

# WWB 0330-0900

## Water-water heat pumps only

Heating capacity 273,255 ÷ 867,605 BTU/h



- Optimised to produce high temperature hot water
- Can be used with any air or water cooled heat pump
- Max. processed water temperature: 176.0 °F
- Max inlet temperature on source side: 113.0 °F



### DESCRIPTION

WWB is a range of irreversible water-water heat pumps that produce high temperature water with a low or medium temperature source. Internal unit suitable for use in centralised residential systems, in systems that serve hotels and other forms of accommodation, and for applications in the tertiary and industrial sectors.

### FEATURES

#### Maximum energy efficiency

Aermec, which has focused for years on energy efficiency, designed the WWB units with the aim of guaranteeing high efficiency both with full and partial loads.

#### Operating field

With its wide operating range, it can be integrated with numerous applications and is a valid alternative to boilers and all conventional systems used to produce high temperature hot water since it also uses existing systems.

Production of hot water up to 176.0 °F (Max inlet temperature on source side 113.0 °F).

#### Constructional characteristics of unit

- Optimised plate heat exchangers with low pressure drops.
- 2 cooling circuits, 1 compressor per circuit.
- Scroll compressors for high condensing temperatures.
- Compact size for easier installation.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

#### Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

### CONTROL

Control unit accessible externally with touch-screen user interface, multilingual display of all operating parameters.

Optimised control logic for use with low and medium temperature heat pumps.

Complies with safety (EC) and electromagnetic compatibility directives.

**Removable slide-out electrical panel with opening side (LH/RH side) configurator option**

### ACCESSORIES

**AER485P1:** RS-485 interface for supervision systems with MODBUS protocol.

**AERBACP:** Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

**AERNET:** The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

**MULTICHILLER\_EVO:** Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

**PGD1:** Allows you to control the unit at a distance.

**VT:** Anti-vibration supports.

### FACTORY FITTED ACCESSORIES

**RIF:** Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ACCESSORIES COMPATIBILITY

Model	Ver	0330	0350	0550	0600	0700	0800	0900
AER485P1	L	.	.	.	.	.	.	.
AERBACP	L	.	.	.	.	.	.	.
AERNET	L	.	.	.	.	.	.	.
MULTICHILLER_EVO	L	.	.	.	.	.	.	.
PGD1	L	.	.	.	.	.	.	.

**MULTICHILLER\_EVO:** Contact the factory for compatibility of the accessory with the type of implant envisaged.

Antivibration

Ver	0330	0350	0550	0600	0700	0800	0900
L	VT9	VT9	VT9	VT15	VT15	VT15	VT15

Power factor correction

Ver	0330	0350	0550	0600	0700	0800	0900
L	RIFWWB03307	RIFWWB03507	RIFWWB05507	RIFWWB06007	RIFWWB07007	RIFWWB08007	RIFWWB09007

A grey background indicates the accessory must be assembled in the factory

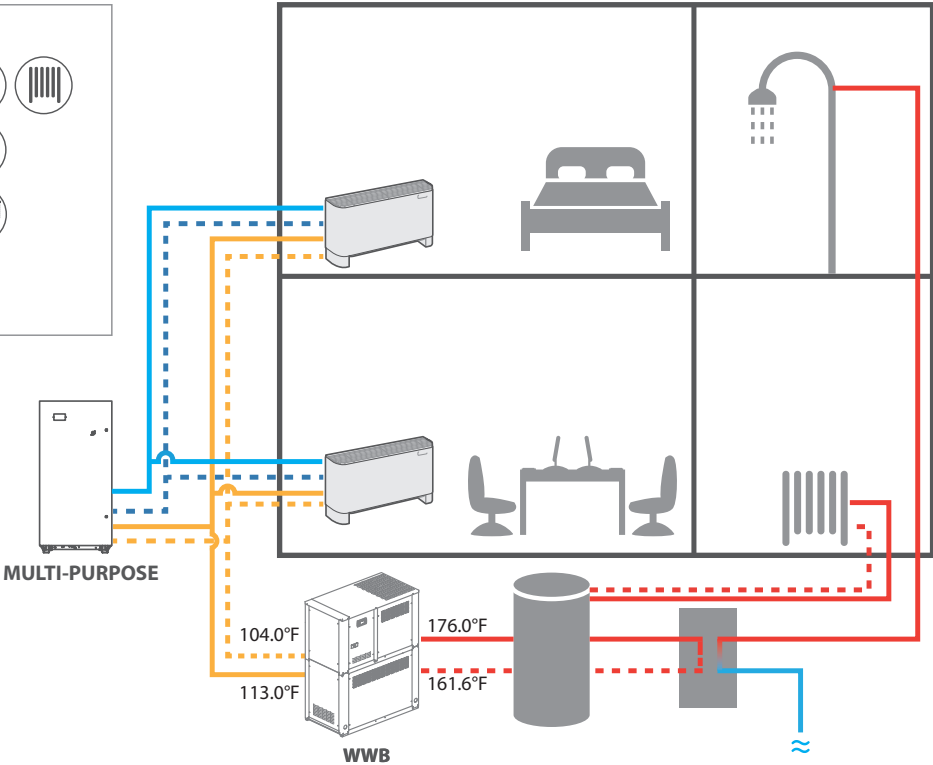
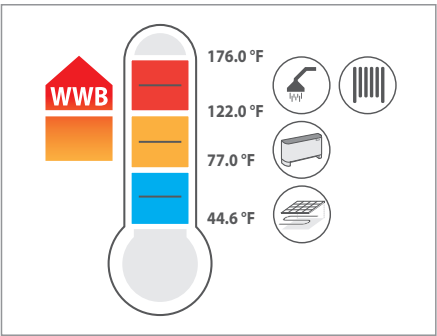
CONFIGURATOR

Field	Description
1,2,3	WWB
4,5,6,7	Size 0330, 0350, 0550, 0600, 0700, 0800, 0900
8	Operating field
X	Standard (1)
9	Model
H	Heat pump
10	Version

Field	Description
L	Silenced
11	Power supply
7	460V ~ 3 60Hz
8	575V ~ 3 60Hz
12	Electrical panel version
°	Standard opening (LH)
R	Reverse opening (RH)

(1) Evaporator water up to +41 °F. Electronic thermostatic valve as standard.

Example of four-pipe system



## PERFORMANCE SPECIFICATIONS

Size			0330	0350	0550	0600	0700	0800	0900
<b>Heating performances (Water user side 158 °F / 172.4 °F; Water source side 113 °F / 104 °F) (1)</b>									
Heating capacity	L	BTU/h	273,255	326,269	373,165	494,406	579,467	721,828	867,605
Input power	L	kW	20.2	22.6	25.4	34.6	40.6	55.0	65.9
Heating total input current	L	A	29	32	36	50	60	75	92
COP	L	kW/kW	3.97	4.23	4.31	4.19	4.18	3.85	3.86
Water flow rate system side	L	gpm	38.8	46.3	53.0	70.2	82.3	102.5	123.2
Pressure drop system side	L	ft H <sub>2</sub> O	7.75	11.05	6.47	11.35	6.91	10.72	7.32
Water flow rate source side	L	gpm	45.8	55.9	64.3	84.4	98.9	119.8	144.1
Pressure drop source side	L	ft H <sub>2</sub> O	5.15	3.44	4.55	2.56	3.52	4.77	6.90
<b>Heating performances (Water user side 158 °F / 172.4 °F; Water source side 95 °F / 86 °F) (2)</b>									
Heating capacity	L	BTU/h	220,411	263,175	301,002	398,797	467,409	582,241	699,827
Input power	L	kW	19.8	22.2	24.9	33.9	39.9	54.0	64.7
Heating total input current	L	A	29	32	36	49	59	73	90
COP	L	kW/kW	3.26	3.48	3.54	3.44	3.44	3.16	3.17
Water flow rate system side	L	gpm	31.3	37.4	42.7	56.6	66.4	82.7	99.3
Pressure drop system side	L	ft H <sub>2</sub> O	5.04	7.19	4.21	7.39	4.50	6.98	4.76
Water flow rate source side	L	gpm	34.1	41.9	48.3	63.2	74.0	88.9	107.0
Pressure drop source side	L	ft H <sub>2</sub> O	2.86	1.93	2.57	1.44	1.97	2.63	3.81

(1) Water user side 158 °F / 172.4 °F; Water source side 113 °F / 104 °F

(2) Water user side 158 °F / 172.4 °F; Water source side 95 °F / 86 °F

## ELECTRIC DATA

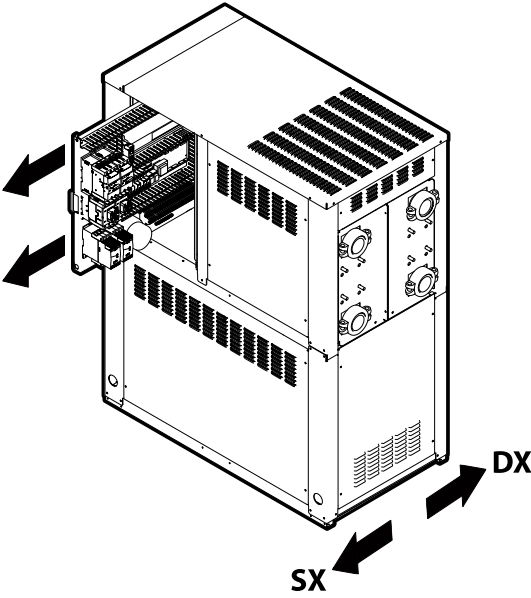
Size			0330	0350	0550	0600	0700	0800	0900
<b>Power supply: 7</b>									
<b>Electric data</b>									
Peak current (LRA)	L	A	113	133	147	179	215	269	326
Minimum circuit amperage (MCA)	L	A	35	35	50	60	60	70	100
Maximum overcurrent permitted by the protection device (MOP)	L	A	40	45	60	70	80	100	125
<b>Power supply: 8</b>									
<b>Electric data</b>									
Peak current (LRA)	L	A	94	96	99	133	161	215	281
Minimum circuit amperage (MCA)	L	A	35	35	35	50	60	70	70
Maximum overcurrent permitted by the protection device (MOP)	L	A	40	40	40	60	80	90	90

## GENERAL TECHNICAL DATA

Size			0330	0350	0550	0600	0700	0800	0900
<b>Compressor</b>									
Type	L	type				Scroll			
Compressor regulation	L	Type				On-Off			
Number	L	no.	2	2	2	2	2	2	2
Circuits	L	no.	2	2	2	2	2	2	2
Refrigerant	L	type				R134a			
Refrigerant load circuit 1	L	lbs	6.6	7.9	9.7	13.7	17.0	17.6	21.8
Refrigerant load circuit 2	L	lbs	7.9	7.7	9.5	13.7	16.5	17.2	21.4
<b>Source side heat exchanger</b>									
Type	L	type				Brazed plate			
Number	L	no.	1	1	1	1	1	1	1
Connections (in/out)	L	Type				Grooved joints			
Sizes (in/out)	L	Ø	2"	2"	2"	2" 1/2	2" 1/2	2" 1/2	2" 1/2
<b>System side heat exchanger</b>									
Type	L	type				Brazed plate			
Number	L	no.	1	1	1	1	1	1	1
Connections (in/out)	L	Type				Grooved joints			
Sizes (in/out)	L	Ø	2"	2"	2"	2" 1/2	2" 1/2	2" 1/2	2" 1/2
<b>Sound data calculated in heating mode (1)</b>									
Sound power level	L	dB(A)	76.8	77.8	77.3	78.6	79.3	83.9	85.9
Sound pressure level (10 m / 33 ft)	L	dB(A)	45.2	46.2	45.7	47.0	47.7	52.4	54.4

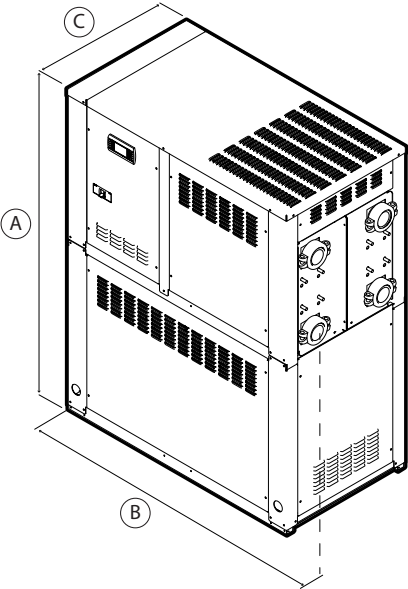
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2. Sound pressure (cold functioning) measured in free field, 10 m / 33 ft away from the unit external surface (in compliance with UNI EN ISO 3744).

Removal of electrical panel



Electrical panel version			Configurator option		
Sx - LH side			° (Standard)		
Dx - RH side			R		

DIMENSIONS



Size			0330	0350	0550	0600	0700	0800	0900
Dimensions and weights									
A	L	in	65.0	65.0	65.0	65.0	65.0	65.0	65.0
B	L	in	51.2	51.2	51.2	51.2	51.2	51.2	51.2
C	L	in	28.0	28.0	28.0	28.0	28.0	28.0	28.0
Weights									
Weight empty + packaging	L	lb	937	970	1,003	1,102	1,576	1,676	1,808
Weight functioning	L	lb	926	970	1,014	1,124	1,609	1,709	1,852

Aermec reserves the right to make any modifications deemed necessary.  
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