

This information was generated by the HP KEYMARK database on 17 Dec 2020

Summary of	VWF 197/4	Reg. No.	40046302
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		
Name of testing laboratory	VDE Testing and Certification Institute GmbH		
Subtype title	VWF 197/4		
Heat Pump Type	Brine/Water		
Refrigerant	R410a		
Mass Of Refrigerant	3.95 kg		

## Model: VWF 197/4 35 & 55

### General Data

Power supply	3x400V 50Hz
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## 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	19.52 kW	19.83 kW
El input	4.18 kW	6.12 kW
COP	4.67	3.24
Indoor water flow rate	3.32 m <sup>3</sup> /h	2.18 m <sup>3</sup> /h

## Average Climate

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### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	195 %	147 %
Prated	19.69 kW	23.00 kW
SCOP	5.07	3.88
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	19.68 kW	20.00 kW
COP Tj = -7°C	4.82	3.43
Pdh Tj = +2°C	19.64 kW	19.90 kW
COP Tj = +2°C	5.06	3.85
Pdh Tj = +7°C	19.61 kW	19.80 kW
COP Tj = +7°C	5.30	4.17
Pdh Tj = 12°C	19.58 kW	19.70 kW
COP Tj = 12°C	5.58	4.56
Pdh Tj = Tbiv	19.68 kW	20.00 kW
COP Tj = Tbiv	4.82	3.43

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Pdh Tj = TOL	19.72 kW	20.10 kW
COP Tj = TOL	4.54	3.04
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	2.60 kW	2.60 kW
Annual energy consumption Qhe	9064 kWh	12017 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	197 %	148 %
Prated	19.69 kW	20.02 kW

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SCOP	5.12	3.91
Tbiv	4 °C	4 °C
TOL	-22 °C	-22 °C
Pdh Tj = +2°C	19.69 kW	20.02 kW
COP Tj = +2°C	4.71	3.27
Pdh Tj = +7°C	19.65 kW	19.91 kW
COP Tj = +7°C	5.02	3.66
Pdh Tj = 12°C	19.60 kW	19.76 kW
COP Tj = 12°C	5.40	4.30
Pdh Tj = Tbiv	19.67 kW	19.96 kW
COP Tj = Tbiv	4.89	3.46
Pdh Tj = TOL	19.69 kW	20.02 kW
COP Tj = TOL	4.71	3.27
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	2.60 kW	2.60 kW

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Annual energy consumption Q <sub>he</sub>	5983 kWh	7962 kWh
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## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	200 %	150 %
Prated	19.69 kW	20.02 kW
SCOP	5.19	3.96
T <sub>biv</sub>	-17 °C	-17 °C
TOL	-22 °C	-22 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	19.63 kW	19.88 kW
COP T <sub>j</sub> = -7°C	5.11	3.76
P <sub>dh</sub> T <sub>j</sub> = +2°C	19.61 kW	19.80 kW
COP T <sub>j</sub> = +2°C	5.33	4.11
P <sub>dh</sub> T <sub>j</sub> = +7°C	19.59 kW	19.74 kW
COP T <sub>j</sub> = +7°C	5.50	4.44
P <sub>dh</sub> T <sub>j</sub> = 12°C	19.58 kW	19.69 kW

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COP Tj = 12°C	5.54	4.72
Pdh Tj = Tbiv	19.66 kW	19.96 kW
COP Tj = Tbiv	4.89	3.46
Pdh Tj = TOL	19.66 kW	19.95 kW
COP Tj = TOL	4.94	3.52
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	2.60 kW	2.60 kW
Annual energy consumption Qhe	10753 kWh	14322 kWh