AWR MTD Air

Available models

AWR MTD
Air source reversible heat pump with domestic hot water supply. Integrated electric heater

AWR MTD/B
Air source reversible heat pump with domestic hot water supply

Unit description

Heat pumps AWR MTD reversible units are able to provide heating, cooling and domestic hot water. Particular attention was paid to the winter, thanks to special technological devices is guaranteed beyond the normal limits of traditional units. Prana AWR Air MTD can be combined with traditional systems or radiant panels, ensuring a high energy efficiency. All units are certified in accordance with the Class A classification Eurovent energy in heating. This makes them particularly suitable for use radiant installations. The installation is greatly simplified through the integration of the group and hydraulic technology Full floating simply by connecting the unit to water plant and electricity so that it can be put into operation.

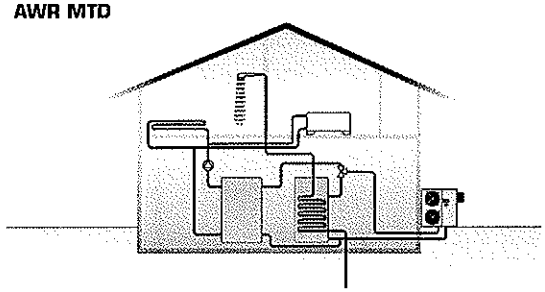
Main components

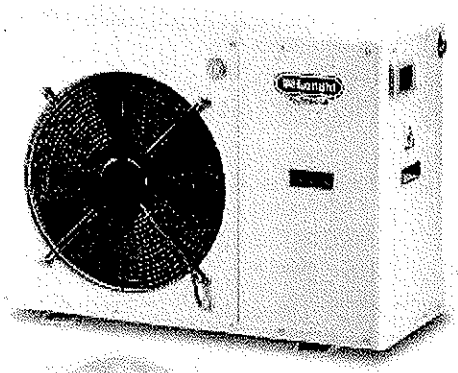
- Condensate drain pan kit.
- Condensing coil protection grills
- Housing and base are made from hot-galvanized epoxy powder coated sheet metal
- High efficiency and low pressure drop stainless steel (AISI 316) water exchangers, with anti-freeze heating element and differencial pressure switch
- Hermetic scroll type compressors, equipped with the crankcase heater and thermal protection
- Condensers finned tubes with copper and aluminium fins high exchange surface (100% fully quality tested); sub cooling circuit to prevent the icing at the basement
- Axial electric fans, external rotor, electric motor with a 6-pole fitted with thermal protection, housed in aerodynamic conveyor profile with safety grill
- Low external air temperature device:
  - continuous fan speed regulation with pressure switch
- Electrical resistance modulating antifreeze to the base located between wing and base exchanger to improve and facilitate the flow of water during defrosting
- User interface unit on board, accessible from the outside with a not touch system
- The electronic menu allows to manage:
  - circulator on system side
  - domestic hot water production by external three-way valve (accessory)
  - a zone of direct heating
  - resistance to internal integration for models AWR MTD
  - heating element of external source
  - outdoor temperature sensor for water plant side modular set point compensation
- Soft starter for 230V/1/50Hz units
- Phase sequence control relay
- The water circuit comes complete with:
  - variable flow circulator for all models
  - differential pressure switch on plant side
  - expansion vessel
  - safety valve
  - manual filling assembly
  - pressure gauge
  - manual air vent valve
- Resistance electricity integration for models MTD (side installation). Activation occurs only when absolutely necessary to set the outdoor air temperature and the temperature of water given

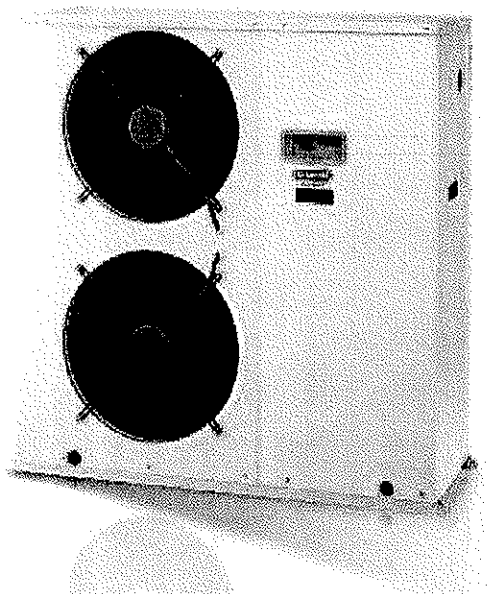
Accessories

- 280 litre buffer tank kit for domestic hot water with external plate-to-plate heat exchanger
- Three-way valve 1" for domestic hot water
- 30-litre system inertial storage tank (fitted under unit)
- Standard pipe kit for connection to storage tank 30 litres
- Rubber insulators kit
- Removable metal mesh water filter kit
- Remote keyboard kit - HSW11

AWR MTD







Medium temperature air source reversible heat pump for water heating up to 55°C and operating limits down to -15°C. From 6,7 to 18,3 kW.

AWR MTD			0011	0025	0031	0041	0031	0041	0051	0061
Heating capacity (A7/W35)	(1)	kW	6,70	8,70	11,0	14,0	10,9	14,5	16,4	18,3
Total power input (compressors & fans)		kW	1,60	2,00	2,60	3,20	2,50	3,20	3,90	4,10
COP*			4,19	4,35	4,23	4,38	4,36	4,53	4,21	4,46
Heating capacity (A2/W35)	(2)	kW	5,60	7,60	9,70	12,4	9,60	12,8	14,4	16,1
Total power input (compressors & fans)		kW	1,60	2,00	2,60	3,20	2,50	3,20	3,90	4,00
COP*			3,63	3,80	3,73	3,88	3,84	4,00	3,69	4,03
Heating capacity (A7/W50)	(3)	kW	6,40	8,50	10,8	13,5	10,5	14,1	15,4	17,6
Total power input (compressors & fans)		kW	2,20	3,00	3,70	4,50	3,40	4,60	5,00	5,60
COP*			2,91	2,83	2,92	3,00	3,09	3,07	3,08	3,14
Cooling Capacity (A35/W18)	(4)	kW	6,50	8,40	11,8	14,0	11,9	14,5	16,9	18,7
Total power input (compressors & fans)		kW	1,90	2,70	3,30	4,10	3,10	4,20	4,70	5,50
EER*			3,42	3,11	3,58	3,41	3,84	3,45	3,60	3,40
Cooling Capacity (A35/W7)	(5)	kW	4,90	6,30	8,90	10,7	8,9	11,1	12,7	14,3
Total power input (compressors & fans)		kW	1,80	2,60	3,20	4,00	3,00	4,10	4,60	5,20
EER*			2,72	2,42	2,78	2,68	2,97	2,71	2,76	2,75

Common data			0011	0025	0031	0041	0031	0041	0051	0061
Type of compressor			scroll							
N.° of compressors		n°	1							
Refrigerant			R-410A							
Plant side pump type			circulator							
Power supply		V/Ph/Hz	230V~ 50Hz				400V-3N~ 50Hz			
Starting current	(6)	A	26	37	44	59	48	64	64	74
Sound power	(7)	dB(A)	68	69	70	70	70	70	71	71
Sound pressure	(8)	dB(A)	57	58	59	59	59	59	60	60
Height/Length/Width		mm	940/900/370	1240/900/420					1400/900/420	
Net weight	(9)	kg	125	150	155	165	155	165	175	180

Note

AWR MTD
AWR MTD/B

(1) Heating mode: external air temperature 7°C b.s.- 6°C b.u., inlet water at 30°C and outlet at 35°C
(2) Heating mode: external air temperature 2°C b.s.- 1°C b.u., inlet water at 30°C and outlet at 35°C
(3) Heating mode: external air temperature 7°C b.s.- 6°C b.u., inlet water at 45°C and outlet at 50°C
(4) Cooling mode: external air temperature 35°C b.s., inlet water at 23°C and outlet at 18°C
(5) Cooling mode: external air temperature 35°C b.s., inlet water at 12°C and outlet at 7°C
(6) Standard unit data
(7) Sound power level according to 9614 and Eurovent 8/1.
(8) Sound pressure at 1 meter distance from the external surface of the unit, free field.

* according to Eurovent