

MLA

MULTIPURPOSE CLASS A AIR CONDENSED HEAT PUMPS WITH SCROLL COMPRESSORS

286-1431 kW



The MLA units are multipurpose air/water units in energy class A for both cooling and heating, available for use with R410A refrigerant or, in the "A2L" version, with low environmental impact R454B refrigerant. The MLA range is designed to manage **the conditioning of industrial plants and thermal loads in technological applications where full 24/7 reliability in all working conditions is a requirement.** The MLA range uses latest-generation Scroll compressors, braze-welded plate exchangers optimised for use with high pressure refrigerants (R410A/R454B) and axial fans suitable for outdoor installation.

- 3 different soundproofing setups available: Standard, Low Noise and Super Low Noise
- High power density units in both chiller and heat pump modes
- Radial EC motor fans (optional)
- Electronic expansion valve
- Easy accessibility thanks to the optimisation of the internal space
- Programmable microprocessor control with proprietary software
- Compliance with ERP regulations





Plate heat exchangers

The MLA range uses braze-welded plate exchangers with asymmetrical channels, suitable for the use of high and medium pressure refrigerant gases. The configuration with asymmetrical channels **allows high heat exchange efficiencies to be reached while maintaining low pressure drops** on the water side - which results in **reduced pumping costs at both full and partial load**.



Maximised energy efficiency

The units of the MLA range fall within the energy efficiency class A, both in cooling and in heating mode. This is thanks to a careful selection of internal components, which also includes the adoption of **innovative high efficiency Scroll compressors with direct start, permanent magnet motor technology**. The high modulation range guaranteed by the multi-Scroll technology allows cooling/heating requirements to be met at any time, **minimising energy waste and increasing seasonal efficiency**. The high degree of partial load operation (**up to 11%** of the rated power), combined with water flow rate modulation (**up to 20%** of the nominal flow) allows **operating costs and system maintenance costs to be reduced**.



Easy maintenance

To carry out maintenance of the condensing coil manifolds and refrigeration circuit components, which are located behind the electrical panel, the MLA range is supplied as standard with the Hi-Rail sliding guide. This allows **the control panel to be easily removed**, resulting in **extra space for unscheduled maintenance, without impacting the footprint** required for normal operation of the unit.



MLA		294PS	324PS	374PS	404PS	454PS	496PS	556PS	596PS	636PS	676PS	748PS	808PS	868PS	900PS	1072PS
Cooling: User water values 12/7°C, 35°C outside air, 40% U.R.																
Cooling capacity	kW	288.8	322.9	374.8	401.8	448.1	487.3	545.7	593.8	617.9	663.4	756.8	804	840.4	942.3	1125
Total absorbed power	kW	86.6	102.1	114	125	144.6	150.8	173.8	191.4	198.6	214.2	228.5	249.7	270.6	283.8	335.1
EER		3.34	3.16	3.29	3.21	3.1	3.23	3.14	3.1	3.11	3.1	3.31	3.22	3.11	3.32	3.36
SEER		4.93	4.73	4.83	4.82	4.89	5.01	5.09	5.15	4.95	5.08	4.75	4.72	4.61	4.91	5
SCOP		4.01	3.96	4.07	4.2	4.26	3.93	4.13	4.01	3.93	4.01	3.83	4	3.93	3.81	3.8
Cooling: Utility water temperature 12/7°C, Recovery water temperature 40/45°C																
Cooling capacity	kW	286.2	324.4	371	403.3	451	479.8	546.8	582.8	607.7	651.6	755.5	807	866.7	931.7	1126.8
Thermal power	kW	362.7	413.5	471.6	511.6	576.2	614.4	699.1	748.6	786.4	843.3	954.1	1023	1099.7	1181.8	1430.6
Total absorbed power	kW	81.4	95.1	107.5	115.7	134.3	144.6	164	178.9	193.1	207.8	212	230.9	249.5	267.8	327.5
SEER		4.93	4.73	4.83	4.82	4.89	5.01	5.09	5.15	4.95	5.08	4.75	4.72	4.61	4.91	5
TER		7.97	7.76	7.84	7.9	7.65	7.57	7.6	7.44	7.22	7.19	8.06	7.93	7.88	7.89	7.81
SCOP		4.01	3.96	4.07	4.2	4.26	3.93	4.13	4.01	3.93	4.01	3.83	4	3.93	3.81	3.8
Heating: User water values 40/45°C, 7°C outside air, 89% U.R.																
Thermal power	kW	292.4	323.5	406	441.2	481.8	505.4	556.7	597	653.1	694.4	777.7	861.8	886	975.8	1177.4
Total absorbed power	kW	86.5	99.6	114.6	122.6	140.2	153	170.8	185.9	202.3	216	225.9	245.1	262.4	285.2	347.5
SEER		4.93	4.73	4.83	4.82	4.89	5.01	5.09	5.15	4.95	5.08	4.75	4.72	4.61	4.91	5
COP		3.38	3.25	3.54	3.6	3.44	3.3	3.26	3.21	3.23	3.21	3.44	3.52	3.38	3.42	3.39
SCOP		4.01	3.96	4.07	4.2	4.26	3.93	4.13	4.01	3.93	4.01	3.83	4	3.93	3.81	3.8
Sound power [Standard]	dB(A)	89	90	90	90	92	91	92	91	93	93	93	93	94	95	96
Sound power [Low noise]	dB(A)	86	87	87	87	89	87	88	87	89	89	90	89	90	91	92
Sound power [Super Low noise]	dB(A)	84	85	85	85	87	85	86	85	87	87	88	87	88	89	90
Dimensions [LxHxD]	mm	3520x2680x2256			4520x2680x2256			5520x2680x2256			6520x2680x2256			9085x2680x2256		
														11085x2680x2256		
														12930x2680x2256		

Also available with 60 Hz power supply