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

Summary of	VITOCAL 100 A- (AF) 06/08	Reg. No.	ICIM-PDC-000085-00
Certificate Holder			
Name	Viessmann Werke Allendorf GmbH		
Address	Viessmannstraße 1	Zip	35107
City	Allendorf/Eder	Country	Germany
Certification Body	ICIM S.p.A.		
Name of testing laboratory	OBL certificates		
Subtype title	VITOCAL 100 A- (AF) 06/08		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass Of Refrigerant	1.5 kg		
Certification Date	25.06.2020		
Testing basis	HP KEYMARK certification scheme rules rev. no. 7		

Model: AWO-M-AC (AF) 101.A06

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	6.08 kW	5.74 kW
El input	1.35 kW	2.09 kW
COP	4.51	2.75
Indoor water flow rate	1.05 m³/h	0.62 m³/h

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	175 %	126 %
Prated	7.00 kW	7.00 kW
SCOP	4.46	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	6.10 kW	5.80 kW
COP Tj = -7°C	2.96	2.08
Cdh	1.00	1.00
Pdh Tj = +2°C	3.70 kW	3.60 kW
COP Tj = +2°C	4.36	3.30
Cdh	1.00	1.00
Pdh Tj = +7°C	3.20 kW	3.00 kW
COP Tj = +7°C	5.56	3.49
Cdh	0.97	0.98
Pdh Tj = 12°C	3.70 kW	3.60 kW

COP Tj = 12°C	7.88	6.49
Cdh	0.96	0.97
Pdh Tj = Tbiv	6.10 kW	5.80 kW
COP Tj = Tbiv	2.96	2.08
Pdh Tj = TOL	6.10 kW	6.00 kW
COP Tj = TOL	2.73	1.95
WTOL	60 °C	60 °C
Poff	19 W	19 W
PTO	19 W	19 W
PSB	19 W	19 W
PCK	30 W	30 W
Supplementary Heater: Type of energy input	0	0
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3179 kWh	4191 kWh

Cooling

EN 14511-2

	+7°C/+12°C
El input	1.60 kW
Indoor water flow rate	0.86 m³/h
Cooling capacity	5.02
EER	3.14

EN 14825

	+7°C/+12°C
Pdesignc	5.02 kW
SEER	4.12
Pdc Tj = 35°C	5.02 kW
EER Tj = 35°C	3.14
Pdc Tj = 30°C	3.70 kW
EER Tj = 30°C	4.03
Cdc	1.0
Pdc Tj = 25°C	2.70 kW
EER Tj = 25°C	4.80
Cdc	1.0
Pdc Tj = 20°C	2.96 kW
EER Tj = 20°C	6.10
Cdc	1.0
Poff	19 W
PTO	0 W
PSB	19 W
PCK	30 W
Annual energy consumption Qce	730 kWh

Model: AWO-M-AC (AF) 101.A08

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	7.81 kW	7.19 kW
El input	1.78 kW	2.59 kW
COP	4.38	2.77
Indoor water flow rate	1.34 m³/h	0.77 m³/h

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	176 %	128 %
Prated	7.00 kW	7.00 kW
SCOP	4.46	3.27
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	6.50 kW	6.30 kW
COP Tj = -7°C	2.95	1.91
Cdh	1.00	1.00
Pdh Tj = +2°C	4.00 kW	3.80 kW
COP Tj = +2°C	4.37	3.33
Cdh	1.00	1.00
Pdh Tj = +7°C	3.10 kW	3.10 kW
COP Tj = +7°C	5.55	3.90
Cdh	0.97	0.98
Pdh Tj = 12°C	3.70 kW	3.60 kW

COP Tj = 12°C	7.86	6.30
Cdh	0.96	0.97
Pdh Tj = Tbiv	6.50 kW	6.30 kW
COP Tj = Tbiv	2.95	1.91
Pdh Tj = TOL	6.50 kW	6.40 kW
COP Tj = TOL	2.70	1.95
WTOL	60 °C	60 °C
Poff	19 W	19 W
PTO	19 W	19 W
PSB	19 W	19 W
PCK	30 W	30 W
Supplementary Heater: Type of energy input	0	0
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3413 kWh	4496 kWh

Cooling

EN 14511-2

	+7°C/+12°C
El input	1.99 kW
Indoor water flow rate	1.05 m³/h
Cooling capacity	6.08
EER	3.05

EN 14825

	+7°C/+12°C
Pdesignc	6.08 kW
SEER	4.25
Pdc Tj = 35°C	6.08 kW
EER Tj = 35°C	3.05
Pdc Tj = 30°C	4.49 kW
EER Tj = 30°C	4.07
Cdc	1.0
Pdc Tj = 25°C	2.74 kW
EER Tj = 25°C	4.84
Cdc	1.0
Pdc Tj = 20°C	3.02 kW
EER Tj = 20°C	6.34
Cdc	1.0
Poff	19 W
PTO	0 W
PSB	19 W
PCK	19 W
Annual energy consumption Qce	857 kWh