

MBT HVJ

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

Flow meter

Accessories

- Vibration dampers
- Remote interface

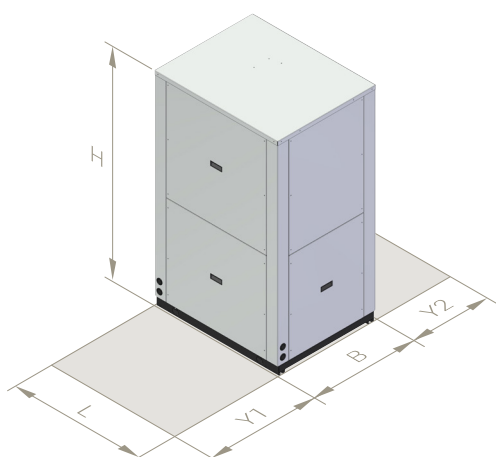


TECHNICAL DATA	30	
Efficiency class - EU reg 811/2013 average climate - medium temperature application	A++	-
Power supply	400V - 3N - 50Hz	-
Refrigerant	R410A	-
Type of compressors	high temperature rotary inverter brushless DC (BLDC) with vapour injection	-
N° of compressors / N° of refrigerant circuits	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	-
Weight *	288	kg
Maximum power input *	13,8	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



	30	
L	980	mm
B	780	mm
H	1630	mm
Y1	1000	mm
Y2	500	mm

	HEATING	B	W	30	
B0W35	Heating capacity	0	35	30,6	kW
	Power input			6,78	kW
	COP			4,51	-
	Plant side water flow rate			5282	l/h
	Plant side pressure drops			12	kPa
	Source side water flow rate			7645	l/h
	Source side pressure drops			25	kPa
B0W45	Heating capacity	0	45	31,3	kW
	Power input			8,41	kW
	COP			3,72	-
	Plant side water flow rate			5425	l/h
	Plant side pressure drops			13	kPa
	Source side water flow rate			7351	l/h
	Source side pressure drops			24	kPa
B0W55	Heating capacity	0	55	32,6	kW
	Power input			10,1	kW
	COP			3,23	-
	Plant side water flow rate			3545	l/h
	Plant side pressure drops			6	kPa
	Source side water flow rate			7219	l/h
	Source side pressure drops			23	kPa
B0W65	Heating capacity	0	65	34,5	kW
	Power input			12,3	kW
	COP			2,80	-
	Plant side water flow rate			3018	l/h
	Plant side pressure drops			4	kPa
	Source side water flow rate			7121	l/h
	Source side pressure drops			22	kPa

	COOLING	B	W	30	
B30W7	Cooling capacity	30	7	28,9	kW
	Power input			6,32	kW
	EER			4,57	-
	Plant side water flow rate			4977	l/h
	Plant side pressure drops			11	kPa
	Source side water flow rate			6596	l/h
	Source side pressure drops			19	kPa
B30W18	Cooling capacity	30	18	37,8	kW
	Power input			6,36	kW
	EER			5,94	-
	Plant side water flow rate			6539	l/h
	Plant side pressure drops			18	kPa
	Source side water flow rate			8253	l/h
	Source side pressure drops			29	kPa

	ACOUSTIC PERFORMANCES	B	W	30	
Base	Sound power level	0	35	66	dB(A)
	Sound pressure level - 1 m			50	dB(A)
	Sound pressure level - 5 m			39	dB(A)
	Sound pressure level - 10 m			34	dB(A)
Low noise	Sound power level	0	35	61	dB(A)
	Sound pressure level - 1 m			45	dB(A)
	Sound pressure level - 5 m			35	dB(A)
	Sound pressure level - 10 m			30	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