

MDD HTJ

AIR-WATER
HEAT PUMPS
FOR INDOOR 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

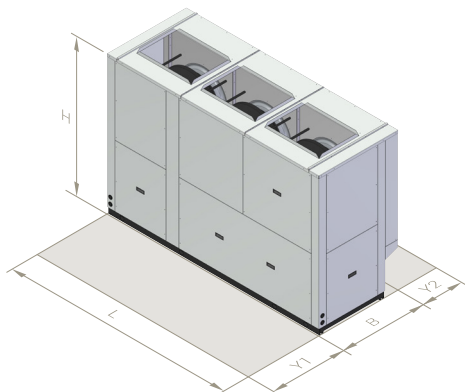
Vibration dampers
Remote interface

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	plug fan EC					-
N° of fans	3	3	3	4	4	-
Hydraulic fittings	2" M	2" M	2" M	2" M	2" M	-
Weight *	676	688	694	841	852	kg
Maximum power input *	34,1	39,5	43,7	49,2	54,2	kW
Air flow rate	17200	20000	21400	26800	28400	m³/h
Available static head	120	120	120	120	120	Pa

* 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 ΔT 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	1630	1630	1630	1630	1630	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			4,65	4,61	4,61	4,60	4,58	-
	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			3,71	3,66	3,65	3,66	3,64	-
	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			3,08	3,04	3,02	3,03	3,03	-
	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			2,53	2,49	2,48	2,49	2,47	-
	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			3,92	3,89	3,89	3,88	3,86	-
	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			3,14	3,10	3,08	3,10	3,08	-
	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			2,60	2,58	2,57	2,58	2,56	-
	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			2,15	2,13	2,12	2,13	2,12	-
	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			3,15	3,12	3,10	3,12	3,11	-
	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			3,87	3,81	3,80	3,80	3,80	-
	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	80	80	81	82	82	dB(A)
	Sound pressure level - 1 m			63	63	64	64	65	dB(A)
	Sound pressure level - 5 m			53	54	55	55	56	dB(A)
	Sound pressure level - 10 m			48	49	50	50	51	dB(A)
Low noise	Sound power level	7	35	78	79	79	80	80	dB(A)
	Sound pressure level - 1 m			61	61	62	62	63	dB(A)
	Sound pressure level - 5 m			51	52	53	53	54	dB(A)
	Sound pressure level - 10 m			46	47	47	48	49	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 db 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					