prated	3.91 kW	2.82 kW
SCOP	3.96	2.76
Tbiv	-13 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = $-7$ °C	2.36 kW	1.78 kW
COP Tj = $-7^{\circ}$ C	3.44	2.32
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = $+2$ °C	1.96 kW	1.70 kW
$COP Tj = +2^{\circ}C$	4.80	3.54
Cdh Tj = $+2$ °C	0.980	0.980
Pdh Tj = $+7^{\circ}$ C	2.34 kW	2.09 kW
$COP Tj = +7^{\circ}C$	6.54	4.79
Cdh Tj = $+7$ °C	0.970	0.980
Pdh Tj = 12°C	2.68 kW	2.43 kW
COP Tj = 12°C	8.00	6.07
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	2.99 kW	2.30 kW
COP Tj = Tbiv	2.80	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.22 kW	2.30 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.91 kW	2.82 kW
Annual energy consumption Qhe	2439 kWh	2517 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.22	2.30
COP Tj = -15°C (if TOL $<$ -20°C)	2.17	1.72
Cdh Tj = -15 °C	0.990	0.990

## Average Climate

EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	41 dB(A)	41 dB(A)	
Sound power level outdoor	51 dB(A)	53 dB(A)	





	Low temperature	Medium temperature
$\eta_{s}$	185 %	130 %
Prated	4.00 kW	3.51 kW
SCOP	4.70	3.33
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.54 kW	3.10 kW
COP Tj = -7°C	3.19	2.08
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.18 kW	2.04 kW
COP Tj = +2°C	4.50	3.26
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.32 kW	2.02 kW
COP Tj = +7°C	6.15	4.36
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	2.74 kW	2.44 kW
COP Tj = 12°C	8.42	5.86
Cdh Tj = +12 °C	0.970	0.980
Pdh Tj = Tbiv	3.54 kW	3.10 kW
COP Tj = Tbiv	3.19	2.08
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.24 kW	2.75 kW



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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	1.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.76 kW	0.76 kW
Annual energy consumption Qhe	1758 kWh	2177 kWh

## Model: VWL 35/5 AS 230V + VWL 58/5 IS

Configure model		
Model name	VWL 35/5 AS 230V + VWL 58/5 IS	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

## Heating

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	

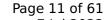
EN 14511-2		
	Low temperature	Medium temperature
Heat output	3.13 kW	2.73 kW
El input	0.64 kW	1.05 kW
СОР	4.89	2.62

### Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	51 dB(A)	53 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	253 %	156 %
Prated	3.76 kW	3.31 kW
SCOP	6.41	3.98
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.76 kW	3.31 kW
COP Tj = +2°C	3.69	2.24
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.25 kW	2.06 kW
COP Tj = +7°C	5.81	3.36
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	2.70 kW	2.41 kW
COP Tj = 12°C	8.08	5.31
Cdh Tj = +12 °C	0.97	0.98

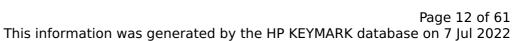




Pdh Tj = Tbiv	3.76 kW	3.31 kW
COP Tj = Tbiv	3.69	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.76 kW	3.31 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.69	2.24
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 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	783 kWh	1111 kWh

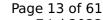
### Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	44 dB(A)	44 dB(A)	
Sound power level outdoor	51 dB(A)	53 dB(A)	





	Low temperature	Medium temperature
$\eta_{s}$	155 %	107 %
Prated	3.91 kW	2.82 kW
SCOP	3.96	2.76
Tbiv	-13 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	2.36 kW	1.78 kW
COP Tj = -7°C	3.44	2.32
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	1.96 kW	1.70 kW
COP Tj = +2°C	4.80	3.54
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.34 kW	2.09 kW
$COP Tj = +7^{\circ}C$	6.54	4.79
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	2.68 kW	2.43 kW
COP Tj = 12°C	8.00	6.07
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	2.99 kW	2.30 kW
COP Tj = Tbiv	2.80	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.22 kW	2.30 kW

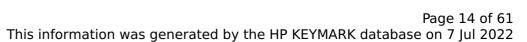




COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.91 kW	2.82 kW
Annual energy consumption Qhe	2439 kWh	2517 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.22	2.30
COP Tj = -15°C (if TOL $<$ -20°C)	2.17	1.72
Cdh Tj = -15 °C	0.990	0.990

## Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	51 dB(A)	53 dB(A)





	Low temperature	Medium temperature
$\eta_{S}$	185 %	130 %
Prated	4.00 kW	3.51 kW
SCOP	4.70	3.33
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = $-7^{\circ}$ C	3.54 kW	3.10 kW
$COPTj = -7^{\circ}C$	3.19	2.08
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = $+2$ °C	2.18 kW	2.04 kW
$COP Tj = +2^{\circ}C$	4.50	3.26
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = $+7^{\circ}$ C	2.32 kW	2.02 kW
$COP Tj = +7^{\circ}C$	6.15	4.36
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	2.74 kW	2.44 kW
COP Tj = 12°C	8.42	5.86
Cdh Tj = +12 °C	0.970	0.980
Pdh Tj = Tbiv	3.54 kW	3.10 kW
COP Tj = Tbiv	3.19	2.08
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.24 kW	2.75 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	1.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.76 kW	0.76 kW
Annual energy consumption Qhe	1758 kWh	2177 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	120 %	
СОР	2.88	
Heating up time	02:06 h:min	
Standby power input	80.0 W	
Reference hot water temperature	50.5 °C	
Mixed water at 40°C	242 I	



### Colder Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	106 %	
СОР	2.55	
Heating up time	03:00 h:min	
Standby power input	80.0 W	
Reference hot water temperature	46.9 °C	
Mixed water at 40°C	246	

## Average Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	102 %	
СОР	2.45	
Heating up time	02:32 h:min	
Standby power input	80.0 W	
Reference hot water temperature	50.7 °C	
Mixed water at 40°C	246	



## Model: VWL 35/5 AS 230V S2 + VWL 57/5 IS

Configure model		
Model name VWL 35/5 AS 230V S2 + VWL 57/5 IS		
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

## Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

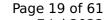
EN 14511-2		
	Low temperature	Medium temperature
Heat output	3.13 kW	2.73 kW
El input	0.64 kW	1.05 kW
СОР	4.89	2.62

### Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	51 dB(A)	53 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	238 %	150 %
Prated	3.76 kW	3.31 kW
SCOP	6.04	3.81
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.76 kW	3.31 kW
COP Tj = +2°C	3.69	2.24
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.25 kW	2.06 kW
COP Tj = +7°C	5.81	3.36
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	2.70 kW	2.41 kW
COP Tj = 12°C	8.08	5.31
Cdh Tj = +12 °C	0.97	0.98

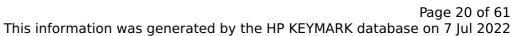




Pdh Tj = Tbiv	3.76 kW	3.31 kW
COP Tj = Tbiv	3.69	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.76 kW	3.31 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.69	2.24
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 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	831 kWh	1159 kWh

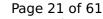
### Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	41 dB(A)	41 dB(A)	
Sound power level outdoor	51 dB(A)	53 dB(A)	





	Low temperature	Medium temperature
$\eta_{S}$	154 %	106 %
Prated	3.91 kW	2.82 kW
SCOP	3.92	2.73
Tbiv	-13 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = $-7$ °C	2.36 kW	1.78 kW
COP Tj = $-7^{\circ}$ C	3.44	2.32
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = $+2$ °C	1.96 kW	1.70 kW
$COP Tj = +2^{\circ}C$	4.80	3.54
Cdh Tj = $+2$ °C	0.980	0.980
Pdh Tj = $+7$ °C	2.34 kW	2.09 kW
$COP Tj = +7^{\circ}C$	6.54	4.79
Cdh Tj = $+7$ °C	0.970	0.980
Pdh Tj = 12°C	2.68 kW	2.43 kW
COP Tj = 12°C	8.00	6.07
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	2.99 kW	2.30 kW
COP Tj = Tbiv	2.80	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.22 kW	2.30 kW

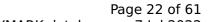




COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.91 kW	2.82 kW
Annual energy consumption Qhe	2463 kWh	2541 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.22	2.30
COP Tj = -15°C (if TOL $<$ -20°C)	2.17	1.72
Cdh Tj = -15 °C	0.990	0.990

## Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	51 dB(A)	53 dB(A)





	Low temperature	Medium temperature
$\eta_{s}$	181 %	128 %
Prated	4.00 kW	3.51 kW
SCOP	4.60	3.27
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.54 kW	3.10 kW
$COP Tj = -7^{\circ}C$	3.19	2.08
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.18 kW	2.04 kW
COP Tj = +2°C	4.50	3.26
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = $+7^{\circ}$ C	2.32 kW	2.02 kW
COP Tj = +7°C	6.15	4.36
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	2.74 kW	2.44 kW
COP Tj = 12°C	8.42	5.86
Cdh Tj = +12 °C	0.970	0.980
Pdh Tj = Tbiv	3.54 kW	3.10 kW
COP Tj = Tbiv	3.19	2.08
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.24 kW	2.75 kW



COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	1.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.76 kW	0.76 kW
Annual energy consumption Qhe	1798 kWh	2217 kWh



## Model: VWL 35/5 AS 230V S2 + VWL 58/5 IS

Configure model		
Model name	VWL 35/5 AS 230V S2 + VWL 58/5 IS	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply 1x230V 50Hz		

## Heating

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	

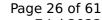
EN 14511-2		
	Low temperature	Medium temperature
Heat output	3.13 kW	2.73 kW
El input	0.64 kW	1.05 kW
СОР	4.89	2.62

### Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	51 dB(A)	53 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	238 %	150 %
Prated	3.76 kW	3.31 kW
SCOP	6.04	3.81
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.76 kW	3.31 kW
COP Tj = +2°C	3.69	2.24
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.25 kW	2.06 kW
COP Tj = +7°C	5.81	3.36
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	2.70 kW	2.41 kW
COP Tj = 12°C	8.08	5.31
Cdh Tj = +12 °C	0.97	0.98





Pdh Tj = Tbiv	3.76 kW	3.31 kW
COP Tj = Tbiv	3.69	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.76 kW	3.31 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.69	2.24
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 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	831 kWh	1159 kWh

### Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	51 dB(A)	53 dB(A)





	Low temperature	Medium temperature
$\eta_{s}$	154 %	106 %
Prated	3.91 kW	2.82 kW
SCOP	3.92	2.73
Tbiv	-13 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = $-7$ °C	2.36 kW	1.78 kW
COP Tj = $-7^{\circ}$ C	3.44	2.32
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = $+2$ °C	1.96 kW	1.70 kW
COP Tj = +2°C	4.80	3.54
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = $+7$ °C	2.34 kW	2.09 kW
$COP Tj = +7^{\circ}C$	6.54	4.79
Cdh Tj = $+7$ °C	0.970	0.980
Pdh Tj = 12°C	2.68 kW	2.43 kW
COP Tj = 12°C	8.00	6.07
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	2.99 kW	2.30 kW
COP Tj = Tbiv	2.80	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.22 kW	2.30 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.91 kW	2.82 kW
Annual energy consumption Qhe	2463 kWh	2541 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.22	2.30
COP Tj = -15°C (if TOL $<$ -20°C)	2.17	1.72
Cdh Tj = -15 °C	0.990	0.990

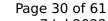
## Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	51 dB(A)	53 dB(A)





	Low temperature	Medium temperature
$\eta_{S}$	181 %	128 %
Prated	4.00 kW	3.51 kW
SCOP	4.60	3.27
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = $-7$ °C	3.54 kW	3.10 kW
$COPTj = -7^{\circ}C$	3.19	2.08
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = $+2$ °C	2.18 kW	2.04 kW
$COPTj = +2^{\circ}C$	4.50	3.26
Cdh Tj = $+2$ °C	0.980	0.980
Pdh Tj = $+7$ °C	2.32 kW	2.02 kW
$COPTj = +7^{\circ}C$	6.15	4.36
Cdh Tj = $+7$ °C	0.970	0.980
Pdh Tj = 12°C	2.74 kW	2.44 kW
COP Tj = 12°C	8.42	5.86
Cdh Tj = +12 °C	0.970	0.980
Pdh Tj = Tbiv	3.54 kW	3.10 kW
COP Tj = Tbiv	3.19	2.08
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.24 kW	2.75 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	1.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.76 kW	0.76 kW
Annual energy consumption Qhe	1798 kWh	2217 kWh

### Domestic Hot Water (DHW)

### Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	120 %
СОР	2.88
Heating up time	02:06 h:min
Standby power input	80.0 W
Reference hot water temperature	50.5 °C
Mixed water at 40°C	242 I



### Colder Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	106 %
СОР	2.55
Heating up time	03:00 h:min
Standby power input	80.0 W
Reference hot water temperature	46.9 °C
Mixed water at 40°C	246

## Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	1.02 %
СОР	2.45
Heating up time	02:32 h:min
Standby power input	80.0 W
Reference hot water temperature	50.7 °C
Mixed water at 40°C	246 I



## Model: VWL 55/5 AS 230V + VWL 58/5 IS

Configure model	
Model name	VWL 55/5 AS 230V + VWL 58/5 IS
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data		
Power supply	1x230V 50Hz	

## Heating

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	

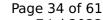
EN 14511-2			
	Low temperature	Medium temperature	
Heat output	4.42 kW	3.69 kW	
El input	0.95 kW	1.38 kW	
СОР	4.68	2.67	

### Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	53 dB(A)	54 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	253 %	156 %
Prated	3.76 kW	3.30 kW
SCOP	6.41	3.98
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.76 kW	3.30 kW
COP Tj = +2°C	3.69	2.24
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.25 kW	2.06 kW
COP Tj = +7°C	5.81	3.36
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	2.70 kW	2.41 kW
COP Tj = 12°C	8.08	5.31
Cdh Tj = +12 °C	0.97	0.98

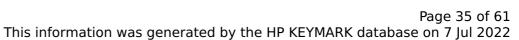




Pdh Tj = Tbiv	3.76 kW	3.30 kW
COP Tj = Tbiv	3.69	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.76 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.69	2.24
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 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	783 kWh	1108 kWh

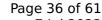
### Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	43 dB(A)	43 dB(A)	
Sound power level outdoor	53 dB(A)	54 dB(A)	





	Low temperature	Medium temperature
$\eta_{s}$	158 %	110 %
Prated	5.19 kW	4.00 kW
SCOP	4.02	2.83
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	2.96 kW	2.44 kW
COP Tj = -7°C	3.41	2.42
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	1.97 kW	1.72 kW
COP Tj = +2°C	4.87	3.56
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.36 kW	2.11 kW
COP Tj = +7°C	6.57	4.89
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	2.68 kW	2.52 kW
COP Tj = 12°C	8.00	6.71
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	4.24 kW	3.26 kW
COP Tj = Tbiv	2.42	1.68
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.30 kW	3.26 kW

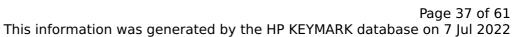




COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.11	1.68
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.19 kW	4.00 kW
Annual energy consumption Qhe	3182 kWh	3485 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.30	3.26
COP Tj = -15°C (if TOL $<$ -20°C)	2.11	1.68
Cdh Tj = -15 °C	0.990	0.990

### **Average Climate**

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	43 dB(A)	43 dB(A)	
Sound power level outdoor	53 dB(A)	54 dB(A)	





	Low temperature	Medium temperature
$\eta_{s}$	175 %	135 %
Prated	5.22 kW	5.24 kW
SCOP	4.44	3.46
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.83 kW	4.33 kW
COP Tj = -7°C	2.71	2.00
Cdh Tj = -7 °C	0.990	1.000
Pdh Tj = +2°C	2.67 kW	2.57 kW
COP Tj = +2°C	4.26	3.36
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	2.30 kW	2.09 kW
$COP Tj = +7^{\circ}C$	6.06	4.67
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	2.71 kW	2.52 kW
COP Tj = 12°C	8.39	6.41
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	4.61 kW	4.63 kW
COP Tj = Tbiv	2.64	2.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	3.72 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.32 kW	1.54 kW
Annual energy consumption Qhe	2427 kWh	3129 kWh

# Domestic Hot Water (DHW)

## Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	120 %	
СОР	2.88	
Heating up time	02:06 h:min	
Standby power input	80.0 W	
Reference hot water temperature	50.5 °C	
Mixed water at 40°C	242	



## Colder Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	106 %	
СОР	2.55	
Heating up time	03:00 h:min	
Standby power input	80.0 W	
Reference hot water temperature	46.9 °C	
Mixed water at 40°C	246 I	

# Average Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	1.02 %	
СОР	2.45	
Heating up time	02:32 h:min	
Standby power input	80.0 W	
Reference hot water temperature	50.7 °C	
Mixed water at 40°C	246 I	



# Model: VWL 55/5 AS 230V + VWL 57/5 IS

Configure model		
Model name	VWL 55/5 AS 230V + VWL 57/5 IS	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply 1x230V 50Hz		

# Heating

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	

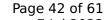
EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.42 kW	3.69 kW
El input	0.95 kW	1.38 kW
СОР	4.68	2.67

## Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	53 dB(A)	54 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	253 %	156 %
Prated	3.76 kW	3.30 kW
SCOP	6.41	3.98
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.76 kW	3.30 kW
COP Tj = +2°C	3.69	2.24
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.25 kW	2.06 kW
COP Tj = +7°C	5.81	3.36
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	2.70 kW	2.41 kW
COP Tj = 12°C	8.08	5.31
Cdh Tj = +12 °C	0.97	0.98





Pdh Tj = Tbiv	3.76 kW	3.30 kW
COP Tj = Tbiv	3.69	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.76 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.69	2.24
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 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	783 kWh	1108 kWh

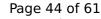
## Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	41 dB(A)	41 dB(A)	
Sound power level outdoor	53 dB(A)	54 dB(A)	





	Low temperature	Medium temperature
ης	158 %	110 %
Prated	5.19 kW	4.00 kW
SCOP	4.02	2.83
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = $-7^{\circ}$ C	2.96 kW	2.44 kW
$COP Tj = -7^{\circ}C$	3.41	2.42
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = $+2$ °C	1.97 kW	1.72 kW
COP Tj = +2°C	4.87	3.56
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = $+7^{\circ}$ C	2.36 kW	2.11 kW
$COP Tj = +7^{\circ}C$	6.57	4.89
Cdh Tj = $+7$ °C	0.970	0.980
Pdh Tj = 12°C	2.68 kW	2.52 kW
COP Tj = 12°C	8.00	6.71
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	4.24 kW	3.26 kW
COP Tj = Tbiv	2.42	1.68
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.30 kW	3.26 kW

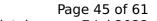




COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.11	1.68
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.19 kW	4.00 kW
Annual energy consumption Qhe	3182 kWh	3485 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.30	3.26
COP Tj = -15°C (if TOL $<$ -20°C)	2.11	1.68
Cdh Tj = -15 °C	0.990	0.990

## **Average Climate**

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	41 dB(A)	41 dB(A)	
Sound power level outdoor	53 dB(A)	54 dB(A)	





	Low temperature	Medium temperature
$\eta_{s}$	175 %	135 %
Prated	5.22 kW	5.24 kW
SCOP	4.44	3.46
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.83 kW	4.33 kW
COP Tj = -7°C	2.71	2.00
Cdh Tj = -7 °C	0.990	1.000
Pdh Tj = $+2$ °C	2.67 kW	2.57 kW
$COP Tj = +2^{\circ}C$	4.26	3.36
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	2.30 kW	2.09 kW
$COP Tj = +7^{\circ}C$	6.06	4.67
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	2.71 kW	2.52 kW
COP Tj = 12°C	8.39	6.41
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	4.61 kW	4.63 kW
COP Tj = Tbiv	2.64	2.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	3.72 kW



COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.32 kW	1.54 kW
Annual energy consumption Qhe	2427 kWh	3129 kWh



# Model: VWL 55/5 AS 230V S2 + VWL 58/5 IS

Configure model		
Model name	VWL 55/5 AS 230V S2 + VWL 58/5 IS	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

# Heating

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operacing range outdoor exchanger/indoor exchanger lower inflictiower infliction	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	

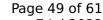
EN 14511-2			
	Low temperature	Medium temperature	
Heat output	4.42 kW	3.69 kW	
El input	0.95 kW	1.38 kW	
СОР	4.68	2.67	

## Warmer Climate



# EN 12102-1 Low temperature Medium temperature Sound power level indoor 43 dB(A) 43 dB(A) Sound power level outdoor 53 dB(A) 54 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	150 %	238 %
Prated	3.30 kW	3.76 kW
SCOP	3.81	6.04
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.30 kW	3.76 kW
COP Tj = +2°C	2.24	3.69
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.06 kW	2.25 kW
COP Tj = +7°C	3.36	5.81
Cdh Tj = +7 °C	0.98	0.97
Pdh Tj = 12°C	2.41 kW	2.70 kW
COP Tj = 12°C	5.31	8.08
Cdh Tj = +12 °C	0.98	0.97

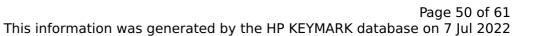




Pdh Tj = Tbiv	3.30 kW	3.76 kW
COP Tj = Tbiv	2.24	3.69
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.30 kW	3.76 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.24	3.69
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 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	1156 kWh	831 kWh

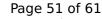
## Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	53 dB(A)	54 dB(A)





	Low temperature	Medium temperature
$\eta_{s}$	157 %	109 %
Prated	5.19 kW	4.00 kW
SCOP	3.99	2.81
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	2.96 kW	2.44 kW
COP Tj = -7°C	3.41	2.42
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	1.97 kW	1.72 kW
COP Tj = +2°C	4.87	3.56
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.36 kW	2.11 kW
COP Tj = +7°C	6.57	4.89
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	2.68 kW	2.52 kW
COP Tj = 12°C	8.00	6.71
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	4.24 kW	3.26 kW
COP Tj = Tbiv	2.42	1.68
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.30 kW	3.26 kW

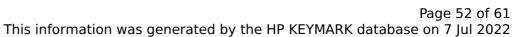




COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.11	1.68
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.19 kW	4.00 kW
Annual energy consumption Qhe	3206 kWh	3509 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.30	3.26
COP Tj = -15°C (if TOL $<$ -20°C)	2.11	1.68
Cdh Tj = -15 °C	0.990	0.990

# **Average Climate**

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	53 dB(A)	54 dB(A)





	Low temperature	Medium temperature
$\eta_{s}$	172 %	134 %
Prated	5.22 kW	5.24 kW
SCOP	4.37	3.41
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = $-7^{\circ}$ C	4.83 kW	4.33 kW
$COPTj = -7^{\circ}C$	2.71	2.00
Cdh Tj = -7 °C	0.990	1.000
Pdh Tj = $+2$ °C	2.67 kW	2.57 kW
$COPTj = +2^{\circ}C$	4.26	3.36
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = $+7$ °C	2.30 kW	2.09 kW
$COPTj = +7^{\circ}C$	6.06	4.67
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	2.71 kW	2.52 kW
COP Tj = 12°C	8.39	6.41
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	4.61 kW	4.63 kW
COP Tj = Tbiv	2.64	2.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	3.72 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.32 kW	1.54 kW
Annual energy consumption Qhe	2467 kWh	3169 kWh

# Domestic Hot Water (DHW)

## Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	120 %	
СОР	2.88	
Heating up time	02:06 h:min	
Standby power input	80.0 W	
Reference hot water temperature	50.5 °C	
Mixed water at 40°C	242 I	



## Colder Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	106 %	
СОР	2.55	
Heating up time	03:00 h:min	
Standby power input	80.0 W	
Reference hot water temperature	46.9 °C	
Mixed water at 40°C	246 I	

# Average Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	1.02 %	
СОР	2.45	
Heating up time	02:32 h:min	
Standby power input	80.0 W	
Reference hot water temperature	50.7 °C	
Mixed water at 40°C	246 I	

# Model: VWL 55/5 AS 230V S2 + VWL 57/5 IS

Configure model		
Model name	VWL 55/5 AS 230V S2 + VWL 57/5 IS	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

# Heating

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit		
Shutting off the heat transfer medium flow		
Complete power supply failure	passed	
Defrost test	passed	

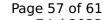
EN 14511-2				
Low temperature Medium temperature				
Heat output	4.42 kW	3.69 kW		
El input	0.95 kW	1.38 kW		
СОР	4.68	2.67		

## Warmer Climate



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	41 dB(A)	41 dB(A)	
Sound power level outdoor	53 dB(A)	54 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	150 %	238 %
Prated	3.30 kW	3.76 kW
SCOP	3.81	6.04
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.30 kW	3.76 kW
COP Tj = +2°C	2.24	3.69
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.06 kW	2.25 kW
COP Tj = +7°C	3.36	5.81
Cdh Tj = +7 °C	0.98	0.97
Pdh Tj = 12°C	2.41 kW	2.70 kW
COP Tj = 12°C	5.31	8.08
Cdh Tj = +12 °C	0.98	0.97

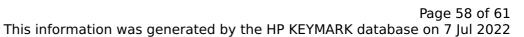




Pdh Tj = Tbiv	3.30 kW	3.76 kW
COP Tj = Tbiv	2.24	3.69
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.30 kW	3.76 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.24	3.69
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 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	1156 kWh	831 kWh

## Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	41 dB(A)	41 dB(A)	
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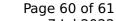




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# **Average Climate**

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PSB	11 W	11 W
PCK	0 W	0 W
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Supplementary Heater: PSUP	0.32 kW	1.54 kW
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