

TECHNICAL SHEET



Description	Dimensions	Weight	Code
DA 701	794x388x705 mm	63 kg	7041701

Ductable isothermal dehumidifier designed for horizontal ceiling installation. Possible operations: air rirculation, 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 temp. 15 °C)
- Pre-treatment + condensing water flow rate at 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



Ricirculation Air



Supply Air

AIR FILTERS

Classes, Minimum Efficiency, Type Of Particulate



e(PM10) min ≤50 %
Hairs



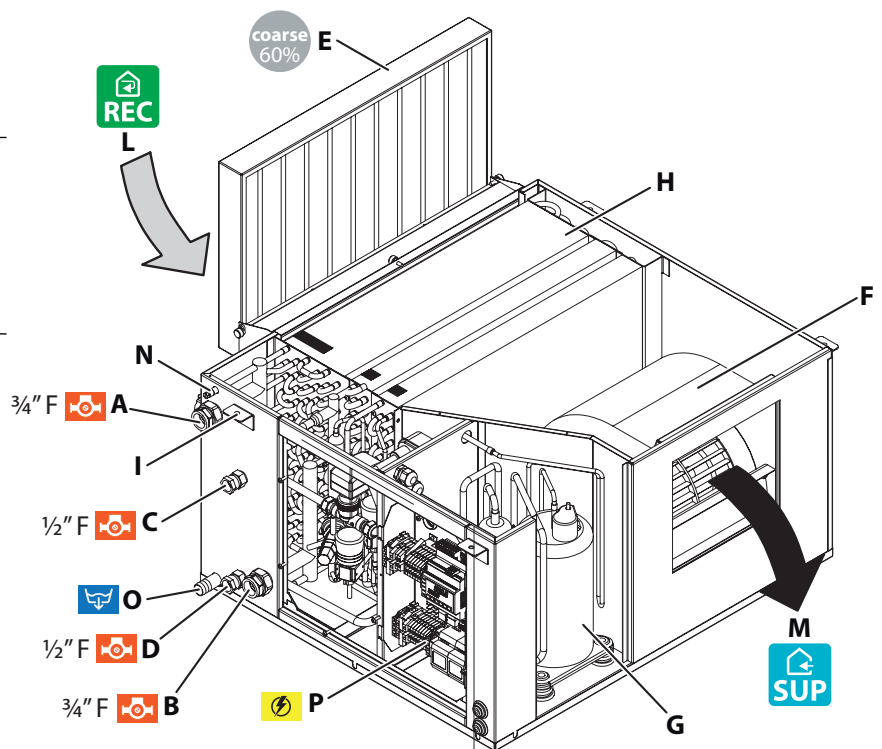
Ø 20 mm Condensation Drain



Hydraulic connection



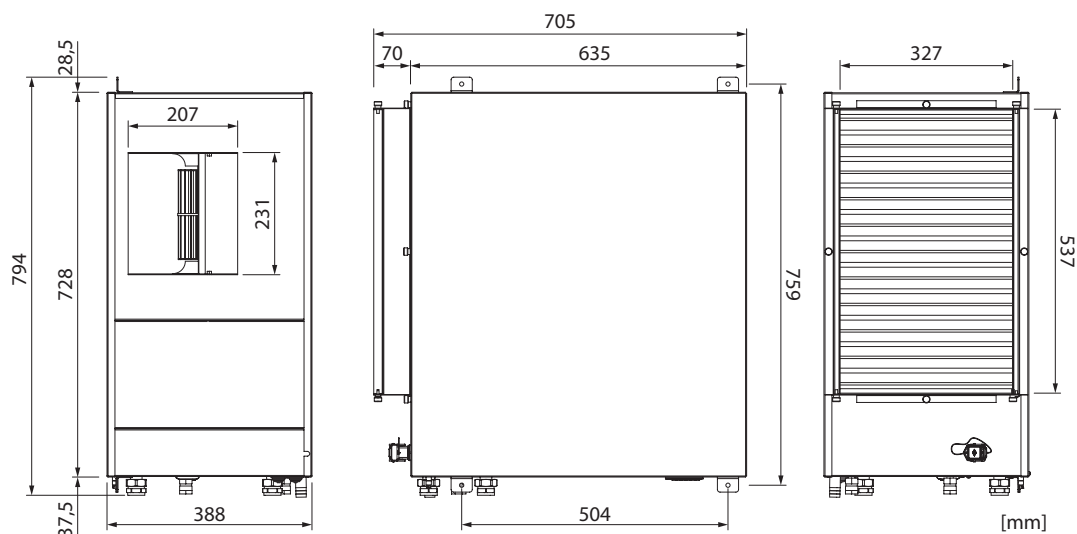
Wiring Box



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

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DIMENSIONS AND TECHNICAL DATA



Overall unit dimensions	
Height	388 mm
Width (without hydraulic connect.)	728 mm
Depth	705 mm
Weight	63 kg

Technical characteristics

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

COMPLEMENTS MANDATORY

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-PN 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

ACCESSORIES

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

SPARE PARTS

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

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SUMMER PERFORMANCE

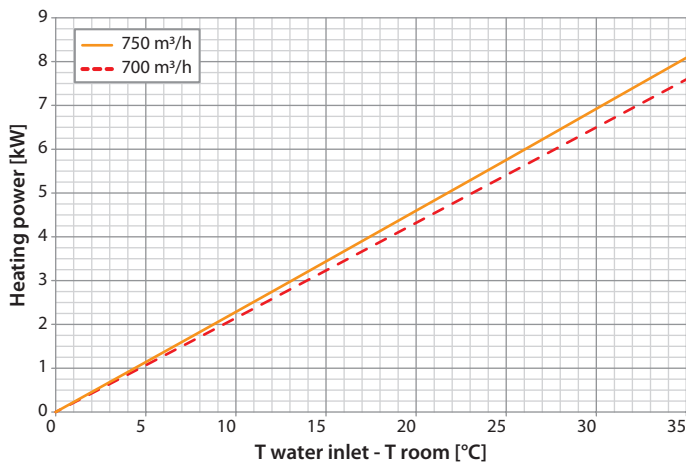
Performance in dehumidification mode, according to the temperature, relative humidity and temperature of the chilled water.

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	
°C	% RH	°C	% RH	W	l/g	°C	Max	Set 17 °C	Dehumidific.	Integration
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	
°C	% RH	°C	% RH	W	l/g	°C	Max	Set 17 °C	Dehumidific.	Integration
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

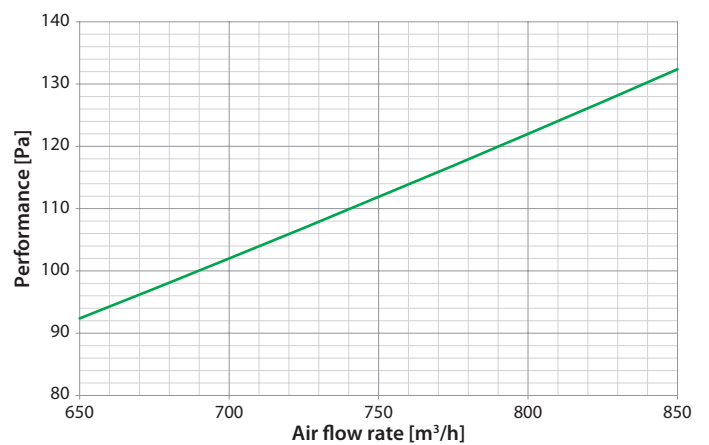
WINTER PERFORMANCE

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



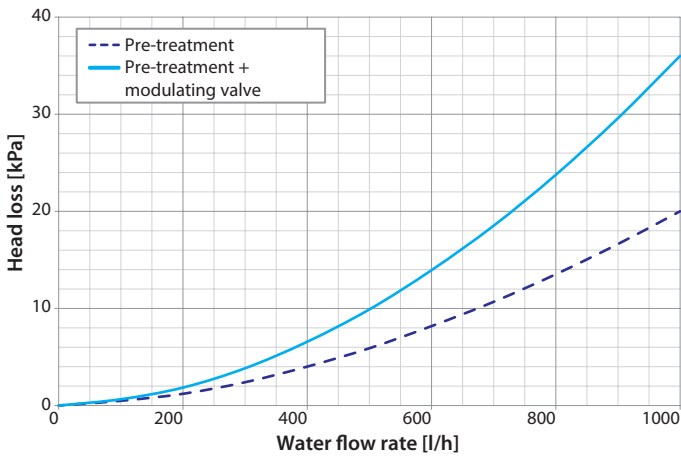
PRESSURE DROP OF HEAT RECOVERY SR

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

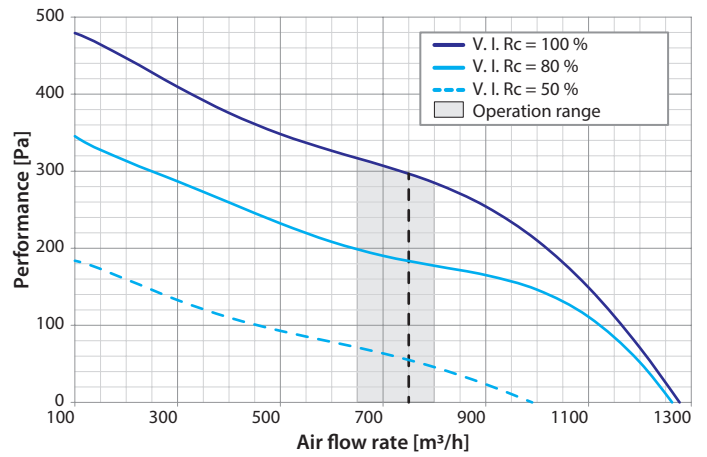


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PRESSURE LOSS OF THE HYDRAULIC CIRCUIT

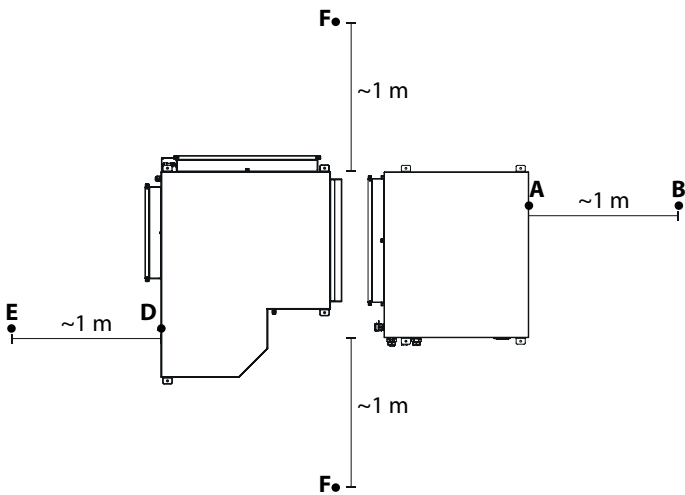


AVAILABLE PRESSURES TO THE INTAKE OUTLET



V. I. Rc.: recirculation air inlet velocity

ACOUSTIC CHARACTERISTICS



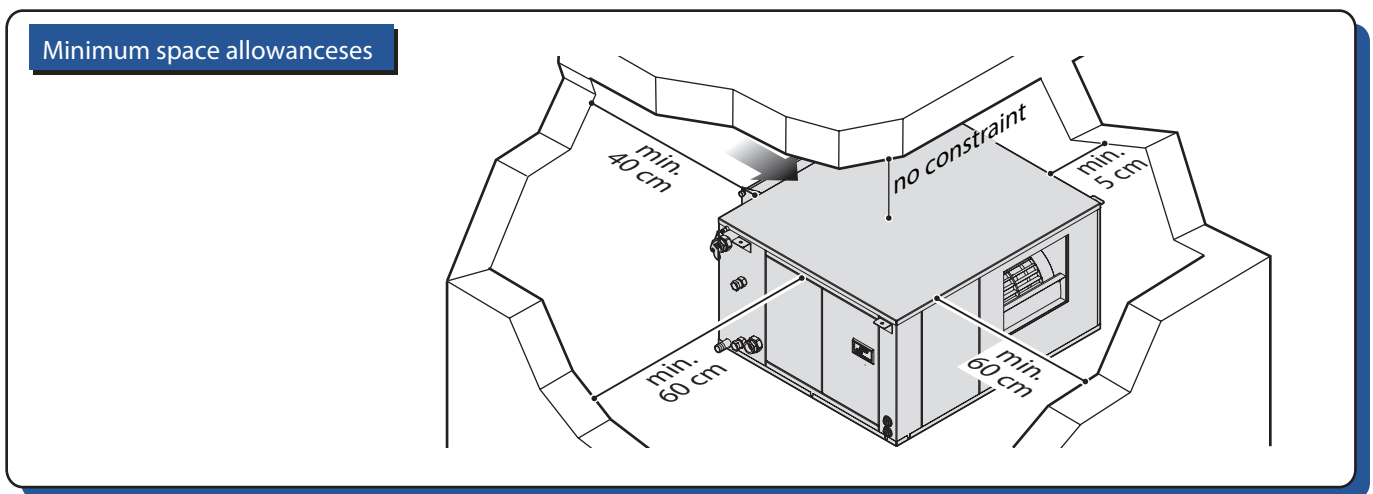
Sound pressure detected							
Operation	Speed [%]	A	B	C	D	E	F
		[db(A)]					
Air recirculation	40	82	63	56	-	-	-
Dehumidification	40	81	65	57	-	-	-
Dehumidification	30	79	61	55	-	-	-
Recirculation	30	79	61	52	-	-	-
Ventilation	30	-	60	54	76	58	55
Ventilation	40	-	65	58	80	62	57
Recirculation	100	80	69	62	-	-	-

Bottom 35 db(A)

The detected acoustic value can be further improved thanks to the noise reduction offered by the presence of the plasterboard ceiling where the machine is installed.

! It is highly recommended to install a silencer near the unit, especially near the supply line.

POSITIONING TO THE CEILING



Minimum space allowances



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FAC0CA002BZ.00 01/2025

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 ISO 9001

