

Summary of	VWF 87/4	Reg. No.	40046299
Certificate Holder	-	·	
Name	Vaillant Deutschland GmbH & Co KG		
Address	Berghauser Straße 40	Zip	42859
City	Remscheid	Country	Germany
Certification Body	VDE Testing and Certification	VDE Testing and Certification Institute GmbH	
Name of testing laboratory	VDE Testing and Certification Institute GmbH		
Subtype title	VWF 87/4		
Heat Pump Type	Brine/Water		
Refrigerant	R410a		
Mass Of Refrigerant	2.4 kg		



# Model: VWF 87/4 35 & 55

General Data	
Power supply	3x400V 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	

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	8.76 kW	8.89 kW	
El input	1.74 kW	2.70 kW	
СОР	5.03	3.29	
Indoor water flow rate	1.53 m³/h	0.98 m³/h	

### Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	214 %	153 %
Prated	8.87 kW	10.00 kW
SCOP	5.54	4.04
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.86 kW	9.00 kW
COP Tj = -7°C	5.24	3.51
Pdh Tj = +2°C	8.85 kW	8.90 kW
COP Tj = +2°C	5.56	4.01
Pdh Tj = +7°C	8.84 kW	8.90 kW
COP Tj = +7°C	5.89	4.41
Pdh Tj = 12°C	8.83 kW	8.90 kW
COP Tj = 12°C	6.27	4.90
Pdh Tj = Tbiv	8.86 kW	9.00 kW
COP Tj = Tbiv	5.24	3.51





Pdh Tj = TOL	8.88 kW	9.00 kW
COP Tj = TOL	4.88	3.07
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	7 W	7 W
РТО	4 W	4 W
PSB	7 W	7 W
PCK	o w	o w
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.20 kW	1.20 kW
Annual energy consumption Qhe	3736 kWh	5189 kWh

### Warmer Climate

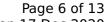
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	216 %	154 %
Prated	8.87 kW	8.99 kW





This information was generated by the HP KEYMARK database on 17 Dec 2020				
SCOP	5.60	4.06		
Tbiv	4 °C	4 °C		
TOL	-22 °C	-22 °C		
Pdh Tj = +2°C	8.87 kW	8.99 kW		
COP Tj = +2°C	5.10	3.33		
Pdh Tj = +7°C	8.85 kW	8.95 kW		
$COP Tj = +7^{\circ}C$	5.51	3.79		
Pdh Tj = 12°C	8.84 kW	8.89 kW		
COP Tj = 12°C	6.02	4.57		
Pdh Tj = Tbiv	8.86 kW	8.97 kW		
COP Tj = Tbiv	5.33	3.55		
Pdh Tj = TOL	8.87 kW	8.99 kW		
COP Tj = TOL	5.10	3.33		
Cdh	0.99	0.99		
WTOL	65 °C	65 °C		
Poff	7 W	7 W		
РТО	4 W	4 W		
PSB	7 W	7 W		
PCK	0 W	0 W		
Supplementary Heater: Type of energy input	electricity	electricity		
Supplementary Heater: PSUP	1.20 kW	1.20 kW		
	,			





Annual energy consumption Qhe	2468 kWh	3442 kWh	
-------------------------------	----------	----------	--

### Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	220 %	157 %
Prated	8.87 kW	8.99 kW
SCOP	5.71	4.13
Tbiv	-17 °C	-17 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.85 kW	8.94 kW
COP Tj = -7°C	5.63	3.91
Pdh Tj = +2°C	5.58 kW	8.91 kW
COP Tj = +2°C	5.92	4.34
Pdh Tj = +7°C	8.83 kW	8.89 kW
COP Tj = +7°C	6.16	4.75
Pdh Tj = 12°C	8.83 kW	8.87 kW



# $$\operatorname{\textit{Page}}\ 7$$ of 13 This information was generated by the HP KEYMARK database on 17 Dec 2020

	<u> </u>	
COP Tj = 12°C	6.21	5.11
Pdh Tj = Tbiv	8.86 kW	8.97 kW
COP Tj = Tbiv	5.33	3.55
Pdh Tj = TOL	8.86 kW	8.96 kW
COP Tj = TOL	5.39	3.62
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	4 W	4 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.20 kW	1.20 kW
Annual energy consumption Qhe	4404 kWh	6160 kWh



# Model: VWF 88/4 35 & 55

General Data	
Power supply	3x400V 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	

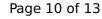
EN 14511-2			
	Low temperature	Medium temperature	
Heat output	8.76 kW	8.89 kW	
El input	1.74 kW	2.70 kW	
СОР	5.03	3.29	
Indoor water flow rate	1.53 m³/h	0.98 m³/h	

### Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	214 %	153 %
Prated	8.87 kW	10.00 kW
SCOP	5.54	4.04
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.86 kW	9.00 kW
COP Tj = -7°C	5.24	3.51
Pdh Tj = +2°C	8.85 kW	8.90 kW
COP Tj = +2°C	5.56	4.01
Pdh Tj = +7°C	8.84 kW	8.90 kW
COP Tj = +7°C	5.89	4.41
Pdh Tj = 12°C	8.83 kW	8.90 kW
COP Tj = 12°C	6.27	4.90
Pdh Tj = Tbiv	8.86 kW	9.00 kW
COP Tj = Tbiv	5.24	3.51



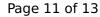


	<u> </u>	
Pdh Tj = TOL	8.88 kW	9.00 kW
COP Tj = TOL	4.88	3.07
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	7 W	7 W
РТО	4 W	4 W
PSB	7 W	7 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.20 kW	1.20 kW
Annual energy consumption Qhe	3736 kWh	5189 kWh

### Warmer Climate

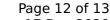
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825		
Low temperature	Medium temperature	
216 %	154 %	
8.87 kW	8.99 kW	
	Low temperature 216 %	





	,	With database on 17 Bee 202
SCOP	5.60	4.06
Tbiv	4 °C	4 °C
TOL	-22 °C	-22 °C
Pdh Tj = +2°C	8.87 kW	8.99 kW
COP Tj = +2°C	5.10	3.33
Pdh Tj = +7°C	8.85 kW	8.95 kW
$COP Tj = +7^{\circ}C$	5.51	3.79
Pdh Tj = 12°C	8.84 kW	8.89 kW
COP Tj = 12°C	6.02	4.57
Pdh Tj = Tbiv	8.86 kW	8.97 kW
COP Tj = Tbiv	5.33	3.55
Pdh Tj = TOL	8.86 kW	8.99 kW
COP Tj = TOL	5.33	3.33
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	7 W	7 W
РТО	4 W	4 W
PSB	7 W	7 W
РСК	o w	o w
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.20 kW	1.20 kW





Annual energy consumption Qhe	2468 kWh	3442 kWh

### Colder Climate

EN 12102-1				
	Low temperature	Medium temperature		
Sound power level indoor	50 dB(A)	50 dB(A)		

EN 14825			
	Low temperature	Medium temperature	
$\eta_{s}$	220 %	157 %	
Prated	8.87 kW	8.99 kW	
SCOP	5.71	4.13	
Tbiv	-17 °C	-17 °C	
TOL	-22 °C	-22 °C	
Pdh Tj = -7°C	8.85 kW	8.94 kW	
COP Tj = -7°C	5.63	3.91	
Pdh Tj = +2°C	5.58 kW	8.91 kW	
COP Tj = +2°C	5.92	4.34	
Pdh Tj = +7°C	8.83 kW	8.89 kW	
COP Tj = +7°C	6.16	4.75	
Pdh Tj = 12°C	8.83 kW	8.87 kW	



# $$\operatorname{\textit{Page}}\ 13$$ of 13 This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = 12°C	6.21	5.11
Pdh Tj = Tbiv	8.86 kW	8.97 kW
COP Tj = Tbiv	5.34	3.55
Pdh Tj = TOL	8.86 kW	8.96 kW
COP Tj = TOL	5.39	3.62
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	7 W	7 W
РТО	4 W	4 W
PSB	7 W	7 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.20 kW	1.20 kW
Annual energy consumption Qhe	4404 kWh	6160 kWh