

MWD HTD

WATER-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

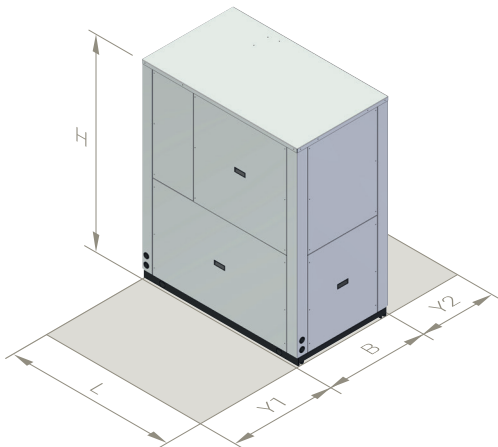
- Vibration dampers
- Remote interface

TECHNICAL DATA	57	67	77	88	100	112	
Efficiency class - EU reg 811/2013 <i>average climate - medium temperature application</i>	A++	A++	A++	A++	A++	A++	-
Power supply	400V - 3N - 50Hz						-
Refrigerant	R410A						-
Type of compressors	high temperature scroll with liquid 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	2" M	-
Weight *	390	402	415	435	439	459	kg
Maximum power input *	20,2	23,2	26,4	29,4	33,2	37,6	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 (water)	5	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



	57	67	77	88	100	112	
L	1330	1330	1330	1330	1330	1330	mm
B	780	780	780	780	780	780	mm
H	1630	1630	1630	1630	1630	1630	mm
Y1	1000	1000	1000	1000	1000	1000	mm
Y2	500	500	500	500	500	500	mm

HEATING		W	W	57	67	77	88	100	112	
W10W35	Heating capacity	10	35	57,8	67,6	77,1	87,7	99,7	112	kW
	Power input			10,8	12,5	14,2	16,1	18,4	20,7	kW
	COP			5,35	5,41	5,43	5,45	5,42	5,41	-
	Plant side water flow rate			9954	11653	13300	15131	17202	19375	l/h
	Plant side pressure drops			29	27	24	23	29	28	kPa
	Source side water flow rate			13574	15889	18134	20629	23454	26418	l/h
	Source side pressure drops			53	48	43	40	51	49	kPa
W10W45	Heating capacity	10	45	53,6	62,7	71,6	81,4	92,6	104	kW
	Power input			12,8	14,9	17,0	19,2	22,0	24,7	kW
	COP			4,19	4,21	4,21	4,24	4,21	4,21	-
	Plant side water flow rate			9275	10858	12392	14098	16028	18053	l/h
	Plant side pressure drops			26	23	21	20	25	24	kPa
	Source side water flow rate			11773	13781	15727	17891	20341	22912	l/h
	Source side pressure drops			40	37	33	31	39	38	kPa
W10W55	Heating capacity	10	55	50,0	58,6	66,8	76,0	86,4	97,4	kW
	Power input			14,5	16,9	19,2	21,8	24,9	28,0	kW
	COP			3,45	3,47	3,48	3,49	3,47	3,48	-
	Plant side water flow rate			5443	6372	7272	8273	9406	10594	l/h
	Plant side pressure drops			9	9	8	8	10	9	kPa
	Source side water flow rate			10255	12004	13698	15584	17718	19958	l/h
	Source side pressure drops			31	28	26	24	30	29	kPa
W10W65	Heating capacity	10	65	47,8	56,0	63,9	72,7	82,7	93,1	kW
	Power input			16,6	19,4	22,2	25,2	28,7	32,3	kW
	COP			2,88	2,89	2,88	2,88	2,88	2,88	-
	Plant side water flow rate			4181	4895	5586	6355	7225	8138	l/h
	Plant side pressure drops			6	5	5	5	6	6	kPa
	Source side water flow rate			8987	10519	12003	13655	15526	17489	l/h
	Source side pressure drops			24	22	20	19	24	23	kPa

COOLING		W	W	57	67	77	88	100	112	
W30W7	Cooling capacity	30	7	45,8	53,6	61,2	69,7	79,2	89,2	kW
	Power input			9,83	11,5	13,1	14,8	16,9	19,0	kW
	EER			4,66	4,66	4,67	4,71	4,69	4,69	-
	Plant side water flow rate			7894	9233	10537	11996	13643	15359	l/h
	Plant side pressure drops			19	18	16	15	19	18	kPa
	Source side water flow rate			9594	11222	12815	14582	16590	18669	l/h
	Source side pressure drops			27	25	23	21	27	26	kPa
W30W18	Cooling capacity	30	18	59,9	70,0	80,0	91,1	104	117	kW
	Power input			9,93	11,5	13,1	14,8	17,0	19,0	kW
	EER			6,03	6,09	6,11	6,16	6,12	6,16	-
	Plant side water flow rate			10373	12132	13845	15762	17927	20182	l/h
	Plant side pressure drops			32	29	26	25	31	30	kPa
	Source side water flow rate			12016	14054	16047	18261	20775	23380	l/h
	Source side pressure drops			42	38	34	32	41	39	kPa

ACOUSTIC PERFORMANCES		W	W	57	67	77	88	100	112	
Base	Sound power level	10	35	70	71	72	73	74	75	dB(A)
	Sound pressure level - 1 m			54	55	56	57	58	59	dB(A)
	Sound pressure level - 5 m			44	45	45	47	48	48	dB(A)
	Sound pressure level - 10 m			38	39	40	41	42	43	dB(A)
Low noise	Sound power level	10	35	64	65	66	67	68	69	dB(A)
	Sound pressure level - 1 m			48	49	50	51	52	53	dB(A)
	Sound pressure level - 5 m			38	39	40	41	42	43	dB(A)
	Sound pressure level - 10 m			33	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.

W10W35	= source :	water in 10°C out 7°C	plant :	water in 30°C out 35°C
W10W45	= source :	water in 10°C out 7°C	plant :	water in 40°C out 45°C
W10W55	= source :	water in 10°C out 7°C	plant :	water in 47°C out 55°C
W10W65	= source :	water in 10°C out 7°C	plant :	water in 55°C out 65°C
W30W7	= source :	water in 30°C out 35°C	plant :	water in 12°C out 7°C
W30W18	= source :	water in 30°C out 35°C	plant :	water in 23°C out 18°C