MBK 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

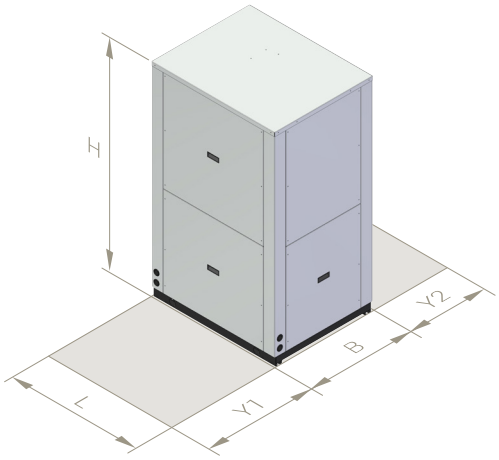
Vibration dampers
Remote interface

	TECHNICAL DATA	16	22	29	37	46	
	Efficiency class - EU reg 811/2013 *average climate - medium temperature appplication*	**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	1 / 1					-
	Type of plant side heat exchangers	stainless steel brazed plates					-
	Type of source side heat exchangers	stainless steel brazed plates					-
	Hydraulic fittings	1"1/2 M	1"1/2 M	1"1/2 M	1"1/2 M	1"1/2 M	-
	Weight *	260	266	279	302	307	kg
	Maximum power input *	8,0	10,6	13,2	18,4	21,6	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*



	16	22	29	37	46	
L	980	980	980	980	980	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	16	22	29	37	46	
B0W35	Heating capacity	0	35	16,5	22,2	28,5	37,6	47,1	kW
	Power input			3,66	4,92	6,29	8,27	10,4	kW
	COP			**4,51**	**4,51**	**4,53**	**4,55**	**4,53**	-
	Plant side water flow rate			2840	3827	4918	6477	8122	l/h
	Plant side pressure drops			18	19	19	22	27	kPa
	Source side water flow rate			4139	5574	7165	9439	11832	l/h
	Source side pressure drops			39	41	41	48	58	kPa
B0W45	Heating capacity	0	45	16,9	22,7	29,2	38,5	48,2	kW
	Power input			4,51	6,08	7,77	10,2	12,9	kW
	COP			**3,75**	**3,73**	**3,76**	**3,77**	**3,74**	-
	Plant side water flow rate			2917	3931	5052	6652	8342	l/h
	Plant side pressure drops			19	20	20	23	28	kPa
	Source side water flow rate			3988	5369	6902	9095	11399	l/h
	Source side pressure drops			36	39	39	44	54	kPa
B0W55	Heating capacity	0	55	17,5	23,6	30,4	40,0	50,1	kW
	Power input			5,36	7,23	9,26	12,2	15,3	kW
	COP			**3,26**	**3,26**	**3,28**	**3,28**	**3,27**	-
	Plant side water flow rate			1906	2569	3301	4347	5452	l/h
	Plant side pressure drops			8	9	9	10	13	kPa
	Source side water flow rate			3925	5283	6792	8951	11216	l/h
	Source side pressure drops			35	37	37	43	53	kPa
B0W65	Heating capacity	0	65	18,6	25,0	32,2	42,4	53,1	kW
	Power input			6,54	8,82	11,3	14,9	18,7	kW
	COP			**2,84**	**2,83**	**2,85**	**2,85**	**2,84**	-
	Plant side water flow rate			1623	2187	2811	3701	4641	l/h
	Plant side pressure drops			6	7	7	8	9	kPa
	Source side water flow rate			3882	5224	6717	8853	11092	l/h
	Source side pressure drops			34	37	37	42	52	kPa

	COOLING	B	W	16	22	29	37	46	
B30W7	Cooling capacity	30	7	15,5	20,9	26,9	35,3	44,4	kW
	Power input			3,40	4,58	5,85	7,69	9,70	kW
	EER			**4,56**	**4,56**	**4,60**	**4,59**	**4,58**	-
	Plant side water flow rate			2677	3604	4634	6092	7654	l/h
	Plant side pressure drops			16	17	17	20	24	kPa
	Source side water flow rate			3533	4759	6117	8042	10103	l/h
	Source side pressure drops			28	30	30	35	43	kPa
B30W18	Cooling capacity	30	18	20,3	27,3	35,1	46,2	58,0	kW
	Power input			3,47	4,66	5,94	7,81	9,87	kW
	EER			**5,85**	**5,86**	**5,91**	**5,92**	**5,88**	-
	Plant side water flow rate			3518	4735	6088	8005	10057	l/h
	Plant side pressure drops			27	29	29	33	41	kPa
	Source side water flow rate			4425	5960	7660	10071	12653	l/h
	Source side pressure drops			43	46	46	53	65	kPa

	ACOUSTIC PERFORMANCES	B	W	16	22	29	37	46	
Base	Sound power level	0	35	**62**	**64**	**66**	**68**	**70**	dB(A)
	Sound pressure level - 1 m			46	48	50	52	54	dB(A)
	Sound pressure level - 5 m			36	38	39	42	43	dB(A)
	Sound pressure level - 10 m			30	32	34	36	38	dB(A)
Low noise	Sound power level	0	35	**58**	**60**	**61**	**63**	**65**	dB(A)
	Sound pressure level - 1 m			42	44	45	47	49	dB(A)
	Sound pressure level - 5 m			32	34	35	37	39	dB(A)
	Sound pressure level - 10 m			27	28	30	32	33	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.

B0W35	=	source :	brine in 0°C out -3°C	plant :	water in 30°C out 35°C
B0W45	=	source :	brine in 0°C out -3°C	plant :	water in 40°C out 45°C
B0W55	=	source :	brine in 0°C out -3°C	plant :	water in 47°C out 55°C
B0W65	=	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