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Summary of	PAC BT MB 10/12/14/16 kW 1ph	Reg. No.	ICIM-PDC-000009
Certificate Holder			
Name	Airwell Residential		
Address	10, rue du Fort de Saint Cyr	Zip	78180
City	Montigny le Bretonneux	Country	France
Certification Body	ICIM S.p.A.		
Name of testing laboratory	ReLab		
Subtype title	PAC BT MB 10/12/14/16 kW 1ph		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	3.6 kg		
Certification Date	30.07.2018		

Model: PAC BT MB 10KW H11

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	10.40 kW	8.90 kW
El input	2.23 kW	3.38 kW
COP	4.66	2.63
Indoor water flow rate	1.76 m³/h	0.94 m³/h

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

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	165 %	127 %
Prated	10.00 kW	11.00 kW
SCOP	4.20	3.25
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.10 kW	9.70 kW
COP Tj = -7°C	2.74	1.93
Pdh Tj = +2°C	5.30 kW	6.20 kW
COP Tj = +2°C	4.10	3.12
Pdh Tj = +7°C	3.50 kW	4.20 kW
COP Tj = +7°C	5.90	4.63
Pdh Tj = 12°C	1.40 kW	2.70 kW
COP Tj = 12°C	4.40	5.26
Pdh Tj = Tbiv	9.80 kW	9.70 kW
COP Tj = Tbiv	2.48	1.93

Pdh Tj = TOL	9.80 kW	11.00 kW
COP Tj = TOL	2.48	1.81
Cdh	0.90	0.90
WTOL	49 °C	49 °C
Poff	17 W	17 W
PTO	6 W	6 W
PSB	17 W	17 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4825 kWh	6960 kWh

Model: PAC BT MB 12KW H11

General Data	
Power supply	1x230V 50Hz

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	177 %	127 %
Prated	13.00 kW	11.00 kW
SCOP	4.51	3.25
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.40 kW	9.70 kW
COP Tj = -7°C	2.92	1.93
Pdh Tj = +2°C	6.70 kW	6.20 kW
COP Tj = +2°C	4.25	3.12
Pdh Tj = +7°C	4.40 kW	4.20 kW
COP Tj = +7°C	6.42	4.63
Pdh Tj = 12°C	2.00 kW	2.70 kW
COP Tj = 12°C	6.48	5.26
Pdh Tj = Tbiv	11.40 kW	9.70 kW
COP Tj = Tbiv	2.92	1.93

Pdh Tj = TOL	10.70 kW	11.00 kW
COP Tj = TOL	2.60	1.81
Cdh	0.90	0.90
WTOL	49 °C	49 °C
Poff	17 W	17 W
PTO	6 W	6 W
PSB	17 W	17 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	2.20 kW	0.00 kW
Annual energy consumption Qhe	5908 kWh	6960 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	69 dB(A)	69 dB(A)

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.10 kW	10.60 kW
El input	2.62 kW	3.85 kW
COP	4.61	2.75
Indoor water flow rate	2.12 m^3/h	1.12 m^3/h

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

Model: PAC BT MB 14KW H11

General Data	
Power supply	1x230V 50Hz

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	174 %	127 %
Prated	14.00 kW	13.00 kW
SCOP	4.43	3.26
Tbiv	-8 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.80 kW	11.70 kW
COP Tj = -7°C	2.78	2.05
Pdh Tj = +2°C	7.80 kW	7.30 kW
COP Tj = +2°C	4.09	3.09
Pdh Tj = +7°C	4.80 kW	4.60 kW
COP Tj = +7°C	6.12	4.53
Pdh Tj = 12°C	3.10 kW	2.30 kW
COP Tj = 12°C	8.83	5.28
Pdh Tj = Tbiv	13.00 kW	11.70 kW
COP Tj = Tbiv	2.84	2.05

Pdh Tj = TOL	11.80 kW	10.80 kW
COP Tj = TOL	2.59	1.74
Cdh	0.90	0.90
WTOL	49 °C	49 °C
Poff	17 W	17 W
PTO	6 W	6 W
PSB	17 W	17 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	2.30 kW	2.20 kW
Annual energy consumption Qhe	6572 kWh	8420 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	73 dB(A)	73 dB(A)

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	14.80 kW	11.60 kW
El input	3.43 kW	4.36 kW
COP	4.31	2.66
Indoor water flow rate	2.38 m³/h	1.26 m³/h

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

Model: PAC BT MB 16KW H11

General Data	
Power supply	1x230V 50Hz

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	168 %	125 %
Prated	16.00 kW	14.00 kW
SCOP	4.28	3.21
Tbiv	-6 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.50 kW	12.30 kW
COP Tj = -7°C	2.78	2.02
Pdh Tj = +2°C	9.00 kW	7.90 kW
COP Tj = +2°C	3.99	3.05
Pdh Tj = +7°C	6.10 kW	5.10 kW
COP Tj = +7°C	6.12	4.57
Pdh Tj = 12°C	3.10 kW	2.10 kW
COP Tj = 12°C	7.84	4.77
Pdh Tj = Tbiv	13.90 kW	12.30 kW
COP Tj = Tbiv	2.80	2.02

Pdh Tj = TOL	11.60 kW	10.20 kW
COP Tj = TOL	2.38	1.68
Cdh	0.90	0.90
WTOL	49 °C	49 °C
Poff	17 W	17 W
PTO	6 W	6 W
PSB	17 W	17 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	4.80 kW	3.70 kW
Annual energy consumption Qhe	7934 kWh	8973 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	73 dB(A)	73 dB(A)

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	16.40 kW	13.40 kW
El input	4.02 kW	5.21 kW
COP	4.08	2.57
Indoor water flow rate	2.56 m³/h	1.44 m³/h

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