

TECHNICAL SHEET



Description	Dimension	Weight	Code
DA 701 60 Hz	794x388x754 mm	66 kg	7041801

Ductable isothermal dehumidifier designed for horizontal ceiling installation. Possible operations: air circulation, summer dehumidification, additional sensible heating and cooling capacity. DA 701 dehumidifier consists in a complete cooling unit (refrigerant R410a), EC high efficiency modulating fan, pre-treatment coils and plate condenser to be supplied with cooled water (15 °C), and a display for setting and checking the parameters. The unit can be managed via digital contacts or by using RDZ Wi electronic control unit.

- Nominal air flow rate 750 m³/h
- Available pressure 310 Pa
- Dehumidification capacity 93,2 l/24h (26 °C RH 65% water temperature 15 °C)
- Pre-treatment + condensing water flow rate 15 °C 860 l/h
- Additional sensible cooling capacity up to 3165 W with supply water at 15 °C (26 °C RH 65%)
- Maximum power consumption 1230 W
- nr. 1 syphon mandatory

COMPONENTS

AIR FLOWS



Recirculation
Air



Supply Air

AIR FILTERS

Classes, Minimum Efficiency, Type Of Particulate



e(PM10) min ≤50 %
Hairs



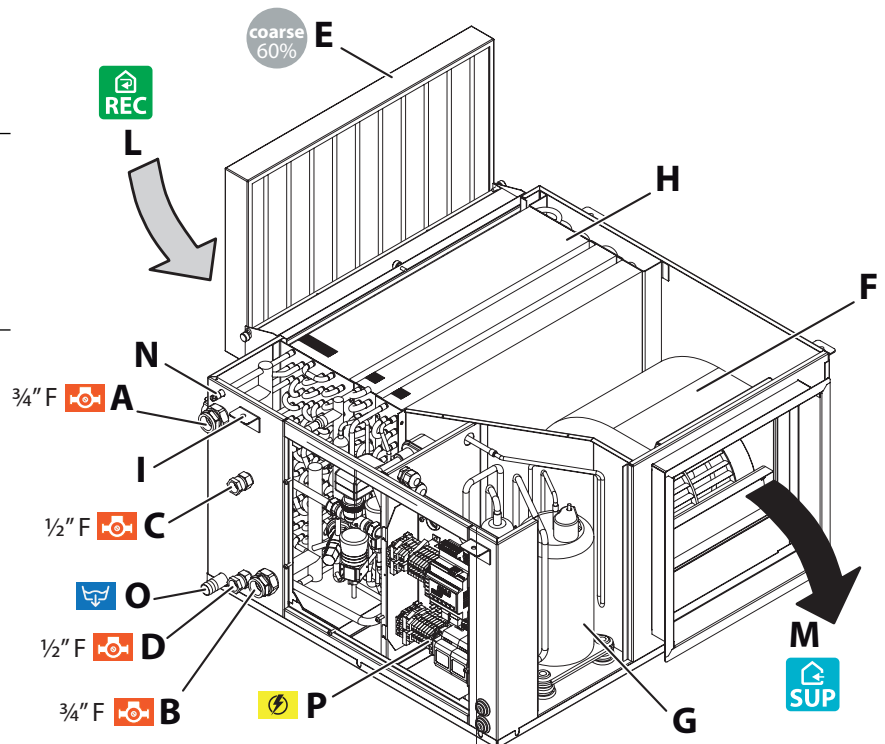
Ø 20 mm Condensation Drain



Hydraulic connection



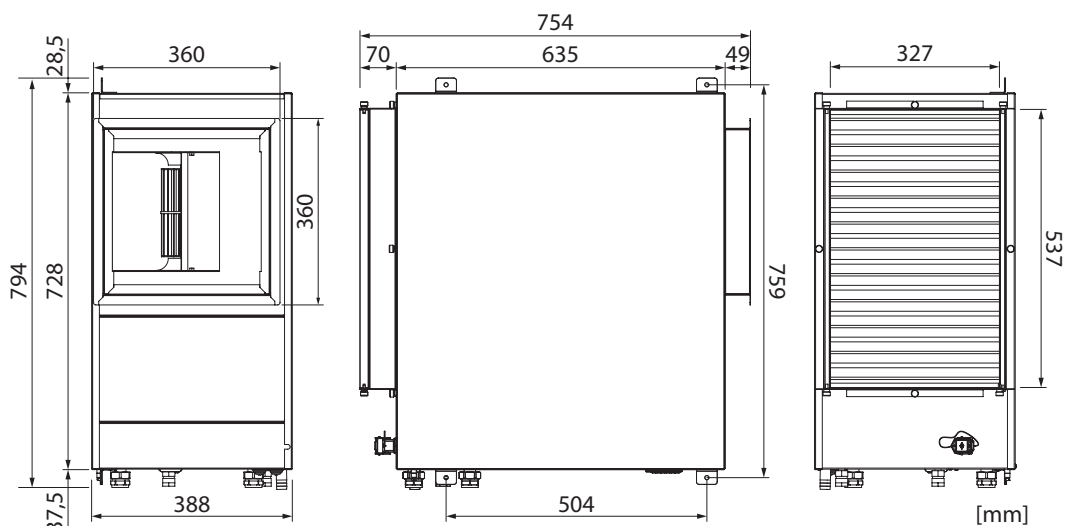
Wiring Box



Rif.	Description	Rif.	Description
A	Pre-treatment water outlet (3/4" F)	H	Finned pack
B	Pre-treatment water inlet (3/4" F)	I	Fixing bracket (Ø 8 mm hole)
C	Condenser water outlet (1/2" F)	L	Air inlet
D	Condenser water inlet (1/2" F)	M	Dehumidified air outlet
E	Filter	N	Vent
F	Fan	O	Ø 20 mm condensation drain
G	Compressor	P	Wiring box

TECHNICAL SHEET

DIMENSIONS AND TECHNICAL DATA



Overall unit dimensions	
Height	388 mm
Width (without hydraulic connection)	728 mm
Depth	754 mm
Weight	66 kg

Technical characteristics

Technical specifications

Condensation (26° - 65%)	l/day	93,2
Max electrical power absorbed	W	1230
Max electrical power absorbed by the fan	W	300
Max electrical consumption	A	7
Nominal air flow rate	m ³ /h	750
Available prevalence	Pa	310
- Only DA		228
- DA + SR		
Pre-cooling water flow rate	l/h	750
Pre-cooling water outlets		3/4" F
Condensation water flow rate	l/h	110
Condensation water outlets		1/2" F
Pre-cooling water pressure drop	kPa	12
- only DA		21
- DA + Modulating Valve		
Refrigerant (R410A) - GWP: 2088	gr	1060
Carbon dioxide equivalent	t	2,21
Maximum operating pressure	Bar	39

MANDATORY COMPLEMENTS

The installation of no. 1 Condensate drain choosing, according to the needs, among those proposed.


Condensate drain		Code
	SF-M 20 Condensate drain kit consisting of a siphon with silicone membrane, hose and fitting, to be used in combination with RDZ air handling units.	3600400
	SF-P N Condensate drain kit with casing, designed for wall installation. It can be used in combination with RDZ air handling units, and it is suitable for Ø 20-32 mm piping. The external shell can be adjusted considering the thickness of the wall. Washable internal cartridge.	7045504

ACCESORIES

Hydraulics		Code
	MP 5-42 Ø1" Flow Meter - Kv 9,7	7045558
	MODULATING VALVE Ø 3/4" 3-way valve with 0-10V modulating servomotor, power supply 24V	7041170

TECHNICAL SHEET

SPARE PARTS

Filter air kit		Code
	FILTER KIT DA 701 Kit for complete replacement of unit filters containing: • 1 ISO Coarse 60% filter - Size 605x296x50 mm	7044175

OPERATING LIMITS

Summer operation: the maximum permissible water temperature in summer operation is **18 °C**. Above 19 °C, the compressor is excluded, leaving only the fan running.

Winter operation: permissible water temperature in winter operation **<55 °C**. At higher temperatures, the appliance may be damaged.

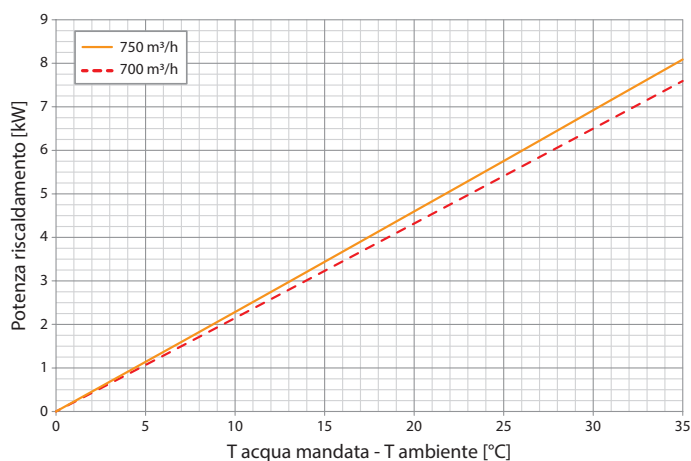
SUMMER PERFORMANCE

Performance in dehumidification mode, according to the temperature, relative humidity and temperature of the chilled water.

Only DA 701 - Performance in dehumidification/integration mode										
Inlet air		outlet air		Latent cooling power		Min. inflow air temp.	Sens. cooling power		Cooling power to be supplied to the unit	
							Max	Set 17 °C	Dehumidific.	Integration
°C	% UR	°C	% UR	W	l/g	°C	W	W	W	W
700 m³/h										
26	55	26	41,3	1632	56,3	13,4	2999	2142	2259	5258
26	65	26	43,7	2613	90,2	14,3	2796	2142	3239	6035
750 m³/h										
26	55	26	42,0	1659	57,3	13,6	3165	2295	2286	5451
26	65	26	44,5	2698	93,2	14,5	2946	2295	3323	6269

DA + SR 701 - Performance in dehumidification/integration mode										
Inlet air		Outlet air		Latent cooling power		Min. inflow air temp	Sens. cooling power		Cooling power to be supplied to the unit	
							Max	Set 17 °C	Dehumidific.	Integration
°C	% UR	°C	% UR	W	l/g	°C	W	W	W	W
700 m³/h										
33	50	26	47,4	3652	126,1	15,2	2568	2142	4275	6843
35	50	26	50,2	4531	156,5	16,1	2354	2142	5151	7505
750 m³/h										
33	50	26	48,4	3791	130,9	15,5	2691	2295	4412	7104
35	50	26	51,2	4724	163,1	16,3	2467	2295	5342	7809

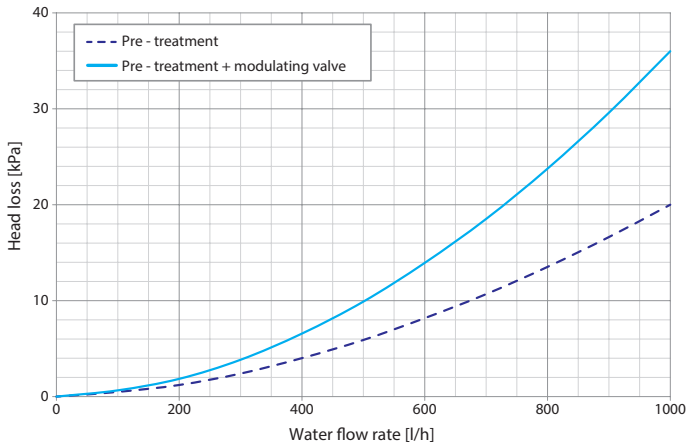
WINTER PERFORMANCE



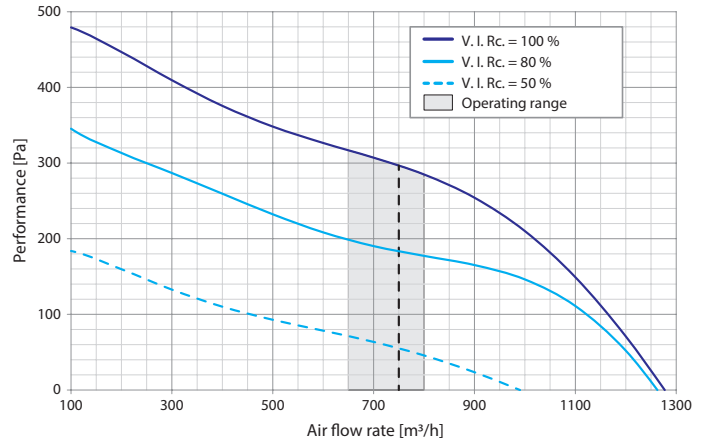
Maximum sensible heating capacity according to the temperature difference between inflow air into the unit and water.

TECHNICAL SHEET

PRESSURE LOSS OF THE HYDRAULIC CIRCUIT

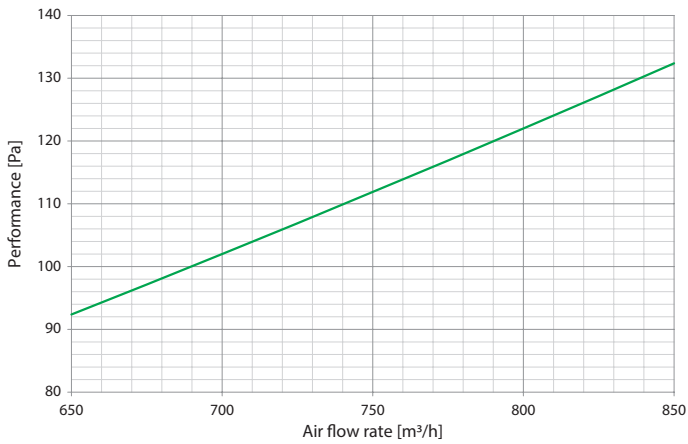


AVAILABLE PRESSURES TO THE INTAKE OUTLET



V. I. Rc. : Recirculating Air Inlet Speed

HEAT RECOVERY SR PRESSURES DROP



Pressure drop value in SR units, which should be subtracted from the aerualic performance of the DA units in case of combination into UC units.

POSITIONING TO THE CEILING

