

This information was generated by the HP KEYMARK database on 7 Jul 2022

[Login](#)

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 Institute GmbH		
Subtype title	VWF 87/4		
Heat Pump Type	Brine/Water		
Refrigerant	R410A		
Mass of Refrigerant	2.4 kg		
Certification Date	28.04.2021		
Testing basis	DIN EN 14511-1:2019-07; EN 14511-1:2018 DIN EN 14511-2:2019-07; EN 14511-2:2018 DIN EN 14511-3:2019-07; EN 14511-3:2018 DIN EN 14511-4:2019-07; EN 14511-4:2018 DIN EN 12102-1:2018-02; EN 12102-1:2017		

Model: VWF 87/4

Configure model	
Model name	VWF 87/4
Application	Heating (medium temp)
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

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
Defrost test	passed

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8.82 kW	8.94 kW
El input	1.82 kW	2.78 kW
COP	4.84	3.22

Warmer Climate

This information was generated by the HP KEYMARK database on 7 Jul 2022

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	50 dB(A)
Sound power level outdoor	- dB(A)	- dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	205 %	148 %
Prated	8.82 kW	8.94 kW
SCOP	5.32	3.89
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.82 kW	8.94 kW
COP Tj = +2°C	4.84	3.22
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	8.81 kW	8.91 kW
COP Tj = +7°C	5.14	3.59
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	8.79 kW	8.85 kW
COP Tj = 12°C	5.63	4.33
Cdh Tj = +12 °C	1.00	1.00

This information was generated by the HP KEYMARK database on 7 Jul 2022

Pdh Tj = Tbiv	8.82 kW	8.94 kW
COP Tj = Tbiv	4.84	3.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.82 kW	8.94 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.84	3.22
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	2215 kWh	3069 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	50 dB(A)
Sound power level outdoor	- dB(A)	- dB(A)

EN 14825

This information was generated by the HP KEYMARK database on 7 Jul 2022

	Low temperature	Medium temperature
η_s	207 %	149 %
Prated	8.82 kW	8.94 kW
SCOP	5.38	3.94
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.81 kW	8.90 kW
COP Tj = -7°C	5.25	3.70
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	8.79 kW	8.87 kW
COP Tj = +2°C	5.54	4.11
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	8.79 kW	8.84 kW
COP Tj = +7°C	5.77	4.50
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	8.78 kW	8.82 kW
COP Tj = 12°C	5.83	4.84
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	8.82 kW	8.94 kW
COP Tj = Tbiv	4.84	3.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.82 kW	8.94 kW

This information was generated by the HP KEYMARK database on 7 Jul 2022

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.84	3.22
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	4041 kWh	5600 kWh
Cdh Tj = -15 °C	1.00	1.00

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	50 dB(A)
Sound power level outdoor	- dB(A)	- dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	202 %	147 %

This information was generated by the HP KEYMARK database on 7 Jul 2022

Prated	8.82 kW	8.94 kW
SCOP	5.26	3.86
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.82 kW	8.93 kW
COP Tj = -7°C	4.90	3.33
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	8.81 kW	8.89 kW
COP Tj = +2°C	5.21	3.81
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	8.80 kW	8.86 kW
COP Tj = +7°C	5.52	4.19
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	8.78 kW	8.83 kW
COP Tj = 12°C	5.87	4.65
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	8.82 kW	8.94 kW
COP Tj = Tbiv	4.84	3.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.82 kW	8.94 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.84	3.22
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00

This information was generated by the HP KEYMARK database on 7 Jul 2022

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	0.00 kW	0.00 kW
Annual energy consumption Qhe	3469 kWh	4781 kWh

Model: VWF 88/4

Configure model	
Model name	VWF 88/4
Application	Heating (medium temp)
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

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
Defrost test	passed

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8.82 kW	8.94 kW
El input	1.82 kW	2.78 kW
COP	4.84	3.22

Warmer Climate

This information was generated by the HP KEYMARK database on 7 Jul 2022

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	50 dB(A)
Sound power level outdoor	- dB(A)	- dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	205 %	148 %
Prated	8.82 kW	8.94 kW
SCOP	5.32	3.89
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.82 kW	8.94 kW
COP Tj = +2°C	4.84	3.22
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	8.81 kW	8.91 kW
COP Tj = +7°C	5.14	3.59
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	8.79 kW	8.85 kW
COP Tj = 12°C	5.63	4.33
Cdh Tj = +12 °C	1.00	1.00

This information was generated by the HP KEYMARK database on 7 Jul 2022

Pdh Tj = Tbiv	8.82 kW	8.94 kW
COP Tj = Tbiv	4.84	3.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.82 kW	8.94 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.84	3.22
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	2215 kWh	3069 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	50 dB(A)
Sound power level outdoor	- dB(A)	- dB(A)

EN 14825

This information was generated by the HP KEYMARK database on 7 Jul 2022

	Low temperature	Medium temperature
η_s	207 %	149 %
Prated	8.82 kW	8.94 kW
SCOP	5.38	3.94
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.81 kW	8.90 kW
COP Tj = -7°C	5.25	3.70
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	8.79 kW	8.87 kW
COP Tj = +2°C	5.54	4.11
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	8.79 kW	8.84 kW
COP Tj = +7°C	5.77	4.50
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	8.78 kW	8.82 kW
COP Tj = 12°C	5.83	4.84
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	8.82 kW	8.94 kW
COP Tj = Tbiv	4.84	3.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.82 kW	8.94 kW

This information was generated by the HP KEYMARK database on 7 Jul 2022

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.84	3.22
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	4041 kWh	5600 kWh
Cdh Tj = -15 °C	1.00	1.00

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	50 dB(A)
Sound power level outdoor	- dB(A)	- dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	202 %	147 %

This information was generated by the HP KEYMARK database on 7 Jul 2022

Prated	8.82 kW	8.94 kW
SCOP	5.26	3.86
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.82 kW	8.93 kW
COP Tj = -7°C	4.90	3.33
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	8.81 kW	8.89 kW
COP Tj = +2°C	5.21	3.81
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	8.80 kW	8.86 kW
COP Tj = +7°C	5.52	4.19
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	8.78 kW	8.83 kW
COP Tj = 12°C	5.87	4.65
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	8.82 kW	8.94 kW
COP Tj = Tbiv	4.84	3.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.82 kW	8.94 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.84	3.22
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00

This information was generated by the HP KEYMARK database on 7 Jul 2022

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	0.00 kW	0.00 kW
Annual energy consumption Qhe	3469 kWh	4781 kWh