

## CAJAS ACUSTICAS Serie UPA



### DESCRIPCION

Gama de 6 cajas acústicas equipadas con ventiladores centrífugos de baja presión de acoplamiento directo. Están disponibles en 2 ó 4 polos según los modelos.

Están provistas de caja de bornes remota para facilitar la conexión eléctrica.

La serie UPA cubre una gama de caudales desde 200 hasta 3.950 m<sup>3</sup>/h.

### APLICACIONES

Ventilación general de locales como:

- Oficinas
- Locales comerciales
- Restaurantes
- Cafés, bares
- Pequeños talleres...

### CONSTRUCCION

#### Cajas

En chapa de acero galvanizado y aisladas con espuma de melamina (M1) de gran espesor.

En la aspiración y en la descarga incorporan bridas circulares con junta de estanqueidad.

Una tapa permite el acceso al ventilador sin herramientas gracias a dos cierres rápidos de seguridad.

Cuatro pies soporte son suministrados con las cajas para facilitar su montaje.

#### Ventiladores

Ventiladores centrífugos de baja presión con alabes hacia delante, fabricados en chapa de acero galvanizado y equipados con motores cerrados\* monofásicos regulables 230 V 50 Hz.

### CARACTERISTICAS TECNICAS

Tipo	Tamaño del ventilador	Velocidad (R.P.M.)	Potencia motor (W)	Intensidad a 220 V (A)	Caudal máximo (m <sup>3</sup> /h)	Nivel de presión sonora (dB (A) a 1,5 m)			Peso (kg)
						Aspiración	Descarga	Radiado	
UPA-125	140/059	1350	100	0,48	320	47	34	30	10
UPA-160	140/059	2350	175	0,80	390	55	41	36	11
UPA-200	133/126	2000	180	0,80	695	58	45	37	13
UPA-250	180/184	1250	200	0,90	1250	60	44	38	18
UPA-250N	146/180	2200	350	1,50	1140	62	45	39	18
UPA-315	180/240	1400	373	3,20	2100	65	52	40	27
UPA-400	240/240	1400	550	6,50	3950	69	55	43	33

### CARACTERISTICAS ACUSTICAS

Para obtener los espectros de potencia, sumar a los valores indicados en la tabla de las características técnicas, las correcciones dadas a continuación:

Tipo		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
UPA-125	Descarga	34,5	46,0	43,5	49,5	59,0	54,5	50,0	44,0
	Aspiración	50,5	45,5	36,0	35,5	36,5	35,0	32,0	29,0
	Radiado	40,5	41,0	24,5	27,5	25,5	25,0	21,5	20,0
UPA-160	Descarga	38,0	55,5	55,0	60,5	65,0	65,0	60,0	56,5
	Aspiración	42,5	53,5	44,5	43,0	40,5	44,0	43,5	40,0
	Radiado	39,0	50,0	37,0	35,5	33,0	31,5	30,5	31,5
UPA-200	Descarga	40,0	56,0	56,5	61,5	67,5	67,5	63,0	59,0
	Aspiración	46,0	56,0	51,0	49,5	50,0	50,5	46,0	40,0
	Radiado	33,0	50,0	41,5	37,0	39,5	38,0	31,5	28,5
UPA-250	Descarga	49,5	56,5	58,5	65,0	70,5	68,0	64,5	59,5
	Aspiración	48,5	53,5	51,5	50,0	49,5	48,5	43,5	39,0
	Radiado	42,5	48,0	42,0	39,5	40,5	37,0	33,0	30,0
UPA-250N	Descarga	48,0	57,0	58,5	65,0	70,5	72,0	68,0	64,0
	Aspiración	50,0	54,0	51,0	49,5	47,5	52,0	48,5	42,0
	Radiado	40,0	46,5	43,0	42,0	44,0	45,5	40,5	33,0
UPA-315	Descarga	52,5	61,5	64,0	69,0	74,0	74,5	71,5	68,0
	Aspiración	55,0	56,0	59,5	54,5	58,5	59,5	54,0	47,0
	Radiado	43,0	48,0	48,5	42,0	44,5	44,5	38,5	35,5
UPA-400	Descarga	57,5	61,5	67,0	73,5	79,5	77,5	76,0	67,5
	Aspiración	58,5	61,0	60,6	57,0	63,5	63,0	59,0	48,0
	Radiado	39,5	50,5	51,0	49,5	51,0	46,5	40,0	33,5

# UPA

## DIRECT-DRIVE LOW PRESSURE CENTRIFUGAL ACOUSTIC CABINET FANS UPA Series

### DESCRIPTION

The UPA series of low pressure direct-drive acoustic centrifugal cabinet fans consists of 6 nominal model sizes. All models are suitable for direct in-line connection to industry standard diameter circular ducting. Depending upon the model, the range are available with 2 or 4 pole speed, single phase motors.

All models include a remote mounted wiring terminal box to facilitate electrical connections.

Airflow performance for the UPA series fans ranges from 200 up to 3,950 m<sup>3</sup>/hr.

### APPLICATIONS

The UPA series of fans are suitable for many ducted noise sensitive ventilation applications, including the ventilation of:

- Offices.
- Restaurants.
- Shops.
- Factory units.
- Cafes and bars.

### CONSTRUCTION

#### Casing

All UPA fan casings are manufactured from

fabricated galvanised sheet steel and internally lined with a 50mm thick Melamine (M1 type) acoustic insulation material.

All models are supplied with circular ducting connection flanges mounted on both the inlet and discharge sides of the casing.

The UPA casing design includes a removable cover (quick release fixings without tools) which permits direct access to the fan motor and impeller for servicing and maintenance, without having to remove the casing from the ducting.

All models are supplied with robust steel support feet enabling the fans to be mounted in any orientation to facilitate installation.

#### Fan

All UPA cabinet fans include, as standard, low pressure forward curved centrifugal fan impellers with a direct-drive single phase motor (IP44, enclosed type). All motors are suitable for speed control via voltage regulation.

### TECHNICAL CHARACTERISTICS

Model Type	Fan Size	Speed (R.P.M.)	Motor Abs. Power (W)	Motor Abs. Current 220 V (A)	Max. Airflow (m <sup>3</sup> /h)	Sound Pressure Level (dB (A) at 1,5 m)			Weight (kg)
						Inlet	Outlet	Radiated	
UPA-125	140/059	1350	100	0,48	320	47	34	30	10
UPA-160	140/059	2350	175	0,80	390	55	41	36	11
UPA-200	133/126	2000	180	0,80	695	58	45	37	13
UPA-250	180/184	1250	200	0,90	1250	60	44	38	18
UPA-250N	146/180	2200	350	1,50	1140	62	45	39	18
UPA-315	180/240	1400	373	3,20	2100	65	52	40	27
UPA-400	240/240	1400	550	6,50	3950	69	55	43	33

### ACOUSTIC CHARACTERISTICS

To obtain the corresponding Sound Power Level Spectrum, simply add the values detailed in the table below at the corresponding octave average frequencies, to that of the value of sound pressure level detailed in the Technical Characteristics Table.

Model Type		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
UPA-125	Outlet	34,5	46,0	43,5	49,5	59,0	54,5	50,0	44,0
	Inlet	50,5	45,5	36,0	35,5	36,5	35,0	32,0	29,0
	Radiated	40,5	41,0	24,5	27,5	25,5	25,0	21,5	20,0
UPA-160	Outlet	38,0	55,5	55,0	60,5	65,0	65,0	60,0	56,5
	Inlet	42,5	53,5	44,5	43,0	40,5	44,0	43,5	40,0
	Radiated	39,0	50,0	37,0	35,5	33,0	31,5	30,5	31,5
UPA-200	Outlet	40,0	56,0	56,5	61,5	67,5	67,5	63,0	59,0
	Inlet	46,0	56,0	51,0	49,5	50,0	50,5	46,0	40,0
	Radiated	33,0	50,0	41,5	37,0	39,5	38,0	31,5	28,5
UPA-250	Outlet	49,5	56,5	58,5	65,0	70,5	68,0	64,5	59,5
	Inlet	48,5	53,5	51,5	50,0	49,5	48,5	43,5	39,0
	Radiated	42,5	48,0	42,0	39,5	40,5	37,0	33,0	30,0
UPA-250N	Outlet	48,0	57,0	58,5	65,0	70,5	72,0	68,0	64,0
	Inlet	50,0	54,0	51,0	49,5	47,5	52,0	48,5	42,0
	Radiated	40,0	46,5	43,0	42,0	44,0	45,5	40,5	33,0
UPA-315	Outlet	52,5	61,5	64,0	69,0	74,0	74,5	71,5	68,0
	Inlet	55,0	56,0	59,5	54,5	58,5	59,5	54,0	47,0
	Radiated	43,0	48,0	48,5	42,0	44,5	44,5	38,5	35,5
UPA-400	Outlet	57,5	61,5	67,0	73,5	79,5	77,5	76,0	67,5
	Inlet	58,5	61,0	60,6	57,0	63,5	63,0	59,0	48,0
	Radiated	39,5	50,5	51,0	49,5	51,0	46,5	40,0	33,5

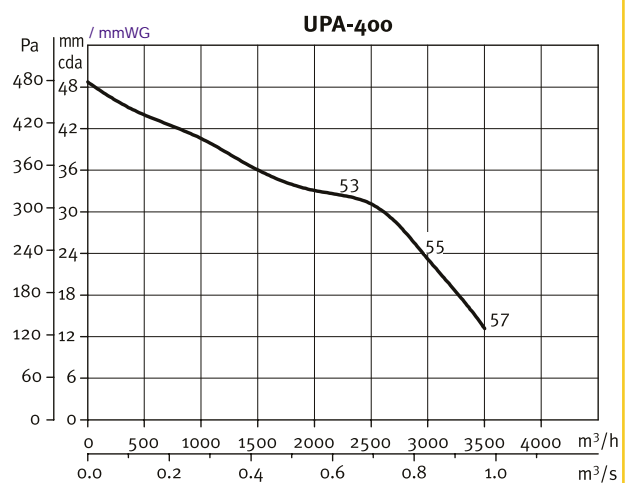
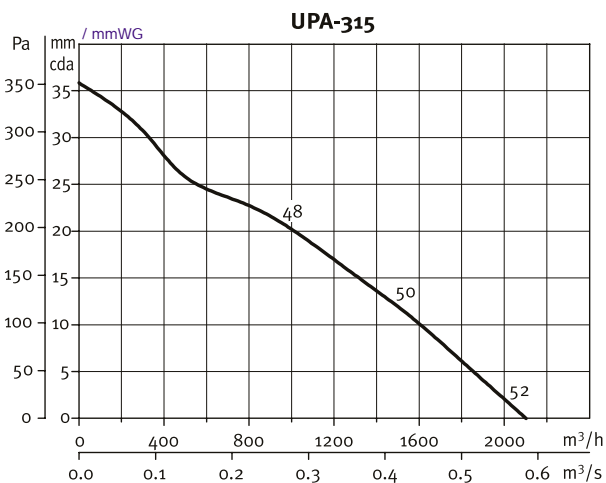
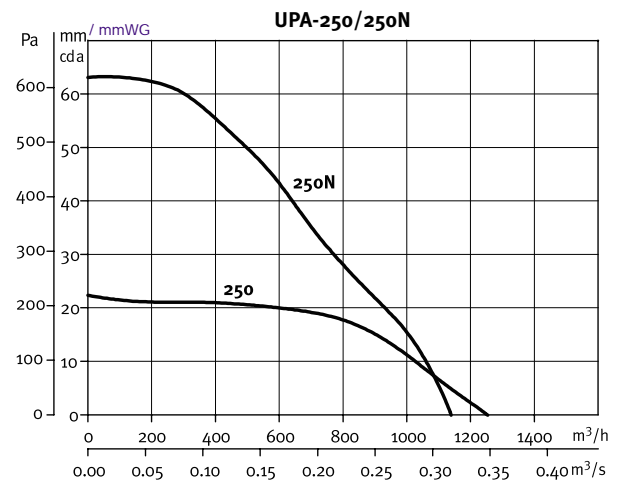
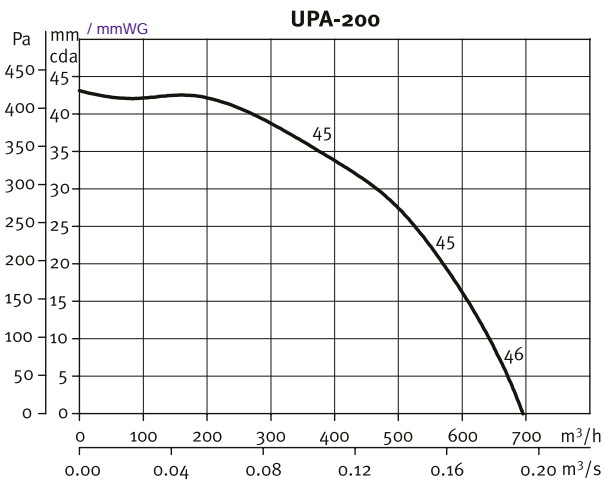
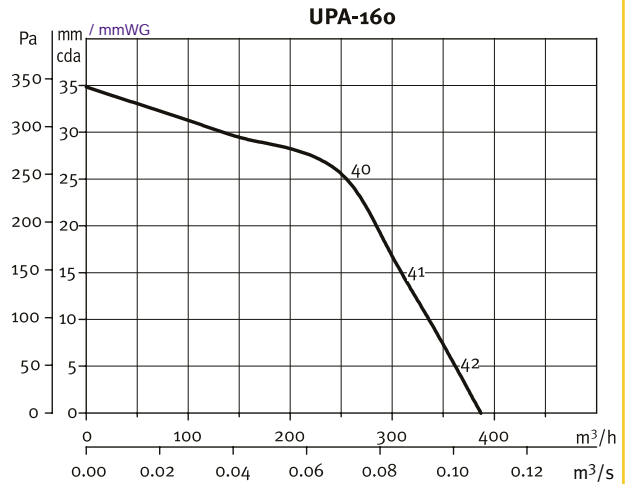
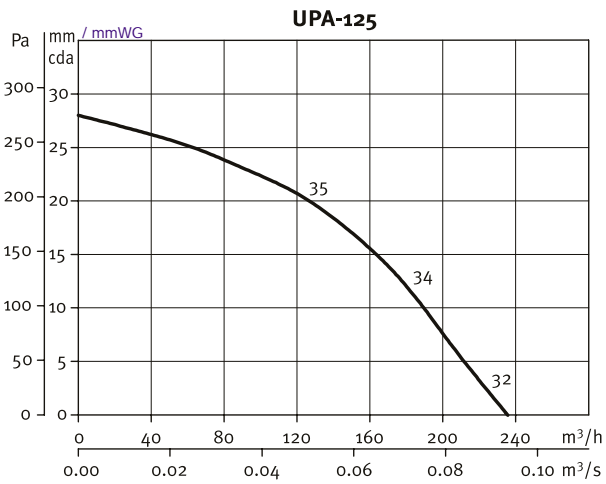


### CURVAS CARACTERISTICAS

- Q = Caudal en m<sup>3</sup>/h y m<sup>3</sup>/s
- P = Presión estática en mmcda y Pa
- Aire seco normal a 20°C y 760 mmHg
- Ensayos de acuerdo con BS 848 Part 1 y 2

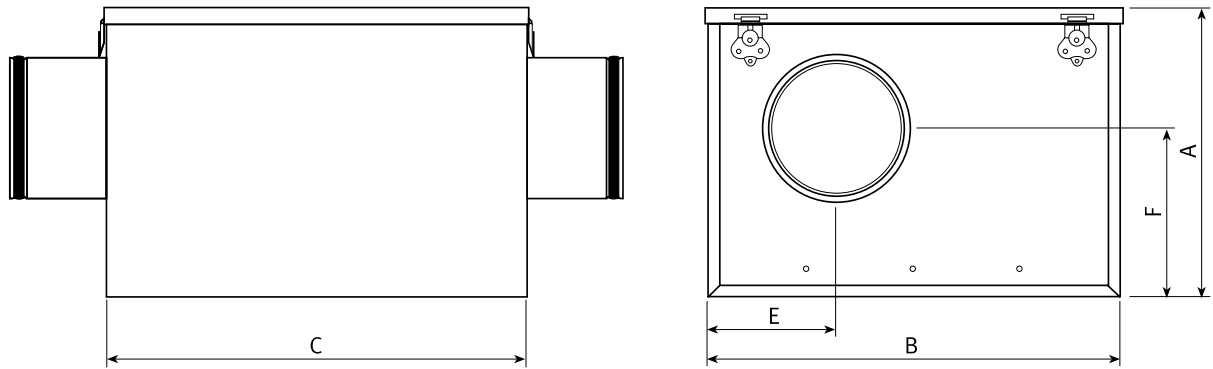
### PERFORMANCE CHARACTERISTICS

- Q = Air Volume in, m<sup>3</sup>/h and m<sup>3</sup>/s
- P = Static Pressure in Pa and mmWG
- Air Density at 20°C and 760 mmHg
- Air flow data in accordance with the following standards: BS 848, Part 1&2





**DIMENSIONES (mm) / DIMENSIONS (mm)**



Tipo / Model type	A	B	C	ØD	E	F
UPA-125	273	388	395	125	125	162
UPA-160	273	388	395	160	143	162
UPA-200	328	430	365	200	216	210
UPA-250	383	525	450	250	263	237
UPA-315	443	600	505	315	301	264
UPA-400	513	660	600	400	331	292

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