Subtype VITOCAL 100 A- (AF) 10/12

Certificate Holder	Viessmann Climate Solutions GmbH & Co. KG
Address	Viessmannstr. 1
ZIP	35107
City	Allendorf/Eder
Country	DE
Certification Body	ICIM S.p.A.
Subtype title	VITOCAL 100 A- (AF) 10/12
Registration number	ICIM-PDC-000086
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	2.5 kg
Certification Date	25.06.2020
Testing basis	HP KEYMARK certification scheme rules rev. no. 7

Model AWO-M-AC (AF) 101.A12	
Model name	AWO-M-AC (AF) 101.A12
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/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 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	11.80 kW	10.83 kW
El input	2.73 kW	4.00 kW
COP	4.32	2.70

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.79 kW	
Cooling capacity	8.51	
EER	3.05	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	176 %	131 %
Prated	10.00 kW	10.00 kW
SCOP	4.47	3.36
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-15 °C

Pdh Tj = -7°C	8.90 kW	8.50 kW
COP Tj = -7°C	2.88	2.08
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	5.40 kW	5.20 kW
COP Tj = +2°C	4.31	3.35
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	4.30 kW	4.20 kW
COP Tj = +7°C	5.82	4.24
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	4.90 kW	4.80 kW
COP Tj = 12°C	7.81	5.31
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	8.90 kW	8.50 kW
COP Tj = Tbiv	2.88	2.08
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.80 kW	8.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.96
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	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4631 kWh	5942 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	8.51 kW	
SEER	4.25	
Pdc Tj = 35°C	8.51 kW	
EER Tj = 35°C	3.05	
Pdc Tj = 30°C	6.28 kW	
EER Tj = 30°C	4.03	
Cdc Tj = 30 °C	1.0	
Pdc Tj = 25°C	3.98 kW	
EER Tj = 25°C	4.58	
Cdc Tj = 25 °C	1.0	
Pdc Tj = 20°C	4.23 kW	
EER Tj = 20°C	6.08	
Cdc Tj = 20 °C	1.0	
Poff	19 W	
PTO	0 W	
PSB	19 W	
PCK	30 W	

Annual energy consumption Qce	1202 kWh

Model AWO-M-AC (AF) 101.A10	
Model name	AWO-M-AC (AF) 101.A10
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/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 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	10.10 kW	9.27 kW
El input	2.28 kW	3.42 kW
COP	4.43	2.71

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.39 kW	
Cooling capacity	7.53	
EER	3.15	

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

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	178 %	135 %
Prated	9.00 kW	9.00 kW
SCOP	4.53	3.45
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-15 °C

Pdh Tj = -7°C	8.30 kW	8.10 kW
COP Tj = -7°C	2.93	2.13
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	5.30 kW	5.20 kW
COP Tj = +2°C	4.32	3.41
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	4.20 kW	4.10 kW
COP Tj = +7°C	6.01	4.30
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	4.90 kW	4.80 kW
COP Tj = 12°C	8.08	6.36
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	8.30 kW	8.10 kW
COP Tj = Tbiv	2.93	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.30 kW	8.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.71	1.96
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	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4294 kWh	5464 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.53 kW	
SEER	4.15	
Pdc Tj = 35°C	7.53 kW	
EER Tj = 35°C	3.15	
Pdc Tj = 30°C	5.49 kW	
EER Tj = 30°C	3.92	
Cdc Tj = 30 °C	1.0	
Pdc Tj = 25°C	3.56 kW	
EER Tj = 25°C	4.46	
Cdc Tj = 25 °C	1.0	
Pdc Tj = 20°C	4.35 kW	
EER Tj = 20°C	6.07	
Cdc Tj = 20 °C	1.0	
Poff	19 W	
PTO	0 W	
PSB	19 W	
PCK	19 W	

Annual energy consumption Qce	1089 kWh