

## Subtype VWF 117/4

Certificate Holder	Vaillant Deutschland GmbH & Co KG
Address	Berghauser Straße 40
ZIP	42859
City	Remscheid
Country	DE
Certification Body	VDE Prüf- und Zertifizierungsinstitut GmbH
Subtype title	VWF 117/4
Registration number	40046300
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	2.5 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 EN 12102-1:2018-02; EN 12102-1:2017

## Model VWF 118/4

Model name	VWF 118/4
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Colder, Warmer
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	3x400V 50Hz
Off-peak product	No

## Brine/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	45 dB(A)	47 dB(A)
Sound power level outdoor	- dB(A)	- dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	201 %	142 %
Prated	11.18 kW	11.33 kW
SCOP	5.22	3.76
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.18 kW	11.32 kW
COP Tj = -7°C	4.83	3.21
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	11.16 kW	11.26 kW
COP Tj = +2°C	5.15	3.70
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	11.14 kW	11.23 kW
COP Tj = +7°C	5.49	4.08
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	11.13 kW	11.19 kW
COP Tj = 12°C	5.87	4.56
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	11.18 kW	11.33 kW
COP Tj = Tbiv	4.77	3.10

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	11.33 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.77	3.10
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	4427 kWh	6227 kWh

#### EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	47 dB(A)
Sound power level outdoor	- dB(A)	- dB(A)

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	206 %	145 %
Prated	11.18 kW	11.33 kW
SCOP	5.35	3.83
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	11.16 kW	11.27 kW
COP Tj = -7°C	5.21	3.59
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	11.14 kW	11.23 kW
COP Tj = +2°C	5.51	4.01
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	11.13 kW	11.20 kW
COP Tj = +7°C	5.75	4.41
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	11.13 kW	11.18 kW
COP Tj = 12°C	5.82	4.76
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	11.18 kW	11.33 kW
COP Tj = Tbiv	4.77	3.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	11.33 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.77	3.10

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	5147 kWh	7285 kWh
Cdh Tj = -15 °C	1.00	1.00

#### EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	47 dB(A)
Sound power level outdoor	- dB(A)	- dB(A)

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	204 %	144 %
Prated	11.18 kW	11.33 kW
SCOP	5.29	3.79
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.18 kW	11.33 kW
COP Tj = +2°C	4.77	3.10
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	11.16 kW	11.29 kW
COP Tj = +7°C	5.08	3.47
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	11.14 kW	11.21 kW
COP Tj = 12°C	5.61	4.24
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	11.18 kW	11.33 kW
COP Tj = Tbiv	4.77	3.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.18 kW	11.33 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.77	3.10
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 Q <sub>he</sub>	2823 kWh	3994 kWh

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Units	Indoor
Climate zone (for heating)	Colder, Warmer
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	3x400V 50Hz
Off-peak product	No

## Brine/Water

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WTOL	65 °C	65 °C
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PTO	4 W	4 W
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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 <sub>he</sub>	2823 kWh	3994 kWh