

MBD HTJ

BRINE-WATER HEAT PUMPS FOR INDOOR INSTALLATION



Options

Operating mode

R - Heating and cooling
(reversible on refrigerant side)

H - Heating

Heat recovery

Base version

Desuperheater version

Acoustic setting up

B - Base setting up

S - Low noise setting up

Plant side flow rate management

None

Standard pump

Modulating pump

High head pump

Source side flow rate management

None

Standard pump

Modulating pump

High head pump

Compressor starter

Standard

Soft starter

Accessories

Vibration dampers

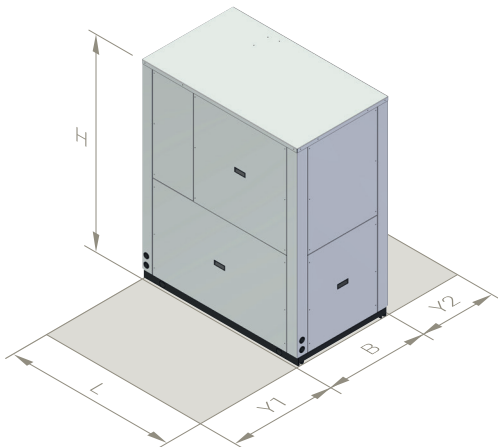
Remote interface

TECHNICAL DATA	52	62	70	78	92	
Efficiency class - EU reg 811/2013 <i>average climate - medium temperature application</i>	A++	A++	A++	A++	A++	-
Power supply	400V - 3N - 50Hz					-
Refrigerant	R410A					-
Type of compressors	high temperature scroll with vapour injection					-
N° of compressors / N° of refrigerant circuits	2 / 1					-
Type of plant side heat exchangers	stainless steel brazed plates					-
Type of source side heat exchangers	stainless steel brazed plates					-
Hydraulic fittings	2" M	2" M	2" M	2" M	2" M	-
Weight *	438	451	465	467	486	kg
Maximum power input *	26,0	31,4	35,6	38,4	43,4	kW

* base unit without options and accessories

OPERATING RANGE	HEATING		COOLING		
	min	max	min	max	
Water outlet temperature	15	65 *	6	25	°C
Source inlet temperature (brine)	-15	25	5	50	°C

* The maximum water outlet temperature can be increased up to 70°C keeping a ΔT of 10°C between inlet and outlet



	52	62	70	78	92	
L	1330	1330	1330	1330	1330	mm
B	780	780	780	780	780	mm
H	1630	1630	1630	1630	1630	mm
Y1	1000	1000	1000	1000	1000	mm
Y2	500	500	500	500	500	mm

HEATING		B	W	52	62	70	78	92	
BOW35	Heating capacity	0	35	53,9	63,4	70,8	79,8	93,2	kW
	Power input			11,7	13,7	15,2	17,2	20,1	kW
	COP			4,61	4,63	4,66	4,64	4,64	-
	Plant side water flow rate			9300	10945	12226	13768	16088	l/h
	Plant side pressure drops			18	17	15	19	20	kPa
	Source side water flow rate			13553	15939	17816	20075	23447	l/h
	Source side pressure drops			37	36	32	40	41	kPa
BOW45	Heating capacity	0	45	55,2	64,9	72,5	81,6	95,4	kW
	Power input			14,5	17,0	18,9	21,3	25,0	kW
	COP			3,81	3,82	3,84	3,83	3,82	-
	Plant side water flow rate			9552	11241	12558	14141	16524	l/h
	Plant side pressure drops			19	18	16	20	21	kPa
	Source side water flow rate			13058	15354	17165	19345	22592	l/h
	Source side pressure drops			35	33	30	38	39	kPa
BOW55	Heating capacity	0	55	57,4	67,5	75,4	84,9	99,2	kW
	Power input			17,3	20,4	22,7	25,6	29,9	kW
	COP			3,32	3,31	3,32	3,32	3,32	-
	Plant side water flow rate			6242	7346	8207	9241	10799	l/h
	Plant side pressure drops			8	8	8	9	9	kPa
	Source side water flow rate			12851	15107	16892	19041	22234	l/h
	Source side pressure drops			34	32	29	37	38	kPa
BOW65	Heating capacity	0	65	60,8	71,6	79,9	90,0	105	kW
	Power input			21,2	25,0	27,8	31,3	36,6	kW
	COP			2,87	2,86	2,87	2,88	2,87	-
	Plant side water flow rate			5314	6254	6987	7867	9194	l/h
	Plant side pressure drops			6	6	6	7	7	kPa
	Source side water flow rate			12711	14938	16707	18837	21991	l/h
	Source side pressure drops			33	32	29	36	37	kPa

COOLING		B	W	52	62	70	78	92	
B30W7	Cooling capacity	30	7	50,8	59,8	66,9	75,3	88,0	kW
	Power input			10,9	12,8	14,2	16,0	18,7	kW
	EER			4,66	4,67	4,71	4,71	4,71	-
	Plant side water flow rate			8752	10297	11515	12957	15153	l/h
	Plant side pressure drops			16	15	14	17	18	kPa
	Source side water flow rate			11546	13595	15194	17093	19989	l/h
	Source side pressure drops			27	26	24	30	31	kPa
B30W18	Cooling capacity	30	18	66,4	78,2	87,4	98,3	115	kW
	Power input			10,9	12,9	14,3	16,1	18,8	kW
	EER			6,09	6,06	6,11	6,11	6,12	-
	Plant side water flow rate			11500	13530	15131	17025	19911	l/h
	Plant side pressure drops			26	25	23	28	29	kPa
	Source side water flow rate			14461	17025	19029	21408	25036	l/h
	Source side pressure drops			42	40	36	45	46	kPa

ACOUSTIC PERFORMANCES		B	W	52	62	70	78	92	
Base	Sound power level	0	35	71	72	73	74	75	dB(A)
	Sound pressure level - 1 m			55	56	57	58	59	dB(A)
	Sound pressure level - 5 m			45	45	47	48	48	dB(A)
	Sound pressure level - 10 m			39	40	41	42	43	dB(A)
Low noise	Sound power level	0	35	65	66	67	68	69	dB(A)
	Sound pressure level - 1 m			49	50	51	52	53	dB(A)
	Sound pressure level - 5 m			39	40	41	42	43	dB(A)
	Sound pressure level - 10 m			34	34	35	36	37	dB(A)

Data declared according to EN 14511. Acoustic performances declared according to EN 12102. The data are related to reversible units (R) without options or accessories.

BOW35	= source :	brine in 0°C out -3°C	plant :	water in 30°C out 35°C
BOW45	= source :	brine in 0°C out -3°C	plant :	water in 40°C out 45°C
BOW55	= source :	brine in 0°C out -3°C	plant :	water in 47°C out 55°C
BOW65	= source :	brine in 0°C out -3°C	plant :	water in 55°C out 65°C
B30W7	= source :	brine in 30°C out 35°C	plant :	water in 12°C out 7°C
B30W18	= source :	brine in 30°C out 35°C	plant :	water in 23°C out 18°C