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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 S.A.S.		
Address	10, rue du Fort de Saint Cyr	Zip	78180
City	Montigny le Bretonneux	Country	France
Certification Body	ICIM S.p.A.		
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

Configure model	
Model name	PAC BT MB 10KW H11
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

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
Defrost test	passed

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

Average Climate

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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

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$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	9.80 kW	11.00 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	2.48	1.81
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	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	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	4825 kWh	6960 kWh

Model: PAC BT MB 12KW H11

Configure model	
Model name	PAC BT MB 12KW H11
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

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
Defrost test	passed

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

Average Climate

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EN 12102-1

	Low temperature	Medium temperature
Sound power level outdoor	69 dB(A)	69 dB(A)

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

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$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	10.70 kW	11.00 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	2.60	1.81
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	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	Electricity	Electricity
Supplementary Heater: PSUP	2.20 kW	0.00 kW
Annual energy consumption Q_{he}	5908 kWh	6960 kWh

Model: PAC BT MB 14KW H11

Configure model	
Model name	PAC BT MB 14KW H11
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

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
Defrost test	passed

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

Average Climate

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EN 12102-1

	Low temperature	Medium temperature
Sound power level outdoor	73 dB(A)	73 dB(A)

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

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$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	11.80 kW	10.80 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	2.59	1.74
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	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	Electricity	Electricity
Supplementary Heater: PSUP	2.30 kW	2.20 kW
Annual energy consumption Q_{he}	6572 kWh	8420 kWh

Model: PAC BT MB 16KW H11

Configure model	
Model name	PAC BT MB 16KW H11
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

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
Defrost test	passed

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level outdoor	73 dB(A)	73 dB(A)

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

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$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	11.60 kW	10.20 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	2.38	1.68
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	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	Electricity	Electricity
Supplementary Heater: PSUP	4.80 kW	3.70 kW
Annual energy consumption Q_{he}	7934 kWh	8973 kWh