

WWB-0300-0900

Water-water heat pumps only

Heating capacity 56,7 ÷ 265,9 kW



- Optimised to produce high temperature hot water
- Can be used with any air or water cooled heat pump
- Water produced up to 80 °C
- Max inlet temperature on source side: 45 °C



Colour RAL 9003

DESCRIPTION

WWB is a range of irreversible water-water heat pumps that produce high temperature water with a low or medium temperature source.

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.

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.

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.

Models available

Heat pump, low noise version

Construction characteristics

- Structure and base in epoxy powder coated galvanised sheet metal. (RAL 9003)
- Optimised plate heat exchangers with low pressure drops
- 2 cooling circuits, 1 compressor per circuit
- Scroll compressors for high condensing temperatures
- Removable slide-out electrical panel with opening side (LH/RH side) configurator option

- 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.
- Electronic expansion valve provided as standard
- Compact size for easier installation

ACCESSORIES

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

PGD1: Simplified remote panel. Allows control of basic unit functions and alarm notification.

AERNET: In Master operating mode, it can be used to remotely control up to six devices configured as slaves with an RS-485 serial connection. Remote control is available via PC, tablet or smartphone thanks to a Cloud Server connection. Chronological recording of the activities of the connected units (log files) is also available for post analysis.

MULTICHILLER_EVO: control system to control, activate and deactivate the individual chillers in a system in which several units are installed in parallel to guarantee constant delivery to the evaporators.

Contact Aermec for compatibility of the accessory with the type of implant envisaged.

VT: Anti-vibration mounts.

RIF: Power factor correction. Connected in parallel to the motor allowing reduction of input current. Accessory installed in the factory.

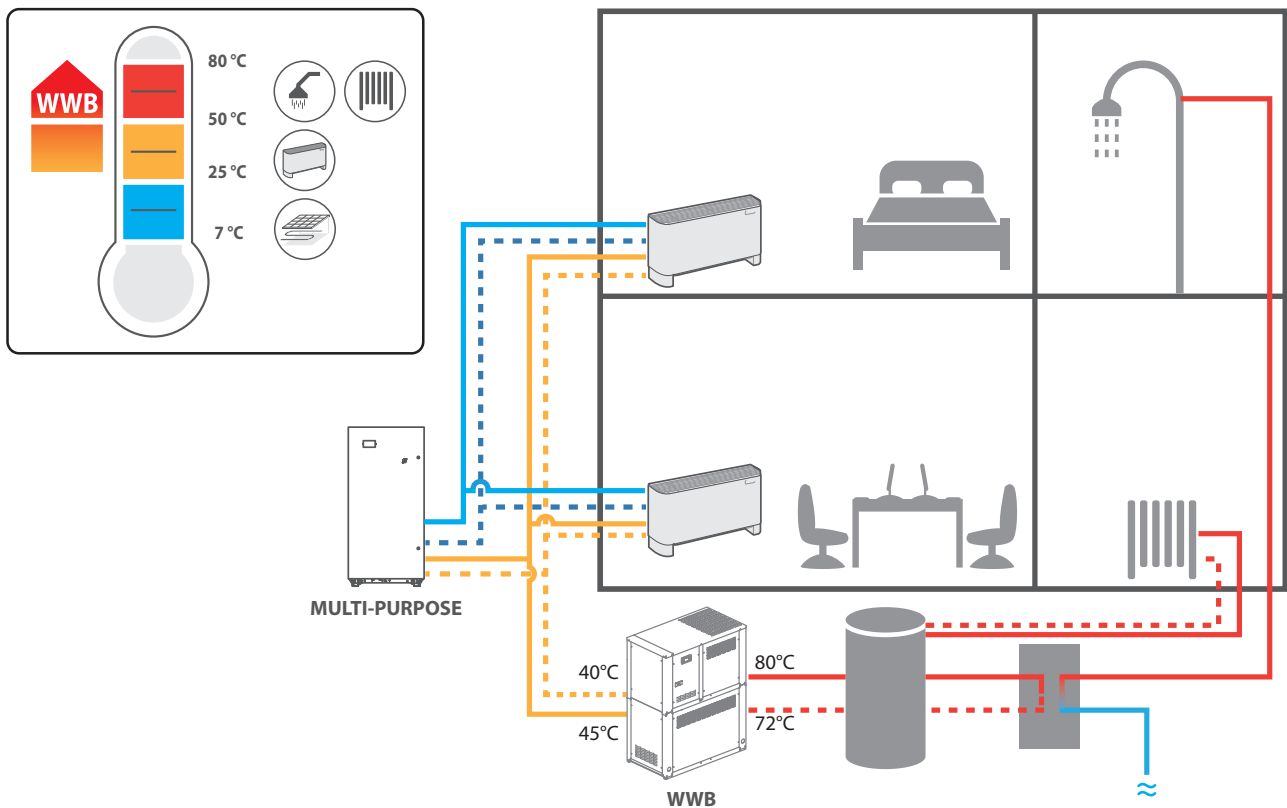
ACCESSORIES COMPATIBILITY

Size	0300	0330	0350	0550	0600	0700	0800	0900
AER485P1	.	.	.	.	.	.	.	.
PGD1	.	.	.	.	.	.	.	.
AERNET	.	.	.	.	.	.	.	.
MULTICHILLER_EVO	.	.	.	.	.	.	.	.
VT	VT9	VT9	VT9	VT9	VT15	VT15	VT15	VT15
RIF	RIFWWB0300	RIFWWB0330	RIFWWB0350	RIFWWB0550	RIFWWB0600	RIFWWB0700	RIFWWB0800	RIFWWB0900

CONFIGURATOR

Field	Description
1,2,3	WWB (Water-to-Water Booster)
4,5,6,7	Size 0300-0330-0350-0550-0600-0700-0800-0900
8	Operating field X Standard (evaporator water up to +5°C) - VT standard electronics
9	Model H Heat pump
10	Version L Low noise
11	Power supply ° 400V/3/50Hz S 400V/3/50Hz with Soft-start
12	Electrical panel version ° Standard opening (LH) R Reverse opening (RH)

Example of four-pipe system



PERFORMANCE SPECIFICATIONS

Size		0300	0330	0350	0550	0600	0700	0800	0900
Heating performances 70 °C / 78 °C ⁽¹⁾									
Heating capacity	kW	56,7	62,7	75,2	92,4	115,9	146,5	177,8	214,4
Input power	kW	16,3	17,6	21,0	27,0	33,9	43,2	54,0	64,7
COP	W/W	3,48	3,56	3,58	3,42	3,42	3,39	3,29	3,31
Water flow rate system side	l/h	6228	6886	8262	10157	12734	16110	19543	23570
Pressure drop system side	kPa	12	14	20	14	22	15	23	16
Water flow rate source side	l/h	7007	7820	9396	11340	14221	17923	21486	25973
Pressure drop source side	kPa	7	9	6	8	4	7	9	13
Heating performances 70 °C / 78 °C ⁽²⁾									
Heating capacity	kW	70,3	77,7	93,2	114,6	143,7	181,7	220,5	265,9
Input power	kW	16,7	18,0	21,6	27,7	34,7	44,3	55,4	66,4
COP	W/W	4,22	4,31	4,33	4,14	4,14	4,11	3,98	4,00
Water flow rate system side	l/h	7721	8537	10242	12592	15787	19972	24228	29221
Pressure drop system side	kPa	18	22	31	21	33	24	35	24
Water flow rate source side	l/h	9339	10399	12491	15140	18986	23950	28791	34785
Pressure drop source side	kPa	12	15	10	15	8	12	16	23

(1) Date 14511:2018; Water user side 70 °C / 78 °C; Water source side 35 °C / 30 °C

(2) Date 14511:2018; Water user side 70 °C / 78 °C; Water source side 45 °C / 40 °C

ENERGY DATA

Size		0300	0330	0350	0550	0600	0700	0800	0900
Performance in average climate conditions (1)									
Pdesignh	(1) kW	46	51	61	76	95	120	145	175
SCOP	(1) W/W	4,60	4,69	4,69	4,56	4,55	4,56	4,43	4,49
ηsh	(1) %	176	180	180	175	174	174	169	171
Energy Efficiency Class	(2)	A++	A++	A++	-	-	-	-	-

(1) Efficiency in medium temperature applications (55°C) 813/2013 ecodesign

(2) Energy efficiency class according to Eco-design Regulation no. 811/2013 ecodesign

ELECTRICAL DATA

Size		0300	0330	0350	0550	0600	0700	0800	0900
Electrical data									
Power supply		400V ±10% / 3 / 50Hz							
Heating total input current	A	28	29	35	45	59	70	87	102
Maximum current (FLA)	A	31	32	38	50	65	80	95	114
Peak current (LRA)	A	110	127	137	165	206	265	319	367
Peak current (LRA) with Soft start	A	53	60	66	81	102	130	156	181

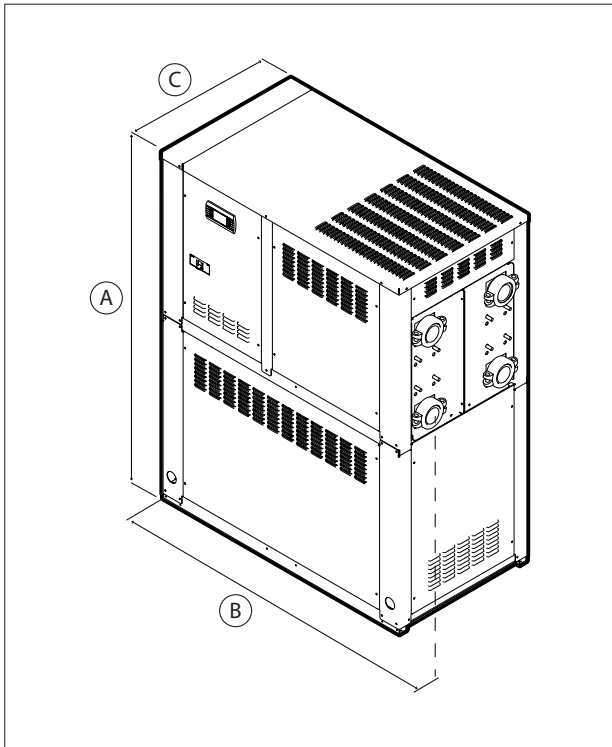
GENERAL TECHNICAL DATA

Size		0300	0330	0350	0550	0600	0700	0800	0900
Compressors									
Type	Type	Scroll							
N° compressors	n°	2	2	2	2	2	2	2	2
N° circuits	n°	2	2	2	2	2	2	2	2
Capacity control (of unit)	%	50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100
Source side heat exchanger									
Type of heat exchanger	Type	Plates							
Quantity	n°	1	1	1	1	1	1	1	1
Heat exchanger connections (IN/OUT)	ø	2"	2"	2"	2"	2" 1/2	2" 1/2	2" 1/2	2" 1/2
System side heat exchanger									
Type of heat exchanger	Type	Plates							
Quantity	n°	1	1	1	1	1	1	1	1
Heat exchanger connections (IN/OUT)	ø	2"	2"	2"	2"	2"	2"	2"	2" 1/2
Sound data									
Sound power ⁽¹⁾	dB(A)	71,8	71,8	71,8	75,1	78,3	79,3	80,4	82,4

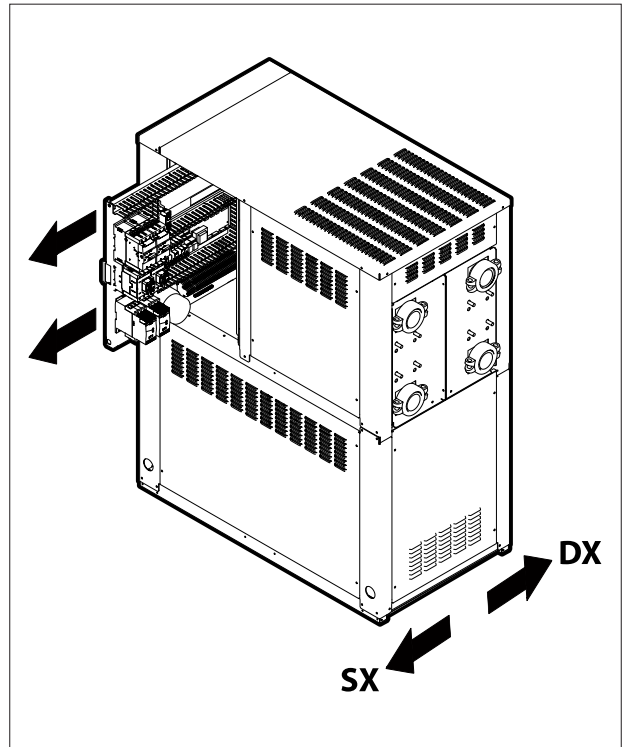
Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification

■ N.B.: For further information, please refer to the selection programme or the technical documentation available at www.aermec.com

DIMENSIONS



Removal of electrical panel



Opening of electrical panel	Configurator option
Sx - LH side	° (Standard)
Dx - RH side	R

Size		0300	0330	0350	0550	0600	0700	0800	0900
Dimensions and weights									
A	mm	1650	1650	1650	1650	1650	1650	1650	1650
B	mm	1300	1300	1300	1300	1300	1300	1300	1300
C	mm	710	710	710	710	710	710	710	710
Empty weight + package	kg	420	425	440	455	500	715	760	820
Operation weight	kg	415	420	440	460	510	730	775	840

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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