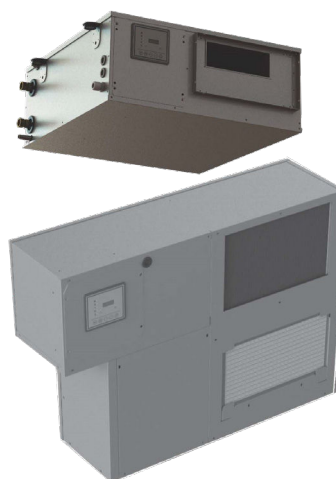


DMH - DMV

Dehumidifier for radiant air-conditioning systems

Dehumidifying capacity 22 l/24h ÷ 36 l/24h

- Better performance compared to traditional dehumidifiers
- Reduced consumption
- Prevents the formation of condensate on the surface of the pavement
- Unit only for indoor installation



DESCRIPTION

Dehumidifiers are refrigerant cycle machines combined with radiant air-conditioning systems, from which they draw a certain water flow rate to increase the dehumidification efficiency and reduce electricity consumption.

The cooling systems employ chilled water at temperatures between 15°C and 20°C, which is enough to take the rooms to the desired temperature, but not suitable for dehumidification. To lower the latter, you would need water at 7°C, resulting in a reduction in the performance of the water chiller compared to when the water is produced at 15-20°C.

Water-cooled refrigerant cycle dehumidifiers are used to keep the air humidity at optimal values (55-65%) in rooms, with the following benefits compared to other systems:

- They employ the chilled water available in the radiant panel system;
- They are used to process the air without modifying its temperature and, therefore, without affecting the operation of the radiant panels and their adjustment system.
- They prevent the formation of condensation on the floor surface in radiant air conditioning systems.

FEATURES

Structure: galvanised sheet metal panels, lined on the inside with a sound-proofing polyethylene covering.

Filter section: 12 mm thick synthetic filtering baffle made with a galvanised sheet metal frame, efficiency class ISO 16890 COARSE 50% (G3 EN 779), can be removed from the front.

Cooling circuit: consisting of a R134a alternative refrigerant compressor, freon filter, expansion capillary, evaporator and condenser with copper pipes and continuous louvered fin louvers, with hydrophilic treatment and aluminium frame (for "-C" cooling versions, with "I" integration, water-freon condenser).

Hydraulic circuit: with pre-treatment and post-cooling coils featuring with copper pipes and continuous louvered fin louvers, with hydrophilic treatment and aluminium frame; for "-C" cooling versions, plate water condenser (no post-cooling); stainless steel condensate drip tray extended to the whole treatment.

Fan: double intake centrifugal fan with blades facing forwards, with multi-speed motor directly coupled; 3 different electrical connections available (H/M/L) for the functioning speed; the manufacturer's default setting is medium (M) speed.

ACCESSORIES

DMUM: Wall mounted environment humidistat.

DMWB: Outer casing for vertical model. Vertical installation.

DMFP: Front panel for outer casing. Vertical installation.

PERFORMANCE SPECIFICATIONS

		DMV220	DMV220I	DMH220	DMH220C	DMH220I	DMH360C	DMH360I	DMH360
Performances (1)									
Condensed humidity	l/24h	22	22	22	22	22	36	36	36
Power at the evaporator	W	1020	1020	1050	1050	1050	1480	1480	1480
Power dissipated with water	W	870	1820	870	1820	1820	2680	2680	1540
Nominal water flow rate	m³/h	240	240	240	240	240	390	390	390
Water pressure drop	kPa	3	3	3	3	3	10	10	10
Available sensitive power	W	-	840	-	840	840	1340	1340	-
Total input power	W	350	350	350	350	350	580	580	580
Input current	A	2,0	2,0	2,0	2,0	2,0	3,2	3,2	3,2
Fan									
Type	type				Centrifugo doppia aspirazione				
Available fan speeds	H / M / L								
Nominal fan setting				M				L	
Air flow rate	m³/h	220	220	220	220	220	360	360	360
High static pressure	Pa	0	0	20	20	20	20	20	20
Compressor									
Type	type				Ermetico alternativo				
Refrigerant	type				R134a				
Refrigerant charge	g	340	270	340	340	270	460	410	460
Operating limits									
Intake air temperature	°C					15 ~ 32			
Water inlet temperature (dehumidifying mode)	°C					10 ~ 21			
Sound data									
Sound pressure level (1 m)	dB(A)	39,0	39,0	42,0	42,0	42,0	47,0	47,0	47,0

(1) At nominal air flow rate at the following conditions: ambient air 26°C BS, RH 65%; incoming water temperature 15°C

Condensed humidity with ambient temperature of 26°C

		DMV220	DMV220I	DMH220	DMH220C	DMH220I	DMH360C	DMH360I	DMH360
Hydraulic circuit water temperature 21°C - Relative humidity 55%									
Condensed humidity	l/24h	12	12	12	12	12	20	20	20
Hydraulic circuit water temperature 18°C - Relative humidity 55%									
Condensed humidity	l/24h	14	14	14	14	14	22	22	22
Hydraulic circuit water temperature 15°C - Relative humidity 55%									
Condensed humidity	l/24h	15	15	15	15	15	25	25	25
Hydraulic circuit water temperature 21°C - Relative humidity 65%									
Condensed humidity	l/24h	17	17	17	17	17	28	28	28
Hydraulic circuit water temperature 18°C - Relative humidity 65%									
Condensed humidity	l/24h	19	19	19	19	19	31	31	31
Hydraulic circuit water temperature 15°C - Relative humidity 65%									
Condensed humidity	l/24h	22	22	22	22	22	36	36	36

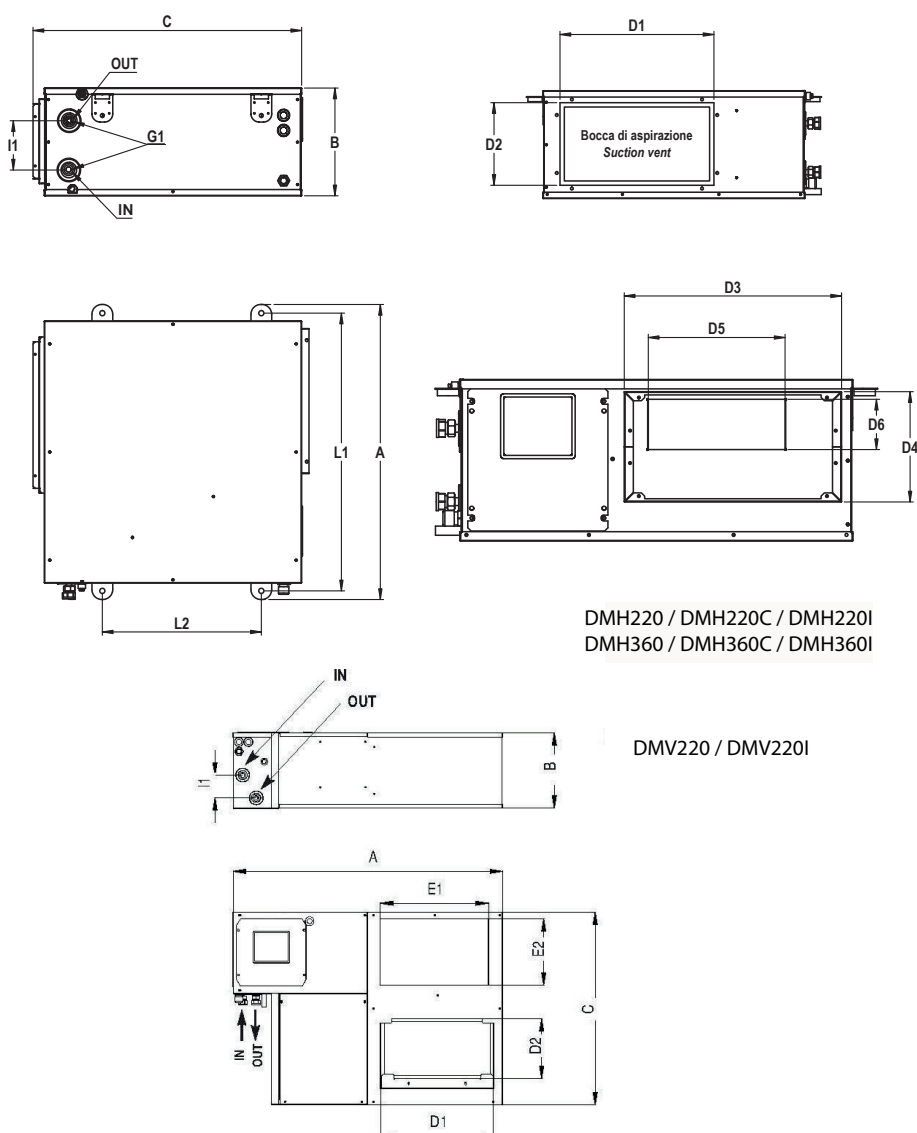
Condensed humidity with ambient temperature of 24°C

		DMV220	DMV220I	DMH220	DMH220C	DMH220I	DMH360C	DMH360I	DMH360
Hydraulic circuit water temperature 21°C - Relative humidity 55%									
Condensed humidity	l/24h	10	10	10	10	10	17	17	17
Hydraulic circuit water temperature 18°C - Relative humidity 55%									
Condensed humidity	l/24h	12	12	12	12	12	19	19	19
Hydraulic circuit water temperature 15°C - Relative humidity 55%									
Condensed humidity	l/24h	13	13	13	13	13	21	21	21
Hydraulic circuit water temperature 21°C - Relative humidity 65%									
Condensed humidity	l/24h	14	14	14	14	14	23	23	23
Hydraulic circuit water temperature 18°C - Relative humidity 65%									
Condensed humidity	l/24h	17	17	17	17	17	27	27	27
Hydraulic circuit water temperature 15°C - Relative humidity 65%									
Condensed humidity	l/24h	18	18	18	18	18	30	30	30

Operating limits

- Intake air temperature 15 ~ 30°C
- Hydraulic circuit water temperature 12 ~ 20°C

DIMENSIONS AND WEIGHTS



DMH220 / DMH220C / DMH220I
DMH360 / DMH360C / DMH360I

DMV220 / DMV220I

		DMH220	DMH220C	DMH220I	DMV220	DMV220I	DMH360	DMH360C	DMH360I
Dimensions and weights									
A	mm	680	680	680	850	850	775	775	775
B	mm	250	250	250	240	240	270	270	270
C	mm	623	623	623	615	615	623	623	623
D1	mm	337	337	337	337	337	437	437	437
D2	mm	172	172	172	172	172	192	192	192
D3	mm	335	335	335	-	-	435	435	435
D4	mm	170	170	170	-	-	195	195	195
D5	mm	210	210	210	-	-	250	250	250
D6	mm	77	77	77	-	-	95	95	95
E1	mm	-	-	-	350	350	-	-	-
E2	mm	-	-	-	215	215	-	-	-
I1	mm	115	115	115	75 (1)	75 (1)	125	125	125
L1	mm	640	640	640	-	-	745	745	745
L2	mm	370	370	370	-	-	370	370	370
G1	Ø	1/2" F	1/2" F	1/2" F	1/2" F	1/2" F	1/2" F	1/2" F	1/2" F
Net weight	kg	35,0	35,0	35,0	40,0	40,0	40,0	40,0	40,0

(1) Pre-shearing for hydraulic and electrical connections on the side, rear and bottom panel

Aermec reserves the right to make any modifications deemed necessary.
All data is subject to change without notice. Aermec does not assume
responsibility or liability for errors or omissions.

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