MLD NT

R290 | 72° NT | Scroll Tandem

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
- High head pump

Compressor starter
- Standard
- Soft starter

Coil protection grilles

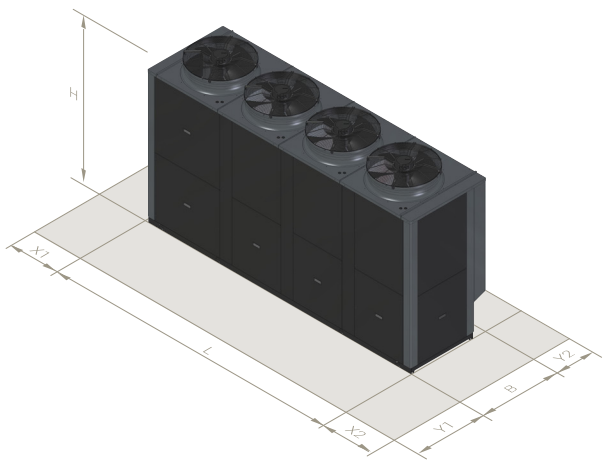
Accessories

Vibration dampers
Remote interface

TECHNICAL DATA	60	70	80	90	
Efficiency class - EU reg 811/2013 *average climate - medium temperature appplication*	**A++**	**A++**	**A++**	**A++**	-
Power supply	400V - 3N - 50Hz				-
Refrigerant	R290				-
Type of compressors	high temperature scroll				-
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	4	4	-
Hydraulic fittings	2" M	2" M	2" M	2" M	-
Weight *	636	642	775	782	kg
Maximum power input *	28,8	32,4	40,6	44,2	kW

** base unit without options and accessories*

OPERATING RANGE	HEATING		COOLING		
	min	max	min	max	
Water outlet temperature	15	72	6	25	°C
Outside air inlet temperature	-22	42	5	47	°C



	60	70	80	90	
L	2480	2480	3230	3230	mm
B	930	930	930	930	mm
H	1830	1830	1830	1830	mm
X1	500	500	500	500	mm
X2	500	500	500	500	mm
Y1	1000	1000	1000	1000	mm
Y2	500	500	500	500	mm

	HEATING	A	W	60	70	80	90	
A7W35	Heating capacity	7	35	55,1	66,7	79,9	91,0	kW
	Power input			12,7	15,3	18,2	20,8	kW
	COP			**4,34**	**4,36**	**4,39**	**4,38**	-
	Plant side water flow rate			9494	11509	13787	15704	l/h
	Plant side pressure drops			27	26	26	24	kPa
A7W45	Heating capacity	7	45	52,2	63,3	75,8	86,3	kW
	Power input			14,7	17,7	21,1	24,1	kW
	COP			**3,55**	**3,58**	**3,59**	**3,58**	-
	Plant side water flow rate			9033	10951	13118	14942	l/h
	Plant side pressure drops			24	24	24	22	kPa
A7W55	Heating capacity	7	55	49,3	59,7	71,6	81,5	kW
	Power input			16,1	19,5	23,2	26,5	kW
	COP			**3,06**	**3,06**	**3,09**	**3,08**	-
	Plant side water flow rate			5361	6499	7785	8868	l/h
	Plant side pressure drops			9	9	9	9	kPa
A7W65	Heating capacity	7	65	46,6	56,5	67,6	77,0	kW
	Power input			18,1	21,9	26,0	29,8	kW
	COP			**2,57**	**2,58**	**2,60**	**2,58**	-
	Plant side water flow rate			4071	4935	5911	6733	l/h
	Plant side pressure drops			5	6	6	5	kPa
A2W35	Heating capacity	2	35	45,3	54,9	65,8	74,9	kW
	Power input			12,3	14,9	17,7	20,2	kW
	COP			**3,68**	**3,68**	**3,72**	**3,71**	-
	Plant side water flow rate			7819	9479	11355	12934	l/h
	Plant side pressure drops			19	18	18	17	kPa
A2W45	Heating capacity	2	45	42,9	52,0	62,3	71,0	kW
	Power input			14,2	17,2	20,4	23,3	kW
	COP			**3,02**	**3,02**	**3,05**	**3,05**	-
	Plant side water flow rate			7433	9011	10794	12295	l/h
	Plant side pressure drops			17	17	17	16	kPa
A2W55	Heating capacity	2	55	40,5	49,1	58,8	67,0	kW
	Power input			15,6	18,8	22,4	25,6	kW
	COP			**2,60**	**2,61**	**2,62**	**2,62**	-
	Plant side water flow rate			4409	5345	6402	7292	l/h
	Plant side pressure drops			6	6	6	6	kPa
A2W65	Heating capacity	2	65	38,3	46,5	55,7	63,4	kW
	Power input			17,5	21,1	25,1	28,7	kW
	COP			**2,19**	**2,20**	**2,22**	**2,21**	-
	Plant side water flow rate			3352	4063	4867	5544	l/h
	Plant side pressure drops			4	4	4	4	kPa

	COOLING	A	W	60	70	80	90	
A35W7	Cooling capacity	35	7	46,9	57,0	68,3	77,8	kW
	Power input			15,1	18,3	21,7	24,8	kW
	EER			**3,11**	**3,11**	**3,15**	**3,14**	-
	Plant side water flow rate			8083	9816	11755	13386	l/h
	Plant side pressure drops			20	20	19	18	kPa
A35W18	Cooling capacity	35	18	61,9	75,3	90,2	103	kW
	Power input			16,3	19,8	23,5	26,9	kW
	EER			**3,80**	**3,80**	**3,84**	**3,83**	-
	Plant side water flow rate			10737	13039	15615	17781	l/h
	Plant side pressure drops			34	33	33	31	kPa

	ACOUSTIC PERFORMANCES	A	W	60	70	80	90	
Base	Sound power level	7	35	**79**	**80**	**81**	**81**	dB(A)
	Sound pressure level - 1 m			62	63	63	64	dB(A)
	Sound pressure level - 5 m			53	53	54	55	dB(A)
	Sound pressure level - 10 m			48	48	49	50	dB(A)
Low noise	Sound power level	7	35	**77**	**77**	**78**	**78**	dB(A)
	Sound pressure level - 1 m			59	60	60	61	dB(A)
	Sound pressure level - 5 m			50	50	51	52	dB(A)
	Sound pressure level - 10 m			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
A7W45 = source : air in 7°C db 6°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
A7W65 = source : air in 7°C db 6°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

A2W35 = source : air in 2°C db 1°C wb plant : water in 30°C out 35°C
A2W45 = source : air in 2°C db 1°C wb plant : water in 40°C out 45°C
A2W55 = source : air in 2°C db 1°C wb plant : water in 47°C out 55°C
A2W65 = source : air in 2°C db 1°C wb plant : water in 55°C out 65°C