MDT HVJ

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

Accessories

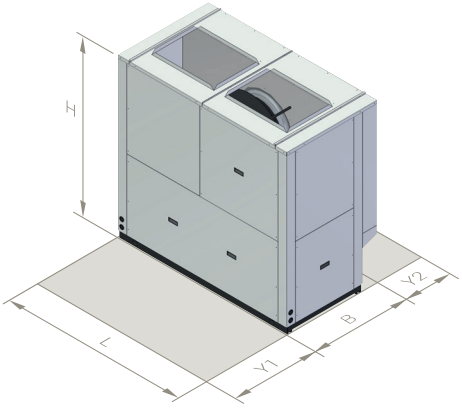
Vibration dampers
Remote interface

	TECHNICAL DATA	50	
	Efficiency class - EU reg 811/2013 *average climate - medium temperature appplication*	**A++**	-
	Power supply	400V - 3N - 50Hz	-
	Refrigerant	R410A	-
	Type of compressors	high temperature scroll 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	finned coil copper - hydrophilic aluminum	-
	Type of fans	plug fan EC	-
	N° of fans	2	-
	Hydraulic fittings	1"1/2 M	-
	Weight *	468	kg
	Maximum power input *	27,9	kW
	Air flow rate	13300	m^3/h
	Available static head	200	Pa

** base unit without options and accessories*

	OPERATING RANGE	HEATING		COOLING		
		min	max	min	max	
	Water outlet temperature	15	62 *	6	25	°C
	Outside air inlet temperature	-22	42	5	47	°C

** The maximum water outlet temperature can be increased up to 67°C keeping a ΔT of 10°C between inlet and outlet*



	50	
L	1730	mm
B	930	mm
H	1630	mm
Y1	1000	mm
Y2	500	mm

	HEATING	A	W	50	
A7W35	Heating capacity	7	35	48,7	kW
	Power input			11,0	kW
	COP			**4,43**	-
	Plant side water flow rate			8390	l/h
	Plant side pressure drops			29	kPa
A7W45	Heating capacity	7	45	49,3	kW
	Power input			13,7	kW
	COP			**3,60**	-
	Plant side water flow rate			8520	l/h
	Plant side pressure drops			29	kPa
A7W55	Heating capacity	7	55	50,0	kW
	Power input			16,4	kW
	COP			**3,05**	-
	Plant side water flow rate			5440	l/h
	Plant side pressure drops			13	kPa
A2W35	Heating capacity	2	35	41,0	kW
	Power input			11,0	kW
	COP			**3,73**	-
	Plant side water flow rate			7079	l/h
	Plant side pressure drops			21	kPa
A2W45	Heating capacity	2	45	41,7	kW
	Power input			13,7	kW
	COP			**3,04**	-
	Plant side water flow rate			7217	l/h
	Plant side pressure drops			22	kPa
A2W55	Heating capacity	2	55	42,6	kW
	Power input			16,4	kW
	COP			**2,60**	-
	Plant side water flow rate			4630	l/h
	Plant side pressure drops			9	kPa

	COOLING	A	W	50	
A35W7	Cooling capacity	35	7	38,1	kW
	Power input			12,2	kW
	EER			**3,12**	-
	Plant side water flow rate			6573	l/h
	Plant side pressure drops			18	kPa
A35W18	Cooling capacity	35	18	50,4	kW
	Power input			13,2	kW
	EER			**3,82**	-
	Plant side water flow rate			8731	l/h
	Plant side pressure drops			31	kPa

	ACOUSTIC PERFORMANCES	A	W	50	
Base	Sound power level	7	35	**80**	dB(A)
	Sound pressure level - 1 m			63	dB(A)
	Sound pressure level - 5 m			53	dB(A)
	Sound pressure level - 10 m			48	dB(A)
Low noise	Sound power level	7	35	**78**	dB(A)
	Sound pressure level - 1 m			62	dB(A)
	Sound pressure level - 5 m			52	dB(A)
	Sound pressure level - 10 m			47	dB(A)

Data declared according to EN 14511. Acoustic performances declared according to EN 12102. The data are related to units working at the **nominal frequency**, 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						