



**AIRTECHNIC**

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Air-Conditioning & Ventilation Components & Systems

## Disc valves

# PV



# Disc valves PV

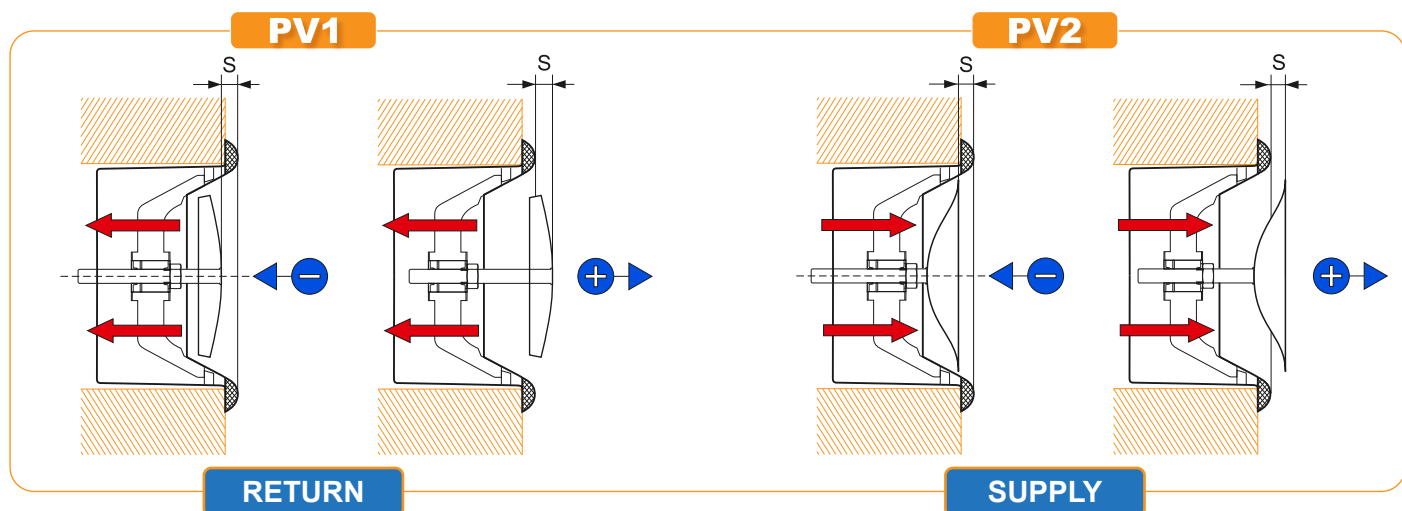
Circular ceiling diffusers (disc valves) **PV** have a central disc that is supported by a screw and when it rotates it moves inwards (-) or outwards (+) varying the amount of air passing through the valve. Depending on the type, they are manufactured from anodized aluminium, aluminium powder painted in RAL color, stainless steel and plastic PVC. They are designed for all types of air conditioning, ventilation, heating or cooling systems and are used in small spaces such as toilets, hallways and small rooms. They are suitable for installation on a ceiling, wall or air duct, for supply or return air, depending on the type.

The standard dimensions are : Ø100, 125, 150, 160 & 200.



## DISC VALVES TYPES

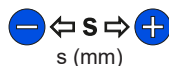
- PV1** : Manufactured from **aluminium**, powder painted in RAL 9010 (white). Suitable for return air.
- PV2** : Manufactured from **aluminium**, powder painted in RAL 9010 (white). Suitable for supply air.
- PVI** : Manufactured from **stainless steel**. Suitable for return or supply air.
- PVP** : Manufactured from **plastic PVC**. Suitable for return air.



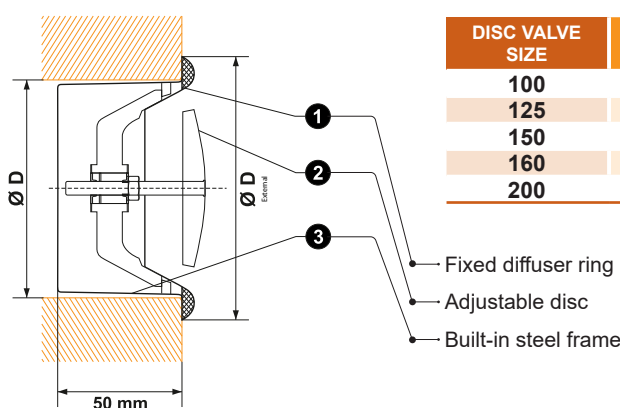
The frame is suitable for all types of installation (wall, ceiling or air duct). Between the frame and the valve there is foam sealant which guarantees **absolute air tightness** and firm placement of the disc valve.

### Air flow adjustment:

The central disc is supported by a screw and when it rotates it moves **inwards (-) or outwards (+) varying the amount of air passing through the valve.**



This also regulates the pressure drop and noise level of the diffuser.



DISC VALVE SIZE	Ø D external	Ø D
100	138	97,5
125	164	122,5
150	202	147,5
160	211	157,5
200	248	197,5

Disc valves PV1 & PV2 can be powder painted in any RAL color, upon request. For the full range of RAL colors please contact us.



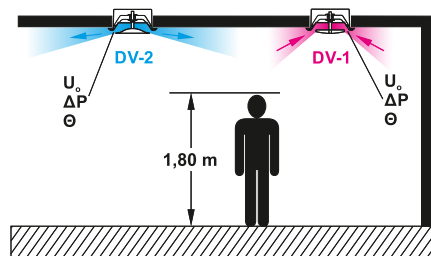
Color examples

## DISC VALVES SIZE SELECTION

The selection of disc valves will be made using the following diagrams and in accordance with the guideline **CR 1752:1998** (Ventilation for buildings - Design criteria for the indoor environment).

The technical specifications for disc valves are the following :

Diffuser diameter	$\varnothing D$	[mm]
Maximum air velocity inside the diffuser	$U_o$	[m/s]
Pressure drop inside the diffuser	$\Delta P$	[Pa]
Noise level	$\Theta$	dB[A]
Air flow adjustment screw position	S	-/+ x
Horizontal stream range	$X_o$	[mm]
Horizontal stream velocity at distance X	$U_T$	[m/s]



## DISC VALVES ORDER

For the proper order of disc valves **PV** please use the following code :

<b>PV1</b> - <b>100</b> - <b>9016</b>	Disc valve color
	<b>RAL...</b> = Disc valve powder painted in RAL color
	<b>Blank</b> = According the disc valve's type
	Disc valve size
	Disc valve type
	<b>PV1</b> = From <b>aluminium</b> , powder painted in RAL 9010. For return air.
	<b>PV2</b> = From <b>aluminium</b> , powder painted in RAL 9010. For supply air.
	<b>PVI</b> = From <b>stainless steel</b> . For return or supply air.
	<b>PVP</b> = From <b>plastic PVC</b> . For return air.

### Examples

#### PV2 - 150

Disc valve type PV2, for supply air, manufactured of aluminium painted in RAL 9010 (white), size 150.

#### PVP - 200

Disc valve type PVP, for return air, manufactured of plastic PVC, size 200.

## SPECIFICATIONS



### Circular, ceiling diffuser, disc valve for return air, PV1

Circular, ceiling diffuser, disc valve, indicative type **PV1** by **AIRTECHNIC**, manufactured of anodized aluminum / aluminum painted in RAL 9010 (white) color / in RAL... color with a central disc that is supported by a screw and when it rotates it moves inwards (-) or outwards (+) varying the amount of air passing through the valve. It will have foam seal between the frame and the valve for ultimate air tightness. The manufacturer will have performed measurements of the technical characteristics of the grille, in an independent laboratory. It will be suitable for wall, ceiling or air duct placement and use in small areas such as toilets, walkways and small rooms **for return air**. The factory will be certified according to **ISO 9001:2015** (Quality Management Systems) and according to **ISO 14001:2015** (Environmental Management Systems). It will be manufactured by **AIRTECHNIC** type **PV1**



### Circular, ceiling diffuser, disc valve for supply air, PV2

Circular, ceiling diffuser, disc valve, indicative type **PV2** by **AIRTECHNIC**, manufactured of anodized aluminum / aluminum painted in RAL 9010 (white) color / in RAL... color with a central disc that is supported by a screw and when it rotates it moves inwards (-) or outwards (+) varying the amount of air passing through the valve. It will have foam seal between the frame and the valve for ultimate air tightness. The manufacturer will have performed measurements of the technical characteristics of the grille, in an independent laboratory. It will be suitable for wall, ceiling or air duct placement and use in small areas such as toilets, walkways and small rooms **for supply air**. The factory will be certified according to **ISO 9001:2015** (Quality Management Systems) and according to **ISO 14001:2015** (Environmental Management Systems). It will be manufactured by **AIRTECHNIC** type **PV2**



### Circular, ceiling diffuser, disc valve for return or supply air, PVI

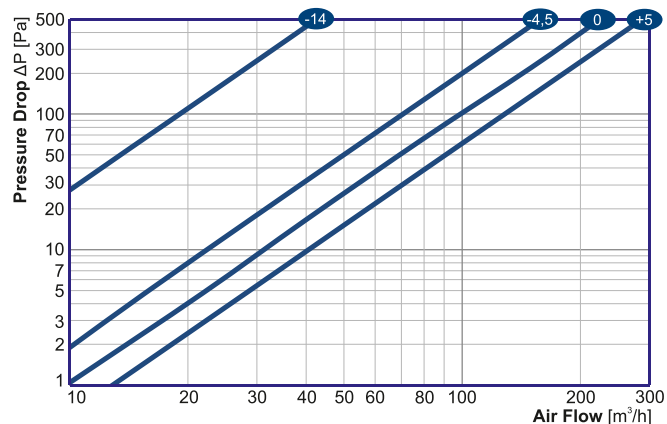
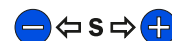
Circular, ceiling diffuser, disc valve, indicative type **PVI** by **AIRTECHNIC**, manufactured of stainless steel with a central disc that is supported by a screw and when it rotates it moves inwards (-) or outwards (+) varying the amount of air passing through the valve. It will have foam seal between the frame and the valve for ultimate air tightness. The manufacturer will have performed measurements of the technical characteristics of the grille, in an independent laboratory. It will be suitable for wall, ceiling or air duct placement and use in small areas such as toilets, walkways and small rooms **for return or supply air**. The factory will be certified according to **ISO 9001:2015** (Quality Management Systems) and according to **ISO 14001:2015** (Environmental Management Systems). It will be manufactured by **AIRTECHNIC** type **PVI**



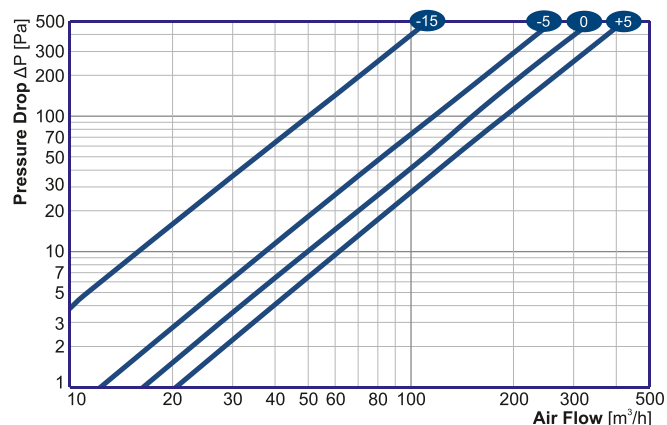
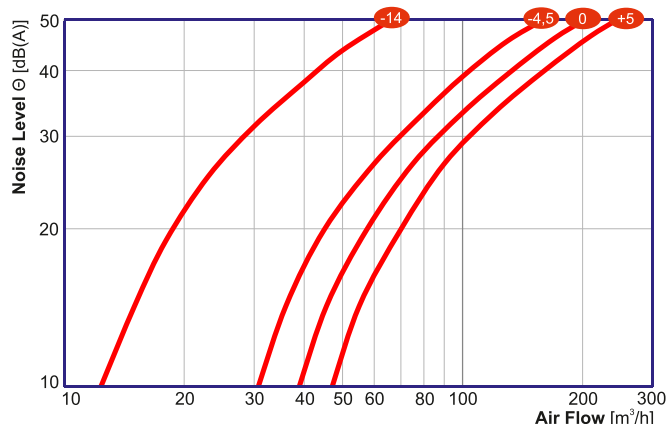
### Circular, ceiling diffuser, disc valve for return air, PVP

Circular, ceiling diffuser, disc valve, indicative type **PVP** by **AIRTECHNIC**, manufactured of plastic PVC with a central disc that is supported by a screw and when it rotates it moves inwards (-) or outwards (+) varying the amount of air passing through the valve. It will have foam seal between the frame and the valve for ultimate air tightness. The manufacturer will have performed measurements of the technical characteristics of the grille, in an independent laboratory. It will be suitable for wall, ceiling or air duct placement and use in small areas such as toilets, walkways and small rooms **for return air**. The factory will be certified according to **ISO 9001:2015** (Quality Management Systems) and according to **ISO 14001:2015** (Environmental Management Systems). It will be manufactured by **AIRTECHNIC** type **PVP**

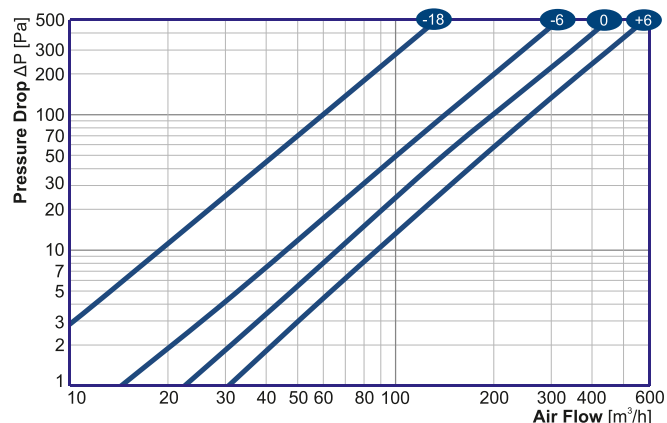
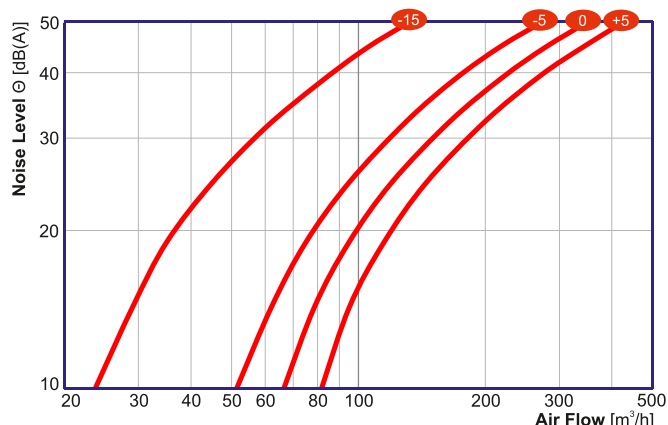
**PV1, PVP, PVI / for RETURN air - PRESSURE DROP & NOISE LEVEL CALCULATION**



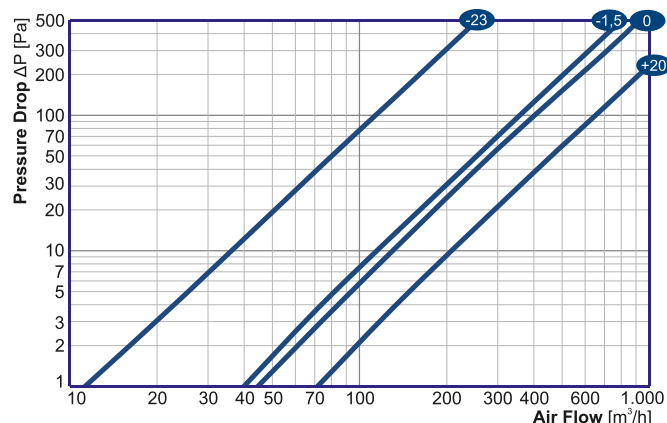
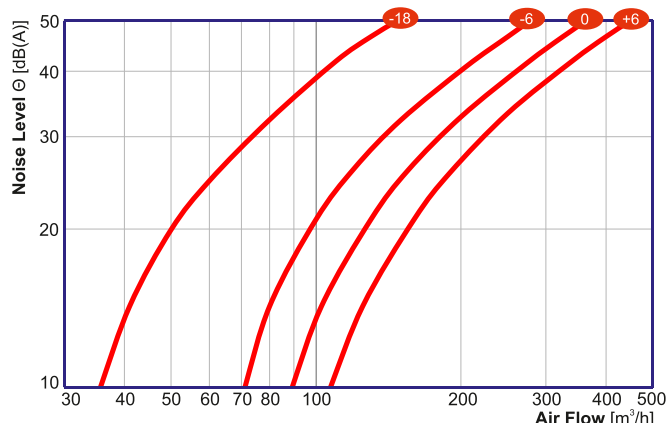
**D100**



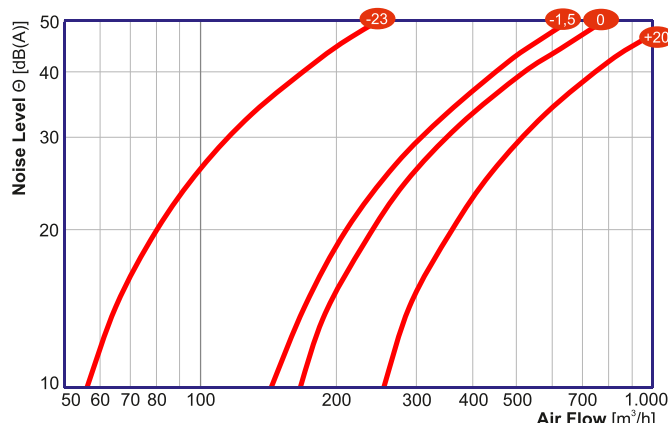
**D125**



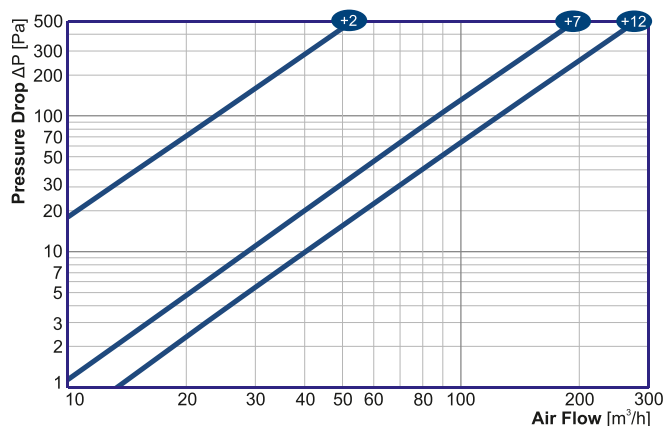
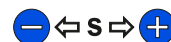
**D160**



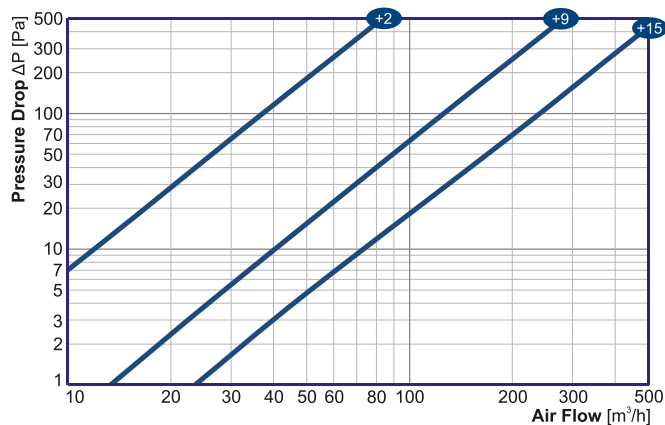
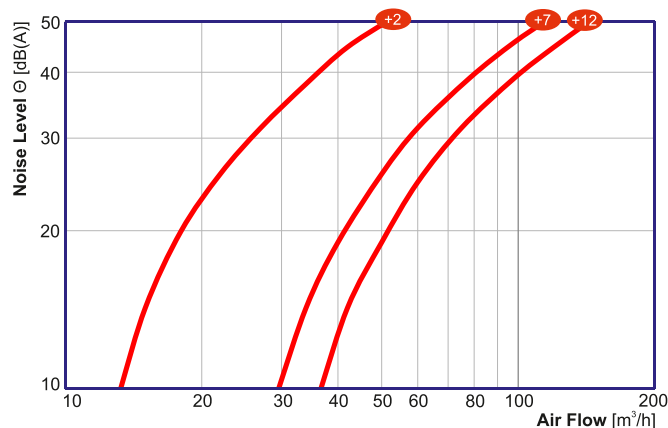
**D200**



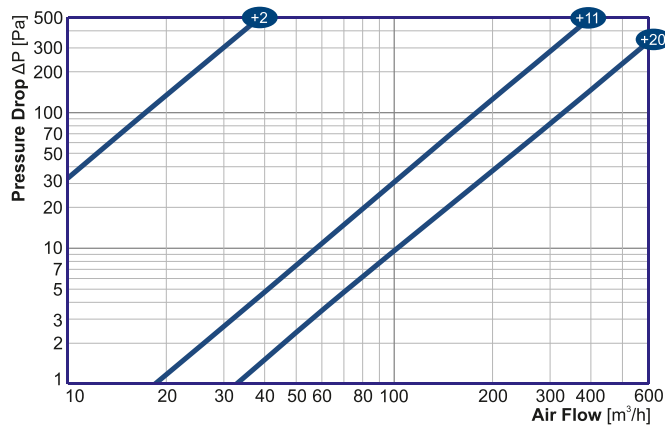
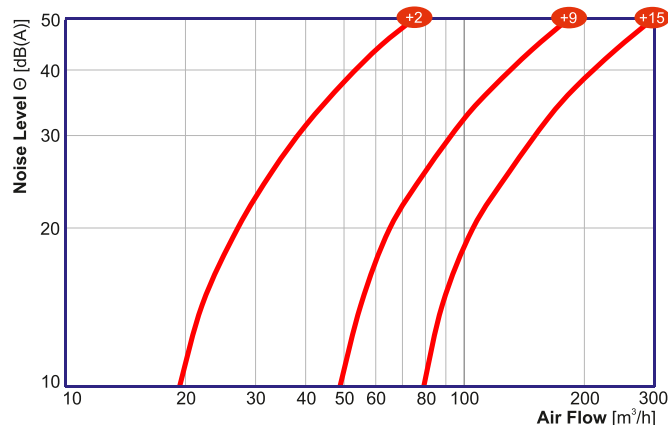
# PV2, PVI / for SUPPLY air - PRESSURE DROP & NOISE LEVEL CALCULATION



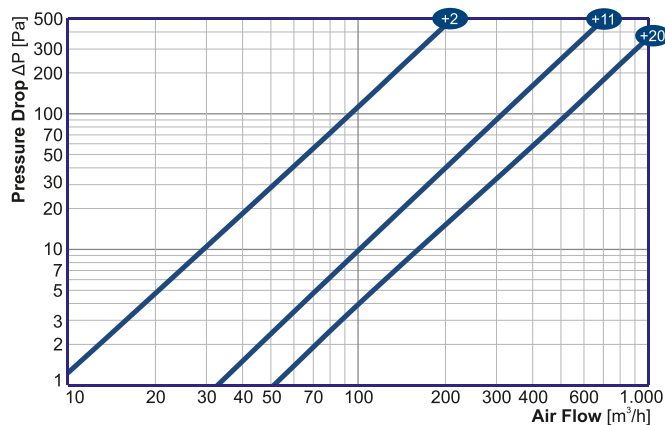
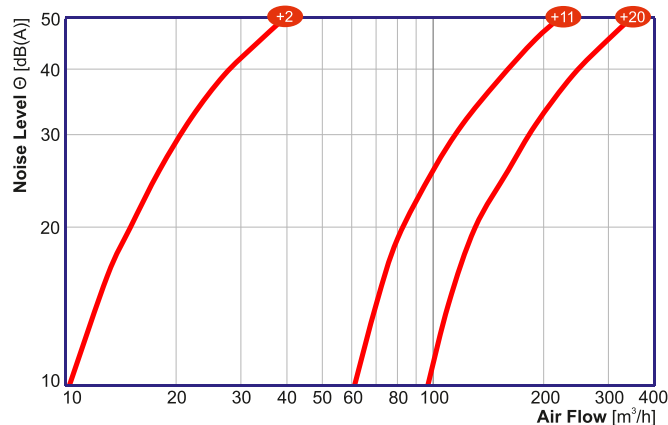
D100



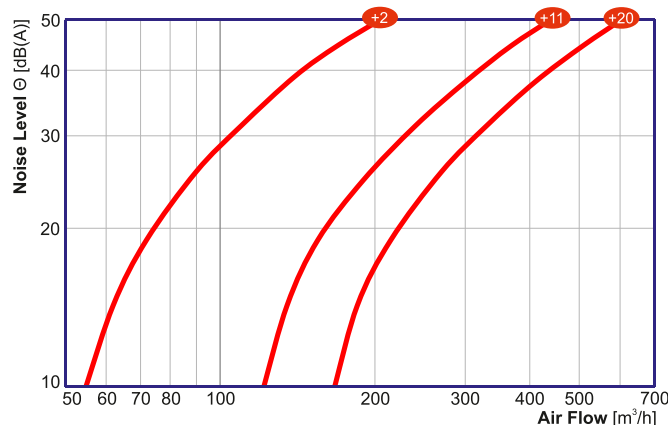
D125



D160



D200





ISO 9001:2015



ISO 14001:2015

Management System  
ISO 14001:2015  
Valid until:  
2024-05-24



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## AIR HANDLING UNITS

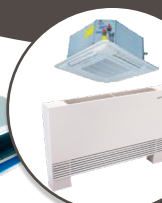


## HEAT EXCHANGERS



EC  
MOTORS

## FAN COIL UNITS

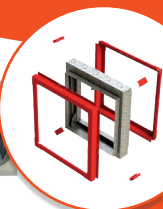
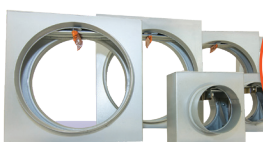


## FANS & FAN SECTIONS



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## FIRE DAMPERS



## AIR OUTLETS



## STEAM HUMIDIFIERS - DEHUMIDIFIERS



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## EVAPORATIVE COOLING



### Main Office ATHENS

📍 Michail Karaoli Str. 19,  
14343, Nea Chalkidona, Athens  
211 - 705.55.00  
✉ sales@airtechnic.gr

### Factory - THIVA

📍 4<sup>th</sup> km Thiva - Chalkida Hwy,  
32200, Thiva  
22620 - 89.006  
✉ factory@airtechnic.gr

### Factory - THESSALONIKI

📍 End of Meandrou Str.,  
57013, Oraiakastro, Thessaloniki  
2311 - 82.40.00  
✉ thessaloniki@airtechnic.gr