

Airwell

TECHNICAL DATA MANUAL

WELLEA MONOBLOC DF A R32

English

AW-WHPMA18-H93

AW-WHPMA22-H93

AW-WHPMA26-H93

AW-WHPMA30-H93



Product fiche 1

Heat pump space heater	unit	AW-WHPMA 18-H93	AW-WHPMA22-H93	AW-WHPMA26-H93	AW-WHPMA30-H93	
Indoor unit sound power (*)	[dB(A)]	/	/	/	/	
Outdoor unit sound power (*)	[dB(A)]	71	73	75	77	
Capacity of the back-up heater integrated in the unit	[kW]	0	0	0	0	
Psup back-up heater	Y/N	No	No	No	No	
off peak operation function integrated in Heat pump		A+++	A+++	A+++	A++	
Space heating	Energy efficiency class 35°C (Low temp. app.)	A++	A++	A+	A+	
Space heating	Energy efficiency class 55°C (Medium temp. app.)					
Average climate (Design temperature= -10°C)						
Space heating 35°C	Prated(declared heating capacity) @-10°C	[kW]	18	22	25	29
	Seasonal space heating efficiency(ηs)	[%]	181	178	177	165
	Annual energy consumption	[kWh]	8,086	10,180	11,489	14,165
Space heating 55°C	Prated(declared heating capacity) @-10°C	[kW]	18	22	26	30
	Seasonal space heating efficiency(ηs)	[%]	125	126	123	123
	Annual energy consumption	[kWh]	11,375	14,390	17,204	19,316
Part load conditions space heating average climate low temperature application						
(A) condition (-7°C)	Pdh(declared heating capacity)	[kW]	15.91	19.73	22.15	21.95
	COPd (declared COP)	-	2.85	2.74	2.56	2.53
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
(B) condition (2°C)	Pdh(declared heating capacity)	[kW]	9.67	12.04	13.78	16.22
	COPd (declared COP)	-	4.57	4.40	4.41	4.12
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
(C) condition (7°C)	Pdh(declared heating capacity)	[kW]	6.57	8.02	9.38	10.69
	COPd (declared COP)	-	5.95	6.24	6.43	6.21
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
(D) condition (12°C)	Pdh(declared heating capacity)	[kW]	3.77	3.81	4.11	4.59
	COPd (declared COP)	-	6.97	7.0	7.08	7.14
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90

Product fiche 2

Heat pump space heater		unit	AW-WHPMA18-H93	AW-WHPMA22-H93	AW-WHPMA26-H93	AW-WHPMA30-H93
(E) Tol(temperature operating limit)	Tol (temperature operating limit)	[°C]	-10	-10	-10	-10
	Pdh (declared heating capacity)	[kW]	18.14	20.34	20.36	20.43
	COPd (declared COP)	-	2.49	2.35	2.34	2.34
	WTOL (Heating water Operation Limit)	[°C]	60	60	60	60
(F) Tbivalent temperature	Tbiv	[°C]	-7	-7	-7	-5
	Pdh (declared heating capacity)	[kW]	15.91	19.73	22.15	23.57
	COPd (declared COP)	-	2.85	2.74	2.56	2.70
	Psup (@T design:-10°C)	[kW]	0.00	1.97	4.68	8.75
Part load conditions space heating average climate medium temperature application						
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	15.64	19.84	20.65	20.12
	COPd (declared COP)	-	1.72	1.74	1.69	1.63
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
	Pdh (declared heating capacity)	[kW]	9.62	11.91	14.28	16.50
(B) condition (2°C)	COPd (declared COP)	-	3.30	3.30	3.11	3.09
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
	Pdh (declared heating capacity)	[kW]	6.40	7.99	9.30	10.51
	COPd (declared COP)	-	4.41	4.62	4.72	4.73
(C) condition (7°C)	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
	Pdh (declared heating capacity)	[kW]	3.60	3.62	3.90	4.65
	COPd (declared COP)	-	5.09	5.20	5.41	5.85
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
(D) condition (12°C)	Tol (temperature operating limit)	[°C]	-10	-10	-10	-10
	Pdh (declared heating capacity)	[kW]	15.03	13.83	13.87	13.83
	COPd (declared COP)	-	1.17	1.08	1.08	1.07
	WTOL (Heating water Operation Limit)	[°C]	60	60	60	60
(F) Tbivalent temperature	Tbiv	[°C]	-7	-7	-6	-5
	Pdh (declared heating capacity)	[kW]	15.64	19.84	22.13	23.98
	COPd (declared COP)	-	1.72	1.74	1.88	2.02
	Psup (@T design:-10°C)	[kW]	2.64	8.6	12.28	15.86

Product fiche 3

Heat pump space heater		unit	AW-WHPMA18-H93	AW-WHPMA22-H93	AW-WHPMA26-H93	AW-WHPMA30-H93
Colder climate (Design temperature = -22°C)						
Space heating 35°C	Prated (declared heating capacity) @ -22°C	[kW]	18	21	26	29
	Seasonal space heating efficiency (ηs)	[%]	146	146	143	138
	Annual energy consumption	[kWh]	11,740	14,179	17,421	20,390
Space heating 55°C	Prated (declared heating capacity) @ -22°C	[kW]	18	22	26	30
	Seasonal space heating efficiency (ηs)	[%]	97	102	101	100
	Annual energy consumption	[kWh]	18,156	21,067	24,967	29,238
Part load conditions space heating colder climate low temperature application						
condition (-15°C)	Pdh (declared heating capacity)	[kW]	14.49	17.46	18.95	18.61
	COPd (declared COP)	-	2.42	2.36	2.27	2.24
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	11.21	13.30	15.91	18.49
	COPd (declared COP)	-	3.09	3.12	3.10	3.07
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	6.64	8.25	10.10	11.88
	COPd (declared COP)	-	4.50	4.42	4.45	4.42
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	4.77	5.45	6.30	7.53
	COPd (declared COP)	-	5.85	5.87	6.06	6.15
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	3.95	3.98	4.03	4.11
	COPd (declared COP)	-	7.18	7.19	7.13	6.87
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
(E) Tol(temperature operating limit)	Tol (temperature operating limit)	[°C]	-22	-22	-22	-22
	Pdh (declared heating capacity)	[kW]	13.14	13.27	13.07	13.17
	COPd (declared COP)	-	1.67	1.69	1.67	1.67
(F) Tbivalent temperature	WTOL (Heating water Operation Limit)	[°C]	37	37	37	37
	Tbiv	[°C]	-15	-15	-12	-10
	Pdh (declared heating capacity)	[kW]	14.49	17.46	18.97	19.93
Supplementary capacity at P_design	COPd (declared COP)	-	2.42	2.36	2.36	2.44
	Psup (@Tdesign:-22°C)	[kW]	4.62	8.13	12.68	15.96

Product fiche 4

Heat pump space heater		unit	AW-WHPMA 18-H93	AW-WHPMA22-H93	AW-WHPMA26-H93	AW-WHPMA30-H93
Part load conditions space heating colder climate medium temperature application						
condition (-15°C)	Pdh (declared heating capacity)	[kW]	13.56	13.78	13.37	13.06
	COPd (declared COP)	-	1.21	1.24	1.20	1.18
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	11.12	13.53	15.90	18.40
	COPd (declared COP)	-	1.98	2.07	2.10	2.10
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	6.65	8.61	10.17	11.23
	COPd (declared COP)	-	3.44	3.70	3.58	3.51
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	4.66	5.21	6.52	7.42
	COPd (declared COP)	-	4.35	4.49	4.99	5.18
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	3.74	3.74	3.63	3.64
	COPd (declared COP)	-	5.68	5.76	5.68	5.73
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
(E) Tol(temperature operating limit)	Tol (temperature operating limit)	[°C]	-15	-15	-15	-15
	Pdh (declared heating capacity)	[kW]	13.56	13.78	13.37	13.06
	COPd (declared COP)	-	1.21	1.24	1.20	1.18
(F) Tbivalent temperature	WTOL (Heating water Operation Limit)	[°C]	50	50	50	50
	Tbiv	[°C]	-7	-7	-7	-7
	Pdh (declared heating capacity)	[kW]	11.12	13.53	15.90	18.40
Supplementary capacity at P_design	COPd (declared COP)	-	1.98	2.07	2.10	2.10
Warmer climate (Design temperature =2°C)	Psup (@Tdesign:-22°C)	[kW]	18.38	22.36	26.27	30.41
Space heating 35°C						
Space heating 35°C	Prated (declared heating capacity) @ 2°C	[kW]	18	22	26	30
	Seasonal space heating efficiency (ηs)	[%]	226	234	231	213
	Annual energy consumption	[kWh]	4,116	4,945	5,959	7,540
Space heating 55°C	Prated (declared heating capacity) @ 2°C	[kW]	18	22	26	30
	Seasonal space heating efficiency (ηs)	[%]	157	161	168	163
	Annual energy consumption	[kWh]	6,041	7,180	8,218	9,580

Product fiche 5

Heat pump space heater		unit	AW-WHPMA18-H93	AW-WHPMA22-H93	AW-WHPMA26-H93	AW-WHPMA30-H93
Part load conditions space heating warmer climate low temperature application						
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	17.84	21.81	25.50	26.29
	COPd (declared COP)	-	3.53	3.31	3.0	2.94
(C) condition (7°C)	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
	Pdh (declared heating capacity)	[kW]	11.36	14.08	16.77	19.57
(D) condition (12°C)	COPd (declared COP)	-	5.16	5.20	5.02	4.75
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
(E) ToI(temperature operating limit)	Pdh (declared heating capacity)	[kW]	5.45	6.44	7.65	8.90
	COPd (declared COP)	-	7.01	7.50	7.78	7.53
(F) Tbivalent temperature	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
	ToI (temperature operating limit)	[°C]	2	2	2	2
Supplementary capacity at P_design	Pdh (declared heating capacity)	[kW]	17.84	21.81	25.50	26.29
	COPd (declared COP)	-	3.53	3.31	3.0	2.94
Part load conditions space heating warmer climate medium temperature application	WTOL (Heating water Operation Limit)	[°C]	60	60	60	60
	Tbiv	[°C]	7	7	7	7
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	11.36	14.08	16.77	19.57
	COPd (declared COP)	-	5.16	5.20	5.02	4.75
(C) condition (7°C)	Psup (@Tdesign:n.2°C)	[kW]	0.00	0.09	0.58	4.15
	Pdh (declared heating capacity)	[kW]	18.44	22.12	26.50	26.41
(D) condition (12°C)	COPd (declared COP)	-	2.12	2.12	1.99	1.99
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
(E) ToI(temperature operating limit)	Pdh (declared heating capacity)	[kW]	11.62	14.15	16.86	19.11
	COPd (declared COP)	-	3.49	3.50	3.47	3.37
Part load conditions space heating warmer climate high temperature application	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
	Pdh (declared heating capacity)	[kW]	5.35	6.38	7.58	8.92
(B) condition (2°C)	COPd (declared COP)	-	5.09	5.34	5.94	6.09
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90
(C) condition (7°C)	ToI (temperature operating limit)	[°C]	2	2	2	2
	Pdh (declared heating capacity)	[kW]	18.44	22.12	26.50	26.41
(D) condition (12°C)	COPd (declared COP)	-	2.12	2.12	1.99	1.99
	WTOL (Heating water Operation Limit)	[°C]	60	60	60	60

Product fiche 6

Heat pump space heater		unit	AW-WHPMA18-H93	AW-WHPMA22-H93	AW-WHPMA26-H93	AW-WHPMA30-H93
(F) T _{biv} ivalent temperature	T _{biv}	[°C]	7	7	7	7
	P _{dh} (declared heating capacity)	[kW]	11.62	14.15	16.86	19.11
Supplementary capacity at P _{design}	COP _d (declared COP)	-	3.49	3.50	3.47	3.37
	P _{sup} (@T _{design} :2°C)	[kW]	0.00	0.00	0.00	3.32
Ecodesign technical data						
Product description	Air-to-water heat pump	Y/N	Yes	Yes	Yes	Yes
	Water-to-water heat pump	Y/N	No	No	No	No
	Brine-to-water heat pump	Y/N	No	No	No	No
	Low-temperature heat pump	Y/N	No	No	No	No
	Equipped with a supplementary heater	Y/N	No	No	No	Yes
Air to water unit	Heat pump combination heater	Y/N	No	No	No	No
	Rated airflow (outdoor)	[m ³ /h]	10650	10650	11200	11200
Brine/water to water unit	Rated water/brine flow (outdoor H/E)	[m ³ /h]	/	/	/	/
	Capacity control	-	Inverter	Inverter	Inverter	Inverter
Other	P _{off} (Power consumption Off mode)	[kW]	0.018	0.018	0.018	0.018
	P _{to} (Power consumption Thermostat off mode)	[kW]	0.096	0.096	0.096	0.096
	P _{sb} (Power consumption Standby mode)	[kW]	0.018	0.018	0.018	0.018
	P _{ck} (Power crankcase heater model)	[kW]	0.000	0.000	0.000	0.000
	Q _{elec} (Daily electricity consumption)	[kWh]	/	/	/	/
	Q _{fuel} (Daily fuel consumption)	[kWh]	/	/	/	/

Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

Product fiche data according to energy label directive 2010/30/EC regulation (EU) 811/2013.

Technical parameters

Model(s):	AW-WHPMA18-H93
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	AVERAGE

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	17.7	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	15.6	kW
Tj = 2 °C	Pdh	9.6	kW
Tj = 7 °C	Pdh	6.4	kW
Tj = 12 °C	Pdh	3.6	kW
Tj = bivalent temperature	Pdh	15.6	kW
Tj = operating limit	Pdh	15.0	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.018	kW
Standby mode	Psb	0.018	kW
Thermostat-off mode	Pto	0.096	kW
Crankcase heater mode	Pck	0.000	kW
Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-71	dB
Annual energy consumption	QHE	11375	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η_s	125	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	1.72	-
Tj = 2 °C	COPd	3.30	-
Tj = 7 °C	COPd	4.41	-
Tj = 12 °C	COPd	5.09	-
Tj = bivalent temperature	COPd	1.72	-
Tj = operating limit	COPd	1.17	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	2.6	kW
Type of energy input	Electrical		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	10650	m ³ /h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m ³ /h

For heat pump combination heater:			
Declared load profile	-		
Daily electricity consumption	Q _{elec}	-	kWh
Annual electricity consumption	AEC	-	kWh
Water heating energy efficiency	η_{wh}	-	%
Daily fuel consumption	Q _{fuel}	-	kWh
Annual fuel consumption	AFC	-	GJ

Contact details: AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	AW-WHPMA18-H93		
Air-to-water heat pump:	YES		
Water-to-water heat pump:	NO		
Brine-to-water heat pump:	NO		
Low-temperature heat pump:	NO		
Equipped with a supplementary heater:	NO		
Heat pump combination heater:	NO		
Declared climate condition:	COLDER		
Parameters are declared for medium-temperature application.			
Item			
Rated heat output (*)	Prated	18.4	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	11.1	kW
Tj = 2 °C	Pdh	6.7	kW
Tj = 7 °C	Pdh	4.7	kW
Tj = 12 °C	Pdh	3.7	kW
Tj = bivalent temperature	Pdh	11.1	kW
Tj = operating limit	Pdh	13.6	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	13.6	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.018	kW
Standby mode	Psb	0.018	kW
Thermostat-off mode	Pto	0.096	kW
Crankcase heater mode	Pck	0.000	kW
Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-71	dB
Annual energy consumption	QHE	18156	kWh
For heat pump combination heater:			
Declared load profile	-		
Daily electricity consumption	Qelec	-	kWh
Annual electricity consumption	AEC	-	kWh
Water heating energy efficiency			
Water heating energy efficiency	η_{wh}	-	%
Daily fuel consumption	Qfuel	-	kWh
Annual fuel consumption	AFC	-	GJ
Contact details	AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France		
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).			
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.			

Technical parameters

Model(s):	AW-WHPMA18-H93
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	WARMER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	18.1	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	-	kW
Tj = 2 °C	Pdh	18.4	kW
Tj = 7 °C	Pdh	11.6	kW
Tj = 12 °C	Pdh	5.4	kW
Tj = bivalent temperature	Pdh	11.6	kW
Tj = operating limit	Pdh	18.4	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.018	kW
Standby mode	Psb	0.018	kW
Thermostat-off mode	Pto	0.096	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-71	dB
Annual energy consumption	QHE	6041	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η_s	157	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	-	-
Tj = 2 °C	COPd	2.12	-
Tj = 7 °C	COPd	3.49	-
Tj = 12 °C	COPd	5.09	-
Tj = bivalent temperature	COPd	3.49	-
Tj = operating limit	COPd	2.12	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	0.0	kW
Type of energy input	-		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	10650	m ³ /h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m ³ /h

For heat pump combination heater:							
Declared load profile	-						
Daily electricity consumption	Q _{elec}	-	kWh	Water heating energy efficiency	η_{wh}	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh
				Annual fuel consumption	AFC	-	GJ

Contact details: AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	AW-WHPMA22-H93
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	AVERAGE

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	22.4	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	19.8	kW
Tj = 2 °C	Pdh	11.9	kW
Tj = 7 °C	Pdh	8.0	kW
Tj = 12 °C	Pdh	3.6	kW
Tj = bivalent temperature	Pdh	19.8	kW
Tj = operating limit	Pdh	13.8	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.018	kW
Standby mode	Psb	0.018	kW
Thermostat-off mode	Pto	0.096	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-73	dB
Annual energy consumption	QHE	14390	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η_s	126	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	1.74	-
Tj = 2 °C	COPd	3.30	-
Tj = 7 °C	COPd	4.62	-
Tj = 12 °C	COPd	5.20	-
Tj = bivalent temperature	COPd	1.74	-
Tj = operating limit	COPd	1.08	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	8.6	kW
Type of energy input	Electrical		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	10650	m ³ /h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m ³ /h

For heat pump combination heater:			
Declared load profile	-		
Daily electricity consumption	Q _{elec}	-	kWh
Annual electricity consumption	AEC	-	kWh
Water heating energy efficiency	η_{wh}	-	%
Daily fuel consumption	Q _{fuel}	-	kWh
Annual fuel consumption	AFC	-	GJ

Contact details AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	AW-WHPMA22-H93
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	COLDER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	22.4	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	13.5	kW
Tj = 2 °C	Pdh	8.6	kW
Tj = 7 °C	Pdh	5.2	kW
Tj = 12 °C	Pdh	3.7	kW
Tj = bivalent temperature	Pdh	13.5	kW
Tj = operating limit	Pdh	13.8	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	13.8	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	P _{cyh}	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	P _{off}	0.018	kW
Standby mode	P _{sb}	0.018	kW
Thermostat-off mode	P _{to}	0.096	kW
Crankcase heater mode	P _{ck}	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	-73	dB
Annual energy consumption	Q _{HE}	21067	kWh

For heat pump combination heater:

Declared load profile	-		
Daily electricity consumption	Q _{elec}	-	kWh
Annual electricity consumption	AEC	-	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	102	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COP _d	2.07	-
Tj = 2 °C	COP _d	3.70	-
Tj = 7 °C	COP _d	4.49	-
Tj = 12 °C	COP _d	5.76	-
Tj = bivalent temperature	COP _d	2.07	-
Tj = operating limit	COP _d	1.24	-
For air-to-water heat pumps: Tj = -15 °C	COP _d	1.24	-
For air-to-water heat pumps: Operation limit temperature	TOL	-15	°C
Cycling interval efficiency	COP _{cyh}	-	-
Heating water operating limit temperature	W _{TOL}	50	°C
Supplementary heater			
Rated heat output (**)	P _{sup}	22.4	kW
Type of energy input	-		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	10650	m ³ /h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m ³ /h

Contact details	AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France
-----------------	--

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	AW-WHPMA22-H93		
Air-to-water heat pump:	YES		
Water-to-water heat pump:	NO		
Brine-to-water heat pump:	NO		
Low-temperature heat pump:	NO		
Equipped with a supplementary heater:	NO		
Heat pump combination heater:	NO		
Declared climate condition:	WARMER		
Parameters are declared for medium-temperature application.			
Heating parameters			
Item	Symbol	Value	Unit
Rated heat output (*)	Prated	22.0	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	-	kW
Tj = 2 °C	Pdh	22.1	kW
Tj = 7 °C	Pdh	14.1	kW
Tj = 12 °C	Pdh	6.4	kW
Tj = bivalent temperature	Pdh	14.1	kW
Tj = operating limit	Pdh	22.1	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.018	kW
Standby mode	Psb	0.018	kW
Thermostat-off mode	Pto	0.096	kW
Crankcase heater mode	Pck	0.000	kW
Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η_s	161	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	-	-
Tj = 2 °C	COPd	2.12	-
Tj = 7 °C	COPd	3.50	-
Tj = 12 °C	COPd	5.34	-
Tj = bivalent temperature	COPd	3.50	-
Tj = operating limit	COPd	2.12	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	0.0	kW
Type of energy input	-		
Item	Symbol	Value	Unit
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-73	dB
Annual energy consumption	QHE	7180	kWh
For heat pump combination heater:			
Declared load profile	-		
Daily electricity consumption	Qelec	-	kWh
Annual electricity consumption	AEC	-	kWh
Water heating energy efficiency	η_{wh}	-	%
Daily fuel consumption	Qfuel	-	kWh
Annual fuel consumption	AFC	-	GJ
Contact details	AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France		
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).			
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.			

Technical parameters

Model(s):	AW-WHPMA26-H93																																																																																										
Air-to-water heat pump:	YES																																																																																										
Water-to-water heat pump:	NO																																																																																										
Brine-to-water heat pump:	NO																																																																																										
Low-temperature heat pump:	NO																																																																																										
Equipped with a supplementary heater:	NO																																																																																										
Heat pump combination heater:	NO																																																																																										
Declared climate condition:	AVERAGE																																																																																										
Parameters are declared for medium-temperature application.																																																																																											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Item</th> <th style="width: 15%;">Symbol</th> <th style="width: 15%;">Value</th> <th style="width: 45%;">Unit</th> </tr> </thead> <tbody> <tr> <td>Rated heat output (*)</td> <td>Prated</td> <td>26.1</td> <td>kW</td> </tr> <tr> <td colspan="4">Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj</td> </tr> <tr> <td>Tj = -7 °C</td> <td>Pdh</td> <td>20.6</td> <td>kW</td> </tr> <tr> <td>Tj = 2 °C</td> <td>Pdh</td> <td>14.3</td> <td>kW</td> </tr> <tr> <td>Tj = 7 °C</td> <td>Pdh</td> <td>9.3</td> <td>kW</td> </tr> <tr> <td>Tj = 12 °C</td> <td>Pdh</td> <td>3.9</td> <td>kW</td> </tr> <tr> <td>Tj = bivalent temperature</td> <td>Pdh</td> <td>22.1</td> <td>kW</td> </tr> <tr> <td>Tj = operating limit</td> <td>Pdh</td> <td>13.8</td> <td>kW</td> </tr> <tr> <td>For air-to-water heat pumps: Tj = -15 °C</td> <td>Pdh</td> <td>-</td> <td>kW</td> </tr> <tr> <td>Bivalent temperature</td> <td>Tbiv</td> <td>-6</td> <td>°C</td> </tr> <tr> <td>Cycling interval capacity for heating</td> <td>Pcyc</td> <td>-</td> <td>kW</td> </tr> <tr> <td>Degradation co-efficient (**)</td> <td>Cdh</td> <td>0.9</td> <td>--</td> </tr> <tr> <td colspan="4">Power consumption in modes other than active mode</td> </tr> <tr> <td>Off mode</td> <td>Poff</td> <td>0.018</td> <td>kW</td> </tr> <tr> <td>Standby mode</td> <td>Psb</td> <td>0.018</td> <td>kW</td> </tr> <tr> <td>Thermostat-off mode</td> <td>Pto</td> <td>0.096</td> <td>kW</td> </tr> <tr> <td>Crankcase heater mode</td> <td>Pck</td> <td>0.000</td> <td>kW</td> </tr> <tr> <td colspan="4">Other items</td> </tr> <tr> <td>Capacity control</td> <td colspan="3">variable</td> </tr> <tr> <td>Sound power level, indoors/outdoors</td> <td>LWA</td> <td>-75</td> <td>dB</td> </tr> <tr> <td>Annual energy consumption</td> <td>QHE</td> <td>17204</td> <td>kWh</td> </tr> </tbody> </table>				Item	Symbol	Value	Unit	Rated heat output (*)	Prated	26.1	kW	Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Tj = -7 °C	Pdh	20.6	kW	Tj = 2 °C	Pdh	14.3	kW	Tj = 7 °C	Pdh	9.3	kW	Tj = 12 °C	Pdh	3.9	kW	Tj = bivalent temperature	Pdh	22.1	kW	Tj = operating limit	Pdh	13.8	kW	For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW	Bivalent temperature	Tbiv	-6	°C	Cycling interval capacity for heating	Pcyc	-	kW	Degradation co-efficient (**)	Cdh	0.9	--	Power consumption in modes other than active mode				Off mode	Poff	0.018	kW	Standby mode	Psb	0.018	kW	Thermostat-off mode	Pto	0.096	kW	Crankcase heater mode	Pck	0.000	kW	Other items				Capacity control	variable			Sound power level, indoors/outdoors	LWA	-75	dB	Annual energy consumption	QHE	17204	kWh
Item	Symbol	Value	Unit																																																																																								
Rated heat output (*)	Prated	26.1	kW																																																																																								
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj																																																																																											
Tj = -7 °C	Pdh	20.6	kW																																																																																								
Tj = 2 °C	Pdh	14.3	kW																																																																																								
Tj = 7 °C	Pdh	9.3	kW																																																																																								
Tj = 12 °C	Pdh	3.9	kW																																																																																								
Tj = bivalent temperature	Pdh	22.1	kW																																																																																								
Tj = operating limit	Pdh	13.8	kW																																																																																								
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW																																																																																								
Bivalent temperature	Tbiv	-6	°C																																																																																								
Cycling interval capacity for heating	Pcyc	-	kW																																																																																								
Degradation co-efficient (**)	Cdh	0.9	--																																																																																								
Power consumption in modes other than active mode																																																																																											
Off mode	Poff	0.018	kW																																																																																								
Standby mode	Psb	0.018	kW																																																																																								
Thermostat-off mode	Pto	0.096	kW																																																																																								
Crankcase heater mode	Pck	0.000	kW																																																																																								
Other items																																																																																											
Capacity control	variable																																																																																										
Sound power level, indoors/outdoors	LWA	-75	dB																																																																																								
Annual energy consumption	QHE	17204	kWh																																																																																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Item</th> <th style="width: 15%;">Symbol</th> <th style="width: 15%;">Value</th> <th style="width: 45%;">Unit</th> </tr> </thead> <tbody> <tr> <td>Seasonal space heating energy efficiency</td> <td>ηs</td> <td>123</td> <td>%</td> </tr> <tr> <td colspan="4">Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj</td> </tr> <tr> <td>Tj = -7 °C</td> <td>COPd</td> <td>1.69</td> <td>-</td> </tr> <tr> <td>Tj = 2 °C</td> <td>COPd</td> <td>3.11</td> <td>-</td> </tr> <tr> <td>Tj = 7 °C</td> <td>COPd</td> <td>4.72</td> <td>-</td> </tr> <tr> <td>Tj = 12 °C</td> <td>COPd</td> <td>5.41</td> <td>-</td> </tr> <tr> <td>Tj = bivalent temperature</td> <td>COPd</td> <td>1.88</td> <td>-</td> </tr> <tr> <td>Tj = operating limit</td> <td>COPd</td> <td>1.08</td> <td>-</td> </tr> <tr> <td>For air-to-water heat pumps: Tj = -15 °C</td> <td>COPd</td> <td>-</td> <td>-</td> </tr> <tr> <td>For air-to-water heat pumps: Operation limit temperature</td> <td>TOL</td> <td>-10</td> <td>°C</td> </tr> <tr> <td>Cycling interval efficiency</td> <td>COPcyc</td> <td>-</td> <td>-</td> </tr> <tr> <td>Heating water operating limit temperature</td> <td>WTOL</td> <td>60</td> <td>°C</td> </tr> <tr> <td colspan="4">Supplementary heater</td> </tr> <tr> <td>Rated heat output (**)</td> <td>Psup</td> <td>12.3</td> <td>kW</td> </tr> <tr> <td>Type of energy input</td> <td colspan="3">Electrical</td> </tr> <tr> <td colspan="4">For air-to-water heat pumps: Rated air flow rate, outdoors</td> </tr> <tr> <td></td> <td>-</td> <td>11200</td> <td>m³/h</td> </tr> <tr> <td colspan="4">For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger</td> </tr> <tr> <td></td> <td>-</td> <td>-</td> <td>m³/h</td> </tr> </tbody> </table>				Item	Symbol	Value	Unit	Seasonal space heating energy efficiency	ηs	123	%	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj				Tj = -7 °C	COPd	1.69	-	Tj = 2 °C	COPd	3.11	-	Tj = 7 °C	COPd	4.72	-	Tj = 12 °C	COPd	5.41	-	Tj = bivalent temperature	COPd	1.88	-	Tj = operating limit	COPd	1.08	-	For air-to-water heat pumps: Tj = -15 °C	COPd	-	-	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C	Cycling interval efficiency	COPcyc	-	-	Heating water operating limit temperature	WTOL	60	°C	Supplementary heater				Rated heat output (**)	Psup	12.3	kW	Type of energy input	Electrical			For air-to-water heat pumps: Rated air flow rate, outdoors					-	11200	m³/h	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger					-	-	m³/h								
Item	Symbol	Value	Unit																																																																																								
Seasonal space heating energy efficiency	ηs	123	%																																																																																								
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj																																																																																											
Tj = -7 °C	COPd	1.69	-																																																																																								
Tj = 2 °C	COPd	3.11	-																																																																																								
Tj = 7 °C	COPd	4.72	-																																																																																								
Tj = 12 °C	COPd	5.41	-																																																																																								
Tj = bivalent temperature	COPd	1.88	-																																																																																								
Tj = operating limit	COPd	1.08	-																																																																																								
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-																																																																																								
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C																																																																																								
Cycling interval efficiency	COPcyc	-	-																																																																																								
Heating water operating limit temperature	WTOL	60	°C																																																																																								
Supplementary heater																																																																																											
Rated heat output (**)	Psup	12.3	kW																																																																																								
Type of energy input	Electrical																																																																																										
For air-to-water heat pumps: Rated air flow rate, outdoors																																																																																											
	-	11200	m³/h																																																																																								
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger																																																																																											
	-	-	m³/h																																																																																								
For heat pump combination heater:																																																																																											
Declared load profile	-																																																																																										
Daily electricity consumption	Qelec	-	kWh																																																																																								
Annual electricity consumption	AEC	-	kWh																																																																																								
Water heating energy efficiency	ηwh	-	%																																																																																								
Daily fuel consumption	Qfuel	-	kWh																																																																																								
Annual fuel consumption	AFC	-	GJ																																																																																								
Contact details	AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France																																																																																										
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).																																																																																											
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.																																																																																											

Technical parameters

Model(s):	AW-WHPMA26-H93																																																																																										
Air-to-water heat pump:	YES																																																																																										
Water-to-water heat pump:	NO																																																																																										
Brine-to-water heat pump:	NO																																																																																										
Low-temperature heat pump:	NO																																																																																										
Equipped with a supplementary heater:	NO																																																																																										
Heat pump combination heater:	NO																																																																																										
Declared climate condition:	COLDER																																																																																										
Parameters are declared for medium-temperature application.																																																																																											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Item</th> <th style="width: 15%;">Symbol</th> <th style="width: 15%;">Value</th> <th style="width: 10%;">Unit</th> </tr> </thead> <tbody> <tr> <td>Rated heat output (*)</td> <td>Prated</td> <td>26.3</td> <td>kW</td> </tr> <tr> <td colspan="4">Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj</td> </tr> <tr> <td>Tj = -7 °C</td> <td>Pdh</td> <td>15.9</td> <td>kW</td> </tr> <tr> <td>Tj = 2 °C</td> <td>Pdh</td> <td>10.2</td> <td>kW</td> </tr> <tr> <td>Tj = 7 °C</td> <td>Pdh</td> <td>6.5</td> <td>kW</td> </tr> <tr> <td>Tj = 12 °C</td> <td>Pdh</td> <td>3.6</td> <td>kW</td> </tr> <tr> <td>Tj = bivalent temperature</td> <td>Pdh</td> <td>15.9</td> <td>kW</td> </tr> <tr> <td>Tj = operating limit</td> <td>Pdh</td> <td>13.4</td> <td>kW</td> </tr> <tr> <td>For air-to-water heat pumps: Tj = -15 °C</td> <td>Pdh</td> <td>13.4</td> <td>kW</td> </tr> <tr> <td>Bivalent temperature</td> <td>Tbiv</td> <td>-7</td> <td>°C</td> </tr> <tr> <td>Cycling interval capacity for heating</td> <td>P_{cyh}</td> <td>-</td> <td>kW</td> </tr> <tr> <td>Degradation co-efficient (**)</td> <td>Cdh</td> <td>0.9</td> <td>--</td> </tr> <tr> <td colspan="4">Power consumption in modes other than active mode</td> </tr> <tr> <td>Off mode</td> <td>P_{off}</td> <td>0.018</td> <td>kW</td> </tr> <tr> <td>Standby mode</td> <td>P_{sb}</td> <td>0.018</td> <td>kW</td> </tr> <tr> <td>Thermostat-off mode</td> <td>P_{to}</td> <td>0.096</td> <td>kW</td> </tr> <tr> <td>Crankcase heater mode</td> <td>P_{ck}</td> <td>0.000</td> <td>kW</td> </tr> <tr> <td colspan="4">Other items</td> </tr> <tr> <td>Capacity control</td> <td colspan="3">variable</td> </tr> <tr> <td>Sound power level, indoors/outdoors</td> <td>L_{WA}</td> <td>-75</td> <td>dB</td> </tr> <tr> <td>Annual energy consumption</td> <td>Q_{HE}</td> <td>24967</td> <td>kWh</td> </tr> </tbody> </table>				Item	Symbol	Value	Unit	Rated heat output (*)	Prated	26.3	kW	Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Tj = -7 °C	Pdh	15.9	kW	Tj = 2 °C	Pdh	10.2	kW	Tj = 7 °C	Pdh	6.5	kW	Tj = 12 °C	Pdh	3.6	kW	Tj = bivalent temperature	Pdh	15.9	kW	Tj = operating limit	Pdh	13.4	kW	For air-to-water heat pumps: Tj = -15 °C	Pdh	13.4	kW	Bivalent temperature	Tbiv	-7	°C	Cycling interval capacity for heating	P _{cyh}	-	kW	Degradation co-efficient (**)	Cdh	0.9	--	Power consumption in modes other than active mode				Off mode	P _{off}	0.018	kW	Standby mode	P _{sb}	0.018	kW	Thermostat-off mode	P _{to}	0.096	kW	Crankcase heater mode	P _{ck}	0.000	kW	Other items				Capacity control	variable			Sound power level, indoors/outdoors	L _{WA}	-75	dB	Annual energy consumption	Q _{HE}	24967	kWh
Item	Symbol	Value	Unit																																																																																								
Rated heat output (*)	Prated	26.3	kW																																																																																								
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj																																																																																											
Tj = -7 °C	Pdh	15.9	kW																																																																																								
Tj = 2 °C	Pdh	10.2	kW																																																																																								
Tj = 7 °C	Pdh	6.5	kW																																																																																								
Tj = 12 °C	Pdh	3.6	kW																																																																																								
Tj = bivalent temperature	Pdh	15.9	kW																																																																																								
Tj = operating limit	Pdh	13.4	kW																																																																																								
For air-to-water heat pumps: Tj = -15 °C	Pdh	13.4	kW																																																																																								
Bivalent temperature	Tbiv	-7	°C																																																																																								
Cycling interval capacity for heating	P _{cyh}	-	kW																																																																																								
Degradation co-efficient (**)	Cdh	0.9	--																																																																																								
Power consumption in modes other than active mode																																																																																											
Off mode	P _{off}	0.018	kW																																																																																								
Standby mode	P _{sb}	0.018	kW																																																																																								
Thermostat-off mode	P _{to}	0.096	kW																																																																																								
Crankcase heater mode	P _{ck}	0.000	kW																																																																																								
Other items																																																																																											
Capacity control	variable																																																																																										
Sound power level, indoors/outdoors	L _{WA}	-75	dB																																																																																								
Annual energy consumption	Q _{HE}	24967	kWh																																																																																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Item</th> <th style="width: 15%;">Symbol</th> <th style="width: 15%;">Value</th> <th style="width: 10%;">Unit</th> </tr> </thead> <tbody> <tr> <td>Seasonal space heating energy efficiency</td> <td>η_s</td> <td>101</td> <td>%</td> </tr> <tr> <td colspan="4">Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj</td> </tr> <tr> <td>Tj = -7 °C</td> <td>COP_d</td> <td>2.10</td> <td>-</td> </tr> <tr> <td>Tj = 2 °C</td> <td>COP_d</td> <td>3.58</td> <td>-</td> </tr> <tr> <td>Tj = 7 °C</td> <td>COP_d</td> <td>4.99</td> <td>-</td> </tr> <tr> <td>Tj = 12 °C</td> <td>COP_d</td> <td>5.68</td> <td>-</td> </tr> <tr> <td>Tj = bivalent temperature</td> <td>COP_d</td> <td>2.10</td> <td>-</td> </tr> <tr> <td>Tj = operating limit</td> <td>COP_d</td> <td>1.20</td> <td>-</td> </tr> <tr> <td>For air-to-water heat pumps: Tj = -15 °C</td> <td>COP_d</td> <td>1.20</td> <td>-</td> </tr> <tr> <td>For air-to-water heat pumps: Operation limit temperature</td> <td>TOL</td> <td>-15</td> <td>°C</td> </tr> <tr> <td>Cycling interval efficiency</td> <td>COP_{cyh}</td> <td>-</td> <td>-</td> </tr> <tr> <td>Heating water operating limit temperature</td> <td>W_{TOL}</td> <td>50</td> <td>°C</td> </tr> <tr> <td colspan="4">Supplementary heater</td> </tr> <tr> <td>Rated heat output (**)</td> <td>P_{sup}</td> <td>26.3</td> <td>kW</td> </tr> <tr> <td>Type of energy input</td> <td colspan="3">-</td> </tr> <tr> <td colspan="4">For air-to-water heat pumps: Rated air flow rate, outdoors</td> </tr> <tr> <td></td> <td>-</td> <td>11200</td> <td>m³/h</td> </tr> <tr> <td colspan="4">For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger</td> </tr> <tr> <td></td> <td>-</td> <td>-</td> <td>m³/h</td> </tr> </tbody> </table>				Item	Symbol	Value	Unit	Seasonal space heating energy efficiency	η _s	101	%	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj				Tj = -7 °C	COP _d	2.10	-	Tj = 2 °C	COP _d	3.58	-	Tj = 7 °C	COP _d	4.99	-	Tj = 12 °C	COP _d	5.68	-	Tj = bivalent temperature	COP _d	2.10	-	Tj = operating limit	COP _d	1.20	-	For air-to-water heat pumps: Tj = -15 °C	COP _d	1.20	-	For air-to-water heat pumps: Operation limit temperature	TOL	-15	°C	Cycling interval efficiency	COP _{cyh}	-	-	Heating water operating limit temperature	W _{TOL}	50	°C	Supplementary heater				Rated heat output (**)	P _{sup}	26.3	kW	Type of energy input	-			For air-to-water heat pumps: Rated air flow rate, outdoors					-	11200	m ³ /h	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger					-	-	m ³ /h								
Item	Symbol	Value	Unit																																																																																								
Seasonal space heating energy efficiency	η _s	101	%																																																																																								
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj																																																																																											
Tj = -7 °C	COP _d	2.10	-																																																																																								
Tj = 2 °C	COP _d	3.58	-																																																																																								
Tj = 7 °C	COP _d	4.99	-																																																																																								
Tj = 12 °C	COP _d	5.68	-																																																																																								
Tj = bivalent temperature	COP _d	2.10	-																																																																																								
Tj = operating limit	COP _d	1.20	-																																																																																								
For air-to-water heat pumps: Tj = -15 °C	COP _d	1.20	-																																																																																								
For air-to-water heat pumps: Operation limit temperature	TOL	-15	°C																																																																																								
Cycling interval efficiency	COP _{cyh}	-	-																																																																																								
Heating water operating limit temperature	W _{TOL}	50	°C																																																																																								
Supplementary heater																																																																																											
Rated heat output (**)	P _{sup}	26.3	kW																																																																																								
Type of energy input	-																																																																																										
For air-to-water heat pumps: Rated air flow rate, outdoors																																																																																											
	-	11200	m ³ /h																																																																																								
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger																																																																																											
	-	-	m ³ /h																																																																																								
For heat pump combination heater:																																																																																											
Declared load profile	-																																																																																										
Daily electricity consumption	Q _{elec}	-	kWh																																																																																								
Annual electricity consumption	AEC	-	kWh																																																																																								
Water heating energy efficiency	η _{wh}	-	%																																																																																								
Daily fuel consumption	Q _{fuel}	-	kWh																																																																																								
Annual fuel consumption	AFC	-	GJ																																																																																								
Contact details	AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France																																																																																										
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).																																																																																											
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.																																																																																											

Technical parameters

Model(s):	AW-WHPMA26-H93
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	WARMER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	26.2	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	-	kW
Tj = 2 °C	Pdh	26.5	kW
Tj = 7 °C	Pdh	16.9	kW
Tj = 12 °C	Pdh	7.6	kW
Tj = bivalent temperature	Pdh	16.9	kW
Tj = operating limit	Pdh	26.5	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.018	kW
Standby mode	Psb	0.018	kW
Thermostat-off mode	Pto	0.096	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-75	dB
Annual energy consumption	QHE	8218	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	168	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	-	-
Tj = 2 °C	COPd	1.99	-
Tj = 7 °C	COPd	3.47	-
Tj = 12 °C	COPd	5.94	-
Tj = bivalent temperature	COPd	3.47	-
Tj = operating limit	COPd	1.99	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	0.0	kW
Type of energy input	-		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	11200	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

For heat pump combination heater:							
Declared load profile	-						
Daily electricity consumption	Qelec	-	kWh	Water heating energy efficiency	ηwh	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Qfuel	-	kWh
				Annual fuel consumption	AFC	-	GJ

Contact details AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	AW-WHPMA30-H93
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	AVERAGE

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	29.7	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	20.1	kW
Tj = 2 °C	Pdh	16.5	kW
Tj = 7 °C	Pdh	10.5	kW
Tj = 12 °C	Pdh	4.7	kW
Tj = bivalent temperature	Pdh	24.0	kW
Tj = operating limit	Pdh	13.8	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	-5	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.018	kW
Standby mode	Psb	0.018	kW
Thermostat-off mode	Pto	0.096	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-77	dB
Annual energy consumption	QHE	19316	kWh

For heat pump combination heater:

Declared load profile	-		
Daily electricity consumption	Qelec	-	kWh
Annual electricity consumption	AEC	-	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	123	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	1.63	-
Tj = 2 °C	COPd	3.09	-
Tj = 7 °C	COPd	4.73	-
Tj = 12 °C	COPd	5.85	-
Tj = bivalent temperature	COPd	2.02	-
Tj = operating limit	COPd	1.07	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	15.9	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	11200	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

Contact details	AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France
-----------------	--

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	AW-WHPMA30-H93
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	COLDER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	30.4	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	18.4	kW
Tj = 2 °C	Pdh	11.2	kW
Tj = 7 °C	Pdh	7.4	kW
Tj = 12 °C	Pdh	3.6	kW
Tj = bivalent temperature	Pdh	18.4	kW
Tj = operating limit	Pdh	13.1	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	13.1	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.018	kW
Standby mode	Psb	0.018	kW
Thermostat-off mode	Pto	0.096	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-77	dB
Annual energy consumption	QHE	29238	kWh

For heat pump combination heater:

Declared load profile	-		
Daily electricity consumption	Qelec	-	kWh
Annual electricity consumption	AEC	-	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	100	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.10	-
Tj = 2 °C	COPd	3.51	-
Tj = 7 °C	COPd	5.18	-
Tj = 12 °C	COPd	5.73	-
Tj = bivalent temperature	COPd	2.10	-
Tj = operating limit	COPd	1.18	-
For air-to-water heat pumps: Tj = -15 °C	COPd	1.18	-
For air-to-water heat pumps: Operation limit temperature	TOL	-15	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	50	°C
Supplementary heater			
Rated heat output (**)	Psup	30.4	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	11200	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

Contact details: AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	AW-WHPMA30-H93
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	WARMER
Parameters are declared for medium-temperature application.	

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	29.7	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	-	kW
Tj = 2 °C	Pdh	26.4	kW
Tj = 7 °C	Pdh	19.1	kW
Tj = 12 °C	Pdh	8.9	kW
Tj = bivalent temperature	Pdh	19.1	kW
Tj = operating limit	Pdh	26.4	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.018	kW
Standby mode	Psb	0.018	kW
Thermostat-off mode	Pto	0.096	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-77	dB
Annual energy consumption	QHE	9580	kWh

For heat pump combination heater:			
Declared load profile	-		
Daily electricity consumption	Qelec	-	kWh
Annual electricity consumption	AEC	-	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	163	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	-	-
Tj = 2 °C	COPd	1.99	-
Tj = 7 °C	COPd	3.37	-
Tj = 12 °C	COPd	6.09	-
Tj = bivalent temperature	COPd	3.37	-
Tj = operating limit	COPd	1.99	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	3.3	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	11200	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

Water heating energy efficiency	ηwh	-	%
Daily fuel consumption	Qfuel	-	kWh
Annual fuel consumption	AFC	-	GJ

Contact details	AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France
-----------------	--

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Information requirements for comfort chillers

Model(s):	AW-WHPMA18-H93
Outdoor side heat exchanger of chiller:	Air to water
Indoor side heat exchanger chiller:	Water
Type:	Compressor driven vapour compression
Driver of compressor:	Electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	16.6	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	185	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	16.6	kW	$T_j=+35^\circ\text{C}$	EER_d	3.06	-
$T_j=+30^\circ\text{C}$	P_{dc}	11.9	kW	$T_j=+30^\circ\text{C}$	EER_d	4.13	-
$T_j=+25^\circ\text{C}$	P_{dc}	7.6	kW	$T_j=+25^\circ\text{C}$	EER_d	5.59	-
$T_j=+20^\circ\text{C}$	P_{dc}	3.5	kW	$T_j=+20^\circ\text{C}$	EER_d	5.55	-

Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
---	----------	-----	---	--	--	--	--

Power consumption in modes other than "active mode"

Off mode	P_{OFF}	0.017	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.084	kW	Standby mode	P_{SB}	0.017	kW

Other items

Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	8100	m^3/h
Sound power level, indoors / outdoors	LWA	-71	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				

Standard rating conditions used	Low temperature application
Contact details	AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France

(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9.
(**) From 26 September 2018.

Information requirements for comfort chillers

Model(s):	AW-WHPMA18-H93
Outdoor side heat exchanger of chiller:	Air to water
Indoor side heat exchanger chiller:	Water
Type:	Compressor driven vapour compression
Driver of compressor:	Electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	18.4	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	216	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	18.4	kW	$T_j=+35^\circ\text{C}$	EER_d	4.44	-
$T_j=+30^\circ\text{C}$	P_{dc}	13.3	kW	$T_j=+30^\circ\text{C}$	EER_d	5.26	-
$T_j=+25^\circ\text{C}$	P_{dc}	8.5	kW	$T_j=+25^\circ\text{C}$	EER_d	6.68	-
$T_j=+20^\circ\text{C}$	P_{dc}	3.3	kW	$T_j=+20^\circ\text{C}$	EER_d	5.15	-

Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
---	----------	-----	---	--	--	--	--

Power consumption in modes other than "active mode"

Off mode	P_{OFF}	0.017	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.084	kW	Standby mode	P_{SB}	0.017	kW

Other items

Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	8100	m^3/h
Sound power level, indoors / outdoors	LWA	-71	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				

Standard rating conditions used	Medium temperature application
Contact details	AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France

(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9.
(**) From 26 September 2018.

Information requirements for comfort chillers

Model(s):	AW-WHPMA22-H93						
Outdoor side heat exchanger of chiller:	Air to water						
Indoor side heat exchanger chiller:	Water						
Type:	Compressor driven vapour compression						
Driver of compressor:	Electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	20.6	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	185	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^{\circ}\text{C}$	P_{dc}	20.6	kW	$T_j=+35^{\circ}\text{C}$	EER_d	2.89	-
$T_j=+30^{\circ}\text{C}$	P_{dc}	14.9	kW	$T_j=+30^{\circ}\text{C}$	EER_d	3.95	-
$T_j=+25^{\circ}\text{C}$	P_{dc}	9.3	kW	$T_j=+25^{\circ}\text{C}$	EER_d	5.37	-
$T_j=+20^{\circ}\text{C}$	P_{dc}	4.3	kW	$T_j=+20^{\circ}\text{C}$	EER_d	6.19	-
Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.017	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.084	kW	Standby mode	P_{SB}	0.017	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	8950	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-/73	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				
Standard rating conditions used	Low temperature application						
Contact details	AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France						
(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.							

Information requirements for comfort chillers

Model(s):	AW-WHPMA22-H93
Outdoor side heat exchanger of chiller:	Air to water
Indoor side heat exchanger chiller:	Water
Type:	Compressor driven vapour compression
Driver of compressor:	Electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	22.8	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	224	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	22.8	kW	$T_j=+35^\circ\text{C}$	EER_d	4.25	-
$T_j=+30^\circ\text{C}$	P_{dc}	16.3	kW	$T_j=+30^\circ\text{C}$	EER_d	5.16	-
$T_j=+25^\circ\text{C}$	P_{dc}	10.2	kW	$T_j=+25^\circ\text{C}$	EER_d	6.45	-
$T_j=+20^\circ\text{C}$	P_{dc}	4.6	kW	$T_j=+20^\circ\text{C}$	EER_d	6.38	-

Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
---	----------	-----	---	--	--	--	--

Power consumption in modes other than "active mode"

Off mode	P_{OFF}	0.017	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.084	kW	Standby mode	P_{SB}	0.017	kW

Other items

Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	8950	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-/73	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				

Standard rating conditions used	Medium temperature application
Contact details	AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France

(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9.
(**) From 26 September 2018.

Information requirements for comfort chillers

Model(s):	AW-WHPMA26-H93
Outdoor side heat exchanger of chiller:	Air to water
Indoor side heat exchanger chiller:	Water
Type:	Compressor driven vapour compression
Driver of compressor:	Electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	25.5	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	183	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	25.5	kW	$T_j=+35^\circ\text{C}$	EER_d	2.63	-
$T_j=+30^\circ\text{C}$	P_{dc}	18.5	kW	$T_j=+30^\circ\text{C}$	EER_d	3.79	-
$T_j=+25^\circ\text{C}$	P_{dc}	11.8	kW	$T_j=+25^\circ\text{C}$	EER_d	5.19	-
$T_j=+20^\circ\text{C}$	P_{dc}	5.6	kW	$T_j=+20^\circ\text{C}$	EER_d	6.84	-

Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
---	----------	-----	---	--	--	--	--

Power consumption in modes other than "active mode"

Off mode	P_{OFF}	0.017	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.084	kW	Standby mode	P_{SB}	0.017	kW

Other items

Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	9750	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-/75	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				

Standard rating conditions used	Low temperature application
Contact details	AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France

(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9.
(**) From 26 September 2018.

Information requirements for comfort chillers

Model(s):	AW-WHPMA26-H93
Outdoor side heat exchanger of chiller:	Air to water
Indoor side heat exchanger chiller:	Water
Type:	Compressor driven vapour compression
Driver of compressor:	Electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	26.8	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	226	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^{\circ}C$	P_{dc}	26.8	kW	$T_j=+35^{\circ}C$	EER_d	4.04	-
$T_j=+30^{\circ}C$	P_{dc}	19.4	kW	$T_j=+30^{\circ}C$	EER_d	5.21	-
$T_j=+25^{\circ}C$	P_{dc}	12.1	kW	$T_j=+25^{\circ}C$	EER_d	6.23	-
$T_j=+20^{\circ}C$	P_{dc}	5.9	kW	$T_j=+20^{\circ}C$	EER_d	6.94	-

Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
---	----------	-----	---	--	--	--	--

Power consumption in modes other than "active mode"

Off mode	P_{OFF}	0.017	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.084	kW	Standby mode	P_{SB}	0.017	kW

Other items

Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	9750	m ³ /h
Sound power level, indoors / outdoors	LWA	-/75	dB				
Emissions of nitrogen oxides (if applicable)	NO _x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m ³ /h
GWP of the refrigerant	-	675	kg CO ₂ eq (100years)				

Standard rating conditions used	Medium temperature application
Contact details	AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France

(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9.
(**) From 26 September 2018.

Information requirements for comfort chillers

Model(s):	AW-WHPMA30-H93						
Outdoor side heat exchanger of chiller:	Air to water						
Indoor side heat exchanger chiller:	Water						
Type:	Compressor driven vapour compression						
Driver of compressor:	Electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	29.5	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	177	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	29.5	kW	$T_j=+35^\circ\text{C}$	EER_d	2.29	-
$T_j=+30^\circ\text{C}$	P_{dc}	21.2	kW	$T_j=+30^\circ\text{C}$	EER_d	3.62	-
$T_j=+25^\circ\text{C}$	P_{dc}	13.5	kW	$T_j=+25^\circ\text{C}$	EER_d	5.06	-
$T_j=+20^\circ\text{C}$	P_{dc}	6.0	kW	$T_j=+20^\circ\text{C}$	EER_d	6.75	-
Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.017	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.084	kW	Standby mode	P_{SB}	0.017	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	10650	m ³ /h
Sound power level, indoors / outdoors	L_{WA}	-177	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m ³ /h
GWP of the refrigerant	-	675	kg CO ₂ eq (100years)				
Standard rating conditions used	Low temperature application						
Contact details	AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France						
(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.							

Information requirements for comfort chillers

Model(s):	AW-WHPMA30-H93
Outdoor side heat exchanger of chiller:	Air to water
Indoor side heat exchanger chiller:	Water
Type:	Compressor driven vapour compression
Driver of compressor:	Electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	30.8	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	225	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	30.8	kW	$T_j=+35^\circ\text{C}$	EER_d	3.79	-
$T_j=+30^\circ\text{C}$	P_{dc}	22.1	kW	$T_j=+30^\circ\text{C}$	EER_d	5.06	-
$T_j=+25^\circ\text{C}$	P_{dc}	13.9	kW	$T_j=+25^\circ\text{C}$	EER_d	6.33	-
$T_j=+20^\circ\text{C}$	P_{dc}	6.3	kW	$T_j=+20^\circ\text{C}$	EER_d	7.01	-

Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
---	----------	-----	---	--	--	--	--

Power consumption in modes other than "active mode"

Off mode	P_{OFF}	0.017	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.084	kW	Standby mode	P_{SB}	0.017	kW

Other items

Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	10650	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-177	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				

Standard rating conditions used	Medium temperature application
Contact details	AIRWELL RESIDENTIAL S.A.S. - 10 rue du fort de Saint Cyr - 78180 Montigny-le-Bretonneux - France

(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9.
(**) From 26 September 2018.

Model	Mode	Heating					Cooling	
	Ambient temperature	7/6			2/1	-7/-8	35/24	
	Water temperature	30-35	40-45	47-55	30-35	30-35	23-18	12-7
AW-WHPMA18-H93	Capacity /W	18000	18000	18000	18000	18000	18500	17000
	Power input /W	3830	5143	6545	5325	6667	3895	5574
	COP / EER	4.70	3.50	2.75	3.38	2.70	4.75	3.05
AW-WHPMA22-H93	Capacity /W	22000	22000	22000	22000	21000	23000	21000
	Power input /W	5000	6471	8302	7097	8077	5000	7119
	COP / EER	4.40	3.40	2.65	3.10	2.60	4.60	2.95
AW-WHPMA26-H93	Capacity /W	26000	26000	26000	24000	22000	27000	26000
	Power input /W	6373	8387	10612	8333	8800	6279	9630
	COP / EER	4.08	3.10	2.45	2.88	2.50	4.30	2.70
AW-WHPMA30-H93	Capacity /W	30100	30000	30000	26000	23000	31000	29500
	Power input /W	7698	10345	13043	9286	9388	7750	11569
	COP / EER	3.91	2.90	2.30	2.80	2.45	4.00	2.55

NOTE



**TECHNICAL DATA MANUAL
WELLEA MONOBLOC DF A
R32**



WARNING :

The design and specifications are subject to change without prior notice for product improvement. Consult with the sales agency or manufacturer for details.