

# MWD HTJ

## 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

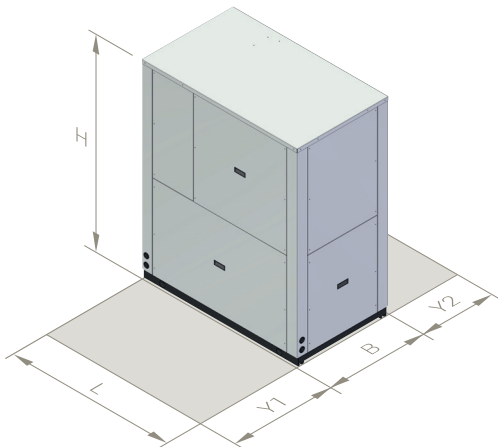
Remote interface

TECHNICAL DATA	68	80	90	100	116	
Efficiency class - EU reg 811/2013 average climate - medium temperature application	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 (water)	5	25	5	50	°C

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



	68	80	90	100	116	
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		W	W	68	80	90	100	116	
W10W35	Heating capacity	10	35	68,2	80,4	89,7	101	118	kW
	Power input			12,4	14,5	16,1	18,3	21,3	kW
	COP			<b>5,50</b>	<b>5,54</b>	<b>5,57</b>	<b>5,52</b>	<b>5,54</b>	-
	Plant side water flow rate			11762	13863	15473	17434	20374	l/h
	Plant side pressure drops			27	26	24	29	30	kPa
	Source side water flow rate			16115	18994	21198	23885	27914	l/h
	Source side pressure drops			49	47	42	53	54	kPa
W10W45	Heating capacity	10	45	69,6	82,1	91,6	103	121	kW
	Power input			15,3	17,9	19,9	22,6	26,4	kW
	COP			<b>4,55</b>	<b>4,59</b>	<b>4,60</b>	<b>4,56</b>	<b>4,58</b>	-
	Plant side water flow rate			12050	14203	15853	17861	20874	l/h
	Plant side pressure drops			28	27	25	31	32	kPa
	Source side water flow rate			15686	18488	20633	23249	27169	l/h
	Source side pressure drops			46	44	40	50	52	kPa
W10W55	Heating capacity	10	55	71,8	84,7	94,5	106	124	kW
	Power input			18,2	21,4	23,8	26,9	31,4	kW
	COP			<b>3,95</b>	<b>3,96</b>	<b>3,97</b>	<b>3,94</b>	<b>3,95</b>	-
	Plant side water flow rate			7813	9208	10278	11580	13533	l/h
	Plant side pressure drops			13	12	11	14	14	kPa
	Source side water flow rate			15477	18243	20358	22940	26808	l/h
	Source side pressure drops			45	43	39	49	50	kPa
W10W65	Heating capacity	10	65	75,0	88,4	98,6	111	130	kW
	Power input			22,2	26,1	29,1	32,8	38,3	kW
	COP			<b>3,38</b>	<b>3,39</b>	<b>3,39</b>	<b>3,38</b>	<b>3,39</b>	-
	Plant side water flow rate			6553	7724	8621	9713	11351	l/h
	Plant side pressure drops			9	9	8	10	10	kPa
	Source side water flow rate			15237	17960	20042	22584	26392	l/h
	Source side pressure drops			44	42	38	47	49	kPa

COOLING		W	W	68	80	90	100	116	
W30W7	Cooling capacity	30	7	50,7	59,8	66,8	75,3	87,9	kW
	Power input			10,8	12,6	14,2	16,0	18,6	kW
	EER			<b>4,69</b>	<b>4,75</b>	<b>4,70</b>	<b>4,71</b>	<b>4,73</b>	-
	Plant side water flow rate			8735	10297	11498	12957	15136	l/h
	Plant side pressure drops			16	15	14	17	18	kPa
	Source side water flow rate			10616	12503	13975	15742	18391	l/h
	Source side pressure drops			23	22	20	24	25	kPa
W30W18	Cooling capacity	30	18	66,3	78,2	87,3	98,3	115	kW
	Power input			10,9	12,7	14,2	16,0	18,7	kW
	EER			<b>6,08</b>	<b>6,16</b>	<b>6,15</b>	<b>6,14</b>	<b>6,15</b>	-
	Plant side water flow rate			11478	13530	15108	17025	19889	l/h
	Plant side pressure drops			26	25	23	28	29	kPa
	Source side water flow rate			13295	15662	17502	19716	23034	l/h
	Source side pressure drops			34	33	30	37	38	kPa

ACOUSTIC PERFORMANCES		W	W	68	80	90	100	116	
Base	Sound power level	10	35	<b>71</b>	<b>72</b>	<b>73</b>	<b>74</b>	<b>75</b>	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	10	35	<b>65</b>	<b>66</b>	<b>67</b>	<b>68</b>	<b>69</b>	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.

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