

# BREZZA

## WATER CASSETTE WITH METAL PANEL

SOMETHING DIFFERENT



## BREZZA

WATER CASSETTE The BREZZA series cassette fan coil unit for 2 and 4 pipe systems features a panel type with intake grille and diffusion frame entirely made of painted sheet metal.

The perfectly aligned elements and linear shapes ensure that this cassette can perfectly adapt to traditional modular false ceilings. Thanks to the special shaping of the diffusion frame, the inlet flow of air sticks to the ceiling surface to then hit the walls homogeneously, without creating annoying air drafts (Coanda effect).

The MPK-C and MPK-D versions of the intake panel have been designed and tested to ensure maximum comfort. Thanks to the adjustable baffles, each user can customize the outlet air flow. The BREZZA series, available with AC/EC motors, is ideal for air conditioning in the residential and retail sectors. The valve kit and the electrical panel, installed on the same side, make installation and maintenance easier.

#### **EC MOTOR**

THE EC MOTOR ALLOWS THE SPEED OF THE FAN UNIT TO BE ACCURATELY MODULATED AND LIMITS THE ENERGY INPUT TO THE ACTUAL WORKLOAD REQUIRED, WITHOUT UNNECESSARY WASTE.

#### COMFORT COANDA EFFECT

THE COMPACT SIZED SPECIAL FRONT PANEL, MADE OF 0.8 MM THICK PAINTED SHEET METAL AND THE SHAPING OF THE BAFFLES GUARANTEE A COANDA EFFECT FOR THE OUTLET AIR FLOW.

ALTERNATIVELY, IT IS POSSIBLE TO HAVE A PANEL WITH FOUR MOVABLE BAFFLES, TO DIRECT THE AIR THROW VERTICALLY OR AT INTERMEDIATE POSITIONS.

#### MINIMAL DESIGN

THE STYLISH DESIGN OF THE PANEL INTEGRATES PERFECTLY INTO ANY ENVIRONMENT AND TYPE OF FALSE CEILING.

#### EASY INSTALLATION

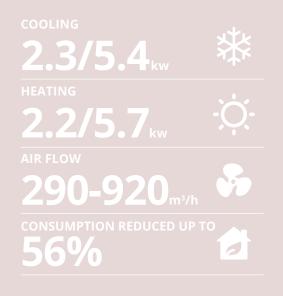
THE BREZZA SERIES HAS BEEN DESIGNED TO ENSURE EASY INSTALLATION, IN FULL COMPLIANCE WITH THE APPLICABLE STANDARDS AND WORKMANLIKE PRACTICES. THE HIGH THICKNESS METAL SHEETS LIMIT VIBRATION, WHICH IS A SOURCE OF NOISE. THE UNITS ARE EQUIPPED WITH BRACKETS FOR FIXING.

## EASY MAINTENANCE

ALL THE UNIT COMPONENTS ARE EASILY ACCESSIBLE.







## LOW NOISE ADAPTABILITY DESIGN

CLEAN LINES, SUITABLE FOR ANY ENVIRONMENT. BREZZA GUARANTEES COMFORT AND AIR QUALITY THANKS TO THE COANDA EFFECT AND LOW MAINTENANCE REQUIREMENTS. AVAILABLE WITH DIFFERENT PANELS.

Available VDI 6022 version





## **COANDA EFFECT**

The BREZZA series units are designed to ensure high levels of comfort. Annoying cold air draughts (usually the problem with cassette fan-coils) are avoided by the special shaping of the panel, which lets air into the environment with a COANDA effect.

The COANDA effect is the tendency of a fluid to follow the outline of a nearby surface: in this case the air flow follows the ceiling line all the way down the walls. Since the inlet air speed is very low, it will not cause any discomfort to people as the flow of air follows the wall line closely. The special configuration of the panel allows users to adjust the outflow according to the type of environment in which BREZZA is installed. If the room ceiling height exceeds 3 m and it is therefore necessary to direct the air flow downwards, a special panel is available from Aertesi with adjustable fins. In this way it is possible to manually adjust the flow orientation for each one of the four deliveries: horizontal (with Coanda effect Fig. A), vertical or in an intermediate position (Fig. B). The excellent performance of the BREZZA cassette allows large rooms to be treated with fewer units.

BREZZA is a byword for innovation, quality and correct air management in line with energy saving policies.

#### MPK-C

PANEL WITH FIXED FINS IN HORIZONTAL POSITION (COANDA): AIR DIFFUSION OCCURS ON ALL 4 SIDES OF THE UNIT.



MPK-D PANEL WITH MANUALLY ADJUSTABLE FINS TO ADJUST THE AIR FLOW VERTICALLY, TOO. COANDA EFFECT 3 M AT MINIMUM SPEED.

SIZE			73			93	
SPEED		MIN	MED	MAX	MIN	MED	MAX
AIR FLOW	m³/h	350	500	710	540	790	920
AC MOTOR	W	30	38	50	54	72	87
EC MOTOR	W	3	8	22	5	15	48
DIFFERENCE		-83%	-74%	-58%	-78%	-56%	-46%





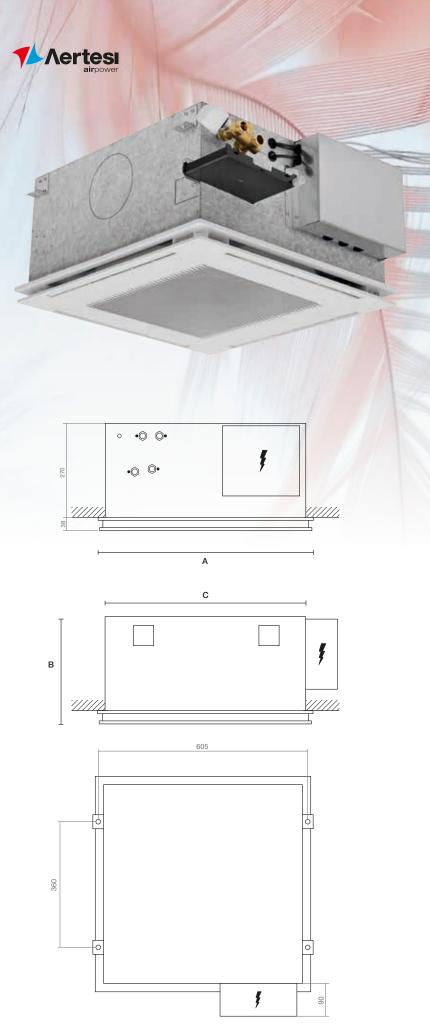
#### PANEL WITH FIXED FINS IN HORIZONTAL POSITION (COANDA):

air diffusion occurs on all 4 sides of the unit.



#### **PANEL WITH MANUALLY ADJUSTABLE FINS:** to adjust the air flow vertically, too

to adjust the air flow vertically, too. Coanda effect **3 m** at minimum speed.



## SHEET METAL PANEL

### 1

No colour changes over time

### 2

It can be painted the same colour as the ceiling

## 3

The MPK-C and MPK-D versions are easily interchangeable

#### 4

Installation can be carried out as later-stage retrofitting

#### 5

It opens from below easily and in total safety

## DIMENSIONS

SIZE	А	В	С	WEIGHT		
51/71	620	308	575	27		
52/72/92	620	308	575	28		
53/73/83/93	620	308	575	30		
74/94	620	308	575	28		
75/95	620	308	575	30		

A = length mm B = height mm C = depth mm

# **BREZZA**



AC MOTOR			2 PIPES											4 PIPES					
WITH 3-ROW COIL		53			73		83		93		75			95					
SPEED (E)		min	med	max	min	med	max	min	med	max	min	med	max	min	med	max	min	med	max
Air flow	m3/h	290	380	550	350	500	710	410	560	770	540	790	920	350	500	710	540	790	920
COOLING - air 27°C dry bull	o, 19°C	wet b	ulb - v	water	inlet	7°C, o	utlet	12°C											
Total capacity (E)	kW	2.25	2.79	3.71	2.62	3.45	4.47	2.97	3.76	4.74	3.66	4.82	5.36	2.20	2.81	3.56	2.96	3.81	4.19
Sensitive capacity (E)	kW	1.58	1.99	2.70	1.86	2.50	3.30	2.12	2.74	3.52	2.66	3.59	4.03	1.60	2.10	2.73	2.23	2.94	3.28
Water flow rate	l/h	387	480	638	450	594	769	510	647	814	629	829	921	375	483	612	509	655	721
Δp (water) (E)	kPa	4.3	6.3	10.3	5.6	9.1	14.3	7.0	10.6	18.0	10.1	16.4	23.0	6.2	9.7	14.6	10.6	16.5	19.5
HEATING - air 20°C - water inlet 45°C, outlet 40°C																			
Capacity (E)	kW	2.17	2.75	3.78	2.56	3.49	4.62	2.94	3.84	4.93	3.72	5.03	5.67	-	-	-	-	-	-
Water flow rate	l/h	375	476	654	443	604	799	509	664	853	644	870	980	-	-	-	-	-	-
Δp (water) (E)	kPa	3.4	5.1	8.9	4.5	7.8	12.7	5.7	9.2	19.0	8.7	14.7	23.0	-	-	-	-	-	-
HEATING - air 20°C - water i	inlet 65	5°C, οι	utlet 5	5°C															
Capacity (E)	kW	-	-	-	-	-	-	-	-	-	-	-	-	2.83	3.62	4.61	3.82	4.95	5.47
Water flow rate	l/h	-	-	-	-	-	-	-	-	-	-	-	-	243	312	397	328	425	471
Δp (water) (E)	kPa	-	-	-	-	-	-	-	-	-	-	-	-	5.2	8.1	12.3	8.9	14.0	16.7
MOTOR ELECTRIC POWER D	RAW																		
Power draw (E)	W	25	30	40	30	36	50	41	50	64	54	72	87	30	36	50	54	72	87
Max power draw	Α	0.18 0.23				0.29 0.40					0.23 0.40								
SOUND DATA																			
Sound power (E)	dB(A)	35	39	48	39	46	55	40	48	57	49	59	62	39	46	55	49	59	62
Sound pressure (*)	dB(A)	26	30	39	30	37	46	31	39	48	40	50	53	30	37	46	40	50	53

(E) = EUROVENT certified performance. (\*) = the sound pressure levels are lower than power levels by 9 dB(A) for a 100 m3 space and a reverberation time of 0.5 sec.

EC MOTOR				2 PI	PES					4 PI	PIPES			
WITH 3-ROW COIL		73			93				75		95			
SPEED (E)		4.7V	6.6V	9.8V	4.0V	6.4V	8.8V	4.7V	6.6V	9.8V	4.0V	6.4V	8.8V	
Air flow	m3/h	300	450	700	350	600	835	300	450	700	350	600	835	
COOLING - air 27°C dry bu	lb, 19°C	wet bulk	o - water	inlet 7°C	, outlet	12°C								
Total capacity (E)	kW	2.25	3.11	4.32	2.55	3.86	4.88	1.90	2.50	3.40	2.10	3.10	3.90	
Sensitive capacity (E)	kW	1.59	2.23	3.19	1.81	2.82	3.65	1.40	1.90	2.60	1.60	2.30	3.00	
Water flow rate	l/h	397	548	761	450	680	862	327	430	585	361	533	671	
Δp (water) (E)	kPa	4.5	7.9	14.1	5.6	11.6	17.5	5.1	8.4	14.0	5.4	12.0	17.9	
HEATING - air 20°C - water	r inlet 45	°C, outle	et 40°C											
Capacity (E)	kW	2.17	3.11	4.46	2.50	3.93	5.12	-	-	-	-	-	-	
Water flow rate	l/h	387	552	790	443	697	909	-	-	-	-	-	-	
Δp (water) (E)	kPa	3.5	6.6	12.4	4.5	10.0	15.9	-	-	-	-	-	-	
HEATING - air 20°C - water	r inlet 65	°C, outle	et 55°C											
Capacity (E)	kW	-	-	-	-	-	-	2.42	3.22	4.49	2.76	4.03	5.06	
Water flow rate	l/h	-	-	-	-	-	-	208	277	386	237	346	435	
Δp (water) (E)	kPa	-	-	-	-	-	-	5.4	8.8	14.9	5.2	10.1	14.9	
MOTOR ELECTRIC POWER	DRAW													
Power draw (E)	W	3	8	22	5	15	48	4	9	26	5	15	48	
Max power draw	A		0.17			0.38			0.17		0.38			
SOUND DATA														
Sound power (E)	dB(A)	32	42	53	37	50	59	32	42	53	37	50	59	
Sound pressure (*)	dB(A)	23	33	44	28	41	50	23	33	44	28	41	50	
ENERGY CLASSIFICATION														
FCEER (E)			А			A			А			А		
FCCOP(E)		A				А			А			А		

(E) = EUROVENT certified performance (\*) = the sound pressure levels are lower than power levels by 9 dB(A) for a 100 m3 space and a reverberation time of 0.5 sec.

Aertesi srl Viale della Tecnica, 6/a 35026 Conselve (PD) ITALY

t. +39.049.9501109 f. +39.049.9500823

www.aertesi.com info@aertesi.com

