

# MLD HTJ

## AIR-WATER HEAT PUMPS FOR OUTDOOR INSTALLATION



### Options

#### Operating mode

R - Heating and cooling  
(reversible on refrigerant side)

#### 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

#### Compressor starter

Standard  
Soft starter

### Accessories

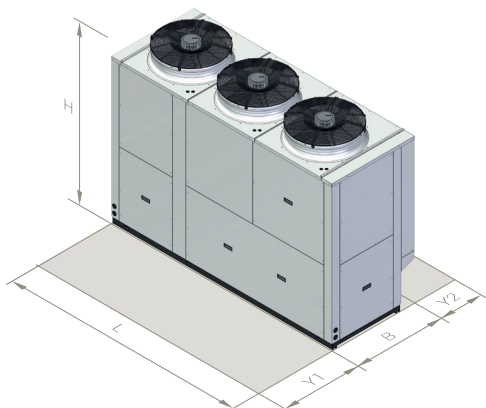
Vibration dampers  
Remote interface

TECHNICAL DATA	56	64	74	84	96	
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	finned coil copper - hydrophilic aluminum					-
Type of fans	axial EC					-
N° of fans	3	3	3	4	4	-
Hydraulic fittings	2" M	2" M	2" M	2" M	2" M	-
Weight *	616	628	634	763	774	kg
Maximum power input *	29,0	34,4	38,6	42,4	47,4	kW

\* base unit without options and accessories

OPERATING RANGE	HEATING		COOLING		
	min	max	min	max	
Water outlet temperature	15	65 *	6	25	°C
Outside air inlet temperature	-22	42	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



	56	64	74	84	96	
L	2480	2480	2480	3230	3230	mm
B	930	930	930	930	930	mm
H	1830	1830	1830	1830	1830	mm
Y1	1000	1000	1000	1000	1000	mm
Y2	500	500	500	500	500	mm

HEATING		A	W	56	64	74	84	96	
A7W35	Heating capacity	7	35	57,2	67,3	75,1	84,7	99,0	kW
	Power input			12,3	14,6	16,3	18,4	21,6	kW
	COP			<b>4,65</b>	<b>4,61</b>	<b>4,61</b>	<b>4,60</b>	<b>4,58</b>	-
	Plant side water flow rate			9854	11613	12964	14606	17068	l/h
	Plant side pressure drops			29	27	23	29	28	kPa
A7W45	Heating capacity	7	45	57,9	68,1	76,0	85,7	100	kW
	Power input			15,6	18,6	20,8	23,4	27,5	kW
	COP			<b>3,71</b>	<b>3,66</b>	<b>3,65</b>	<b>3,66</b>	<b>3,64</b>	-
	Plant side water flow rate			10006	11792	13164	14831	17331	l/h
	Plant side pressure drops			30	27	24	29	29	kPa
A7W55	Heating capacity	7	55	58,8	69,2	77,3	87,1	102	kW
	Power input			19,1	22,8	25,6	28,7	33,7	kW
	COP			<b>3,08</b>	<b>3,04</b>	<b>3,02</b>	<b>3,03</b>	<b>3,03</b>	-
	Plant side water flow rate			6389	7530	8406	9470	11067	l/h
	Plant side pressure drops			13	12	11	13	13	kPa
A7W65	Heating capacity	7	65	60,1	70,8	79,0	89,1	104	kW
	Power input			23,8	28,4	31,9	35,8	42,1	kW
	COP			<b>2,53</b>	<b>2,49</b>	<b>2,48</b>	<b>2,49</b>	<b>2,47</b>	-
	Plant side water flow rate			5250	6188	6907	7782	9094	l/h
	Plant side pressure drops			9	8	7	9	9	kPa
A2W35	Heating capacity	2	35	48,2	56,8	63,4	71,4	83,4	kW
	Power input			12,3	14,6	16,3	18,4	21,6	kW
	COP			<b>3,92</b>	<b>3,89</b>	<b>3,89</b>	<b>3,88</b>	<b>3,86</b>	-
	Plant side water flow rate			8313	9798	10937	12322	14400	l/h
	Plant side pressure drops			21	19	17	21	21	kPa
A2W45	Heating capacity	2	45	49,0	57,7	64,4	72,6	84,8	kW
	Power input			15,6	18,6	20,9	23,4	27,5	kW
	COP			<b>3,14</b>	<b>3,10</b>	<b>3,08</b>	<b>3,10</b>	<b>3,08</b>	-
	Plant side water flow rate			8476	9990	11152	12564	14682	l/h
	Plant side pressure drops			22	20	18	22	21	kPa
A2W55	Heating capacity	2	55	50,0	58,9	65,7	74,1	86,6	kW
	Power input			19,2	22,8	25,6	28,7	33,8	kW
	COP			<b>2,60</b>	<b>2,58</b>	<b>2,57</b>	<b>2,58</b>	<b>2,56</b>	-
	Plant side water flow rate			5437	6408	7154	8060	9418	l/h
	Plant side pressure drops			9	9	8	10	10	kPa
A2W65	Heating capacity	2	65	51,4	60,6	67,6	76,2	89,1	kW
	Power input			23,9	28,5	31,9	35,8	42,1	kW
	COP			<b>2,15</b>	<b>2,13</b>	<b>2,12</b>	<b>2,13</b>	<b>2,12</b>	-
	Plant side water flow rate			4493	5296	5912	6660	7783	l/h
	Plant side pressure drops			7	6	6	7	7	kPa
COOLING		A	W	56	64	74	84	96	
A35W7	Cooling capacity	35	7	44,8	52,8	58,9	66,4	77,7	kW
	Power input			14,2	16,9	19,0	21,3	25,0	kW
	EER			<b>3,15</b>	<b>3,12</b>	<b>3,10</b>	<b>3,12</b>	<b>3,11</b>	-
	Plant side water flow rate			7723	9095	10142	11429	13369	l/h
	Plant side pressure drops			18	17	15	19	18	kPa
A35W18	Cooling capacity	35	18	59,2	69,8	77,8	87,7	103	kW
	Power input			15,3	18,3	20,5	23,1	27,1	kW
	EER			<b>3,87</b>	<b>3,81</b>	<b>3,80</b>	<b>3,80</b>	<b>3,80</b>	-
	Plant side water flow rate			10258	12082	13472	15182	17758	l/h
	Plant side pressure drops			31	29	25	31	31	kPa
ACOUSTIC PERFORMANCES		A	W	56	64	74	84	96	
Base	Sound power level	7	35	<b>79</b>	<b>79</b>	<b>80</b>	<b>81</b>	<b>81</b>	dB(A)
	Sound pressure level - 1 m			62	62	63	63	64	dB(A)
	Sound pressure level - 5 m			52	53	53	54	55	dB(A)
	Sound pressure level - 10 m			47	48	48	49	50	dB(A)
Low noise	Sound power level	7	35	<b>76</b>	<b>77</b>	<b>77</b>	<b>78</b>	<b>78</b>	dB(A)
	Sound pressure level - 1 m			59	59	60	60	61	dB(A)
	Sound pressure level - 5 m			50	50	50	51	52	dB(A)
	Sound pressure level - 10 m			44	45	45	46	47	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.

A7W35	= source :	air in 7°C db 6°C wb	plant :	water in 30°C out 35°C	A2W35	= source :	air in 2°C db 1°C wb	plant :	water in 30°C out 35°C
A7W45	= source :	air in 7°C db 6°C wb	plant :	water in 40°C out 45°C	A2W45	= source :	air in 2°C db 1°C wb	plant :	water in 40°C out 45°C
A7W55	= source :	air in 7°C dd 6°C wb	plant :	water in 47°C out 55°C	A2W55	= source :	air in 2°C db 1°C wb	plant :	water in 47°C out 55°C
A7W65	= source :	air in 7°C db 6°C wb	plant :	water in 55°C out 65°C	A2W65	= source :	air in 2°C db 1°C wb	plant :	water in 55°C out 65°C
A35W7	= source :	air in 35°C db	plant :	water in 12°C out 7°C					
A35W18	= source :	air in 35°C db	plant :	water in 23°C out 18°C					