

Summary of	PAC BTE 12/14/16 kW 3 Ph	Reg. No.	ICIM-PDC-000042-00
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	WPZ		
Subtype title	PAC BTE 12/14/16 kW 3 Ph		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	3.9 kg		
Certification Date	11.09.2019		



Model: PAC-BT-UE-12KW-H13

General Data		
Power supply	3x400V 50Hz	

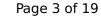
Heating

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	15.77 kW	14.90 kW
El input	3.28 kW	4.67 kW
СОР	4.81	3.19
Indoor water flow rate	2.66 m³/h	1.60 m³/h

Average Climate

EN 14825





	Low temperature	Medium temperature
η_{s}	169 %	132 %
Prated	15.19 kW	17.41 kW
SCOP	4.30	3.39
Tbiv	-6 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.06 kW	12.12 kW
COP Tj = -7°C	3.00	2.04
Cdh	0.90	0.90
Pdh Tj = +2°C	8.46 kW	9.37 kW
COP Tj = +2°C	3.72	3.02
Cdh	0.90	0.90
Pdh Tj = +7°C	7.01 kW	6.61 kW
COP Tj = +7°C	7.01	5.30
Cdh	0.90	0.90
Pdh Tj = 12°C	9.30 kW	8.87 kW
COP Tj = 12°C	9.82	7.98
Cdh	0.90	0.90
Pdh Tj = Tbiv	12.85 kW	14.06 kW
COP Tj = Tbiv	3.22	2.49
Pdh Tj = TOL	9.51 kW	9.24 kW





COP Tj = TOL	2.41	1.53
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	19 W	19 W
РТО	78 W	78 W
PSB	19 W	19 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	7294 kWh	10623 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)



Model: PAC-BTE-UI-10-16KW-H11

General Data		
Power supply	3x400V 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	14.16 kW	13.50 kW	
El input	2.91 kW	4.26 kW	
СОР	4.87	3.17	
Indoor water flow rate	2.38 m³/h	1.45 m³/h	

Average Climate

EN 14825





	Low temperature	Medium temperature
η_{s}	166 %	131 %
Prated	14.37 kW	16.47 kW
SCOP	4.23	3.36
Tbiv	-6 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.29 kW	11.26 kW
COP Tj = -7°C	2.91	2.01
Cdh	0.90	0.90
Pdh Tj = +2°C	8.03 kW	8.95 kW
COP Tj = +2°C	3.65	2.93
Cdh	0.90	0.90
Pdh Tj = +7°C	6.58 kW	6.22 kW
$COP Tj = +7^{\circ}C$	6.84	5.34
Cdh	0.90	0.90
Pdh Tj = 12°C	8.50 kW	8.22 kW
COP Tj = 12°C	10.44	8.48
Cdh	0.90	0.90
Pdh Tj = Tbiv	12.16 kW	13.30 kW
COP Tj = Tbiv	3.16	2.52
Pdh Tj = TOL	8.53 kW	8.17 kW





COP Tj = TOL	2.24	1.43
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	19 W	19 W
РТО	78 W	78 W
PSB	19 W	19 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	7015 kWh	10110 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)



Model: PAC-BT-UE-14KW-H13

General Data	
Power supply	3x400V 50Hz

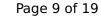
Heating

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	12.16 kW	11.60 kW
El input	2.54 kW	4.08 kW
СОР	4.79	2.84
Indoor water flow rate	2.02 m³/h	1.25 m³/h

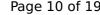
Average Climate

EN 14825





	Low temperature	Medium temperature
η_{s}	176 %	129 %
Prated	12.31 kW	13.66 kW
SCOP	4.48	3.31
Tbiv	-6 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.81 kW	9.55 kW
COP Tj = -7°C	2.91	1.96
Cdh	0.90	0.90
Pdh Tj = +2°C	6.63 kW	7.59 kW
COP Tj = +2°C	4.34	3.05
Cdh	0.90	0.90
Pdh Tj = +7°C	5.69 kW	5.30 kW
COP Tj = +7°C	6.46	5.00
Cdh	0.90	0.90
Pdh Tj = 12°C	7.47 kW	7.07 kW
COP Tj = 12°C	7.96	6.98
Cdh	0.90	0.90
Pdh Tj = Tbiv	10.42 kW	11.03 kW
COP Tj = Tbiv	3.14	2.45
Pdh Tj = TOL	8.02 kW	7.22 kW





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COP Tj = TOL	2.34	1.45
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	19 W	19 W
РТО	78 W	78 W
PSB	19 W	19 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5664 kWh	8539 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	69 dB(A)	69 dB(A)



Model: PAC-BTE-UI-10-16KW-H11

Gene	ral Data
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	12.20 kW	11.60 kW
El input	2.54 kW	4.08 kW
СОР	4.79	2.84
Indoor water flow rate	2.02 m³/h	1.25 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



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EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	69 dB(A)	69 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	176 %	129 %
Prated	12.31 kW	13.66 kW
SCOP	4.48	3.31
Tbiv	-6 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.81 kW	9.55 kW
COP Tj = -7°C	2.91	1.96
Pdh Tj = +2°C	6.63 kW	7.59 kW
COP Tj = +2°C	4.34	3.05
Pdh Tj = +7°C	5.69 kW	5.30 kW
COP Tj = +7°C	6.46	5.00
Pdh Tj = 12°C	7.47 kW	7.07 kW
COP Tj = 12°C	7.96	6.98
Pdh Tj = Tbiv	10.42 kW	11.03 kW



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COP Tj = Tbiv	3.14	2.45
Pdh Tj = TOL	8.02 kW	7.22 kW
COP Tj = TOL	2.34	1.45
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	19 W	19 W
РТО	78 W	78 W
PSB	19 W	19 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	4.29 kW	6.44 kW
Annual energy consumption Qhe	5664 kWh	8539 kWh



Model: PAC-BT-UE-16KW-H13

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	14.20 kW	13.50 kW
El input	2.91 kW	4.26 kW
СОР	4.87	3.17
Indoor water flow rate	2.38 m³/h	1.45 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



 $$\operatorname{Page}\ 15$$ of 19 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	166 %	131 %
Prated	14.37 kW	16.47 kW
SCOP	4.23	3.36
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COP Tj = -7°C	2.91	2.01
Pdh Tj = +2°C	8.03 kW	8.95 kW
COP Tj = +2°C	3.65	2.93
Pdh Tj = +7°C	6.58 kW	6.22 kW
COP Tj = +7°C	6.84	5.34
Pdh Tj = 12°C	8.50 kW	8.22 kW
COP Tj = 12°C	10.44	8.48
Pdh Tj = Tbiv	12.16 kW	13.30 kW



$$\operatorname{\textit{Page}}\ 16$$ of 19 This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = Tbiv	3.16	2.52
Pdh Tj = TOL	8.53 kW	8.17 kW
COP Tj = TOL	2.24	1.43
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	19 W	19 W
РТО	78 W	78 W
PSB	19 W	19 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	5.84 kW	8.30 kW
Annual energy consumption Qhe	7015 kWh	10110 kWh



Model: PAC-BTE-UI-10-16KW-H11

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	15.80 kW	14.90 kW
El input	2.91 kW	4.67 kW
СОР	4.81	3.19
Indoor water flow rate	2.66 m³/h	1.60 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



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	EN 12102-1	
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	169 %	132 %
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SCOP	4.30	3.39
Tbiv	-6 °C	-5 °C
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Pdh Tj = +2°C	8.46 kW	9.37 kW
COP Tj = +2°C	3.72	3.02
Pdh Tj = +7°C	7.01 kW	6.61 kW
COP Tj = +7°C	7.01	5.30
Pdh Tj = 12°C	9.30 kW	8.87 kW
COP Tj = 12°C	9.82	7.98
Pdh Tj = Tbiv	12.85 kW	14.06 kW



$$\operatorname{Page}\ 19$$ of 19 This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = Tbiv	3.22	2.49
Pdh Tj = TOL	9.51 kW	9.24 kW
COP Tj = TOL	2.41	1.53
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	19 W	19 W
РТО	78 W	78 W
PSB	19 W	19 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	gas	gas
Supplementary Heater: PSUP	5.68 kW	8.17 kW
Annual energy consumption Qhe	7294 kWh	10623 kWh