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#### This information was generated by the HP KEYMARK database on 18 Mar 2022

#### Login

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 14511-2				
Low temperature Medium temperature				
Heat output	10.40 kW	8.90 kW		
El input	2.23 kW	3.38 kW		
СОР	4.66	2.63		

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**



CEN heat pump KEYMARK

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

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	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 = $+7^{\circ}$ C	3.50 kW	4.20 kW
$COP Tj = +7^{\circ}C$	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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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.80 kW	11.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.48	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	49 °C	49 °C
Poff	17 W	17 W
РТО	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 Qhe	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	

## **Average Climate**

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	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 or Pdh Tj = Tdesignh if TOL < Tdesignh	10.70 kW	11.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	49 °C	49 °C
Poff	17 W	17 W
РТО	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 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	
СОР	4.61	2.75	

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**

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	

## **Average Climate**

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	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





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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 or Pdh Tj = Tdesignh if TOL < Tdesignh	11.80 kW	10.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.74
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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 Qhe	6572 kWh	8420 kWh

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

# Heating



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EN 14511-2			
Low temperature Medium temperature			
Heat output	14.80 kW	11.60 kW	
El input	3.43 kW	4.36 kW	
СОР	4.31	2.66	

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**

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

## **Average Climate**

EN 14825			
	Low temperature	Medium temperature	
$\eta_{s}$	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	
$COP Tj = +7^{\circ}C$			





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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 or Pdh Tj = Tdesignh if TOL < Tdesignh	11.60 kW	10.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.38	1.68
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	49 °C	49 °C
Poff	17 W	17 W
РТО	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 Qhe	7934 kWh	8973 kWh

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

## Heating



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EN 14511-2			
	Low temperature	Medium temperature	
Heat output	16.40 kW	13.40 kW	
El input	4.02 kW	5.21 kW	
СОР	4.08	2.57	

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