IN-LINE MIXED FLOW DUCT FANS

TD-MIXVENT Series

Low profile mixed flow fans made of **plastic** (up to 800 model) or **galvanised steel sheet metal** protected with epoxy paint (from 1000 model on) and external terminal box.
Removable impeller assembly. Speed controllable motor 230V-50Hz, two speed, Class B *(1)*, IP44.

(1) Models TD-4000 and TD-6000, single speed, Class F.

Additional Information

Fitted with single speed non controllable motor. TD-MIXVENT-T models incorporate a Run-On-Timer adjustable within 1 and 30 minutes.

WARRANTY 5 YEARS Models 160 to 350

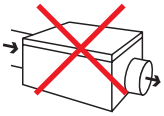
0 016972 402063

The wide range turns TD-MIXVENT Series into the ultimate solution for all types of ventilation systems either domestic or commercial.

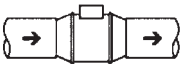
Low profile

Classic centrifugal

In-line centrifugal



Ventilation casing



Mixed flow MIXVENT

The low profile of TD-MIXVENT range fans makes them the most effective solution for installations with limited height such as false ceilings.

Easy to mount

Fix the support

Place the motor body

Carry the connections out

Couple the ducts

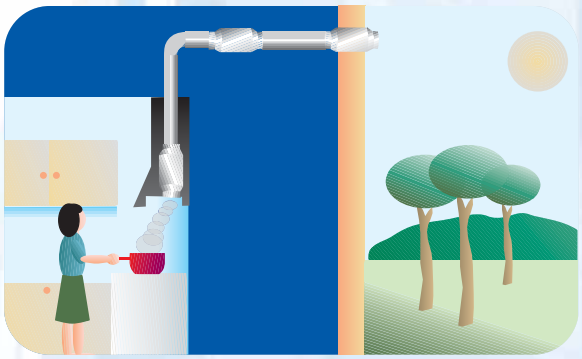
Easy maintenance

Removable motor body allowing maintenance or cleaning without the need to remove any part of the ducting system

Models with Run-On-Timer

TD-MIXVENT-T models are fitted with a timer adjustable between 1 and 30 minutes and are provided with a single speed non-speed controllable motor

Enables flexible orientation



Can be placed at any part of the air duct

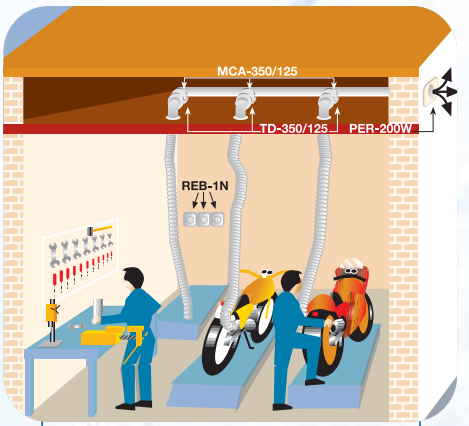
Useful applications of the TD-MIXVENT range

The TD-MIXVENT range provides a solution to a large variety of both small and large ventilation installations.

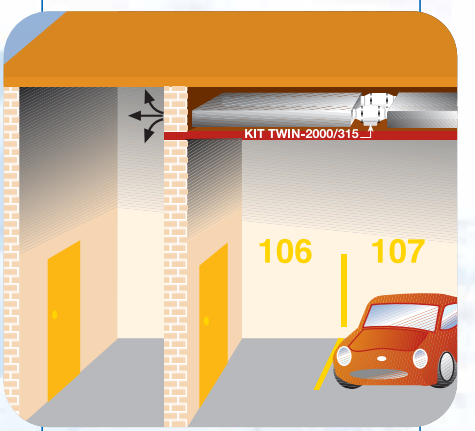
General extract installation

Control panel

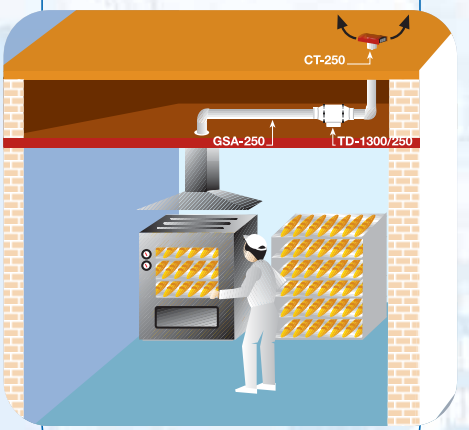
Localised exhaust point installations



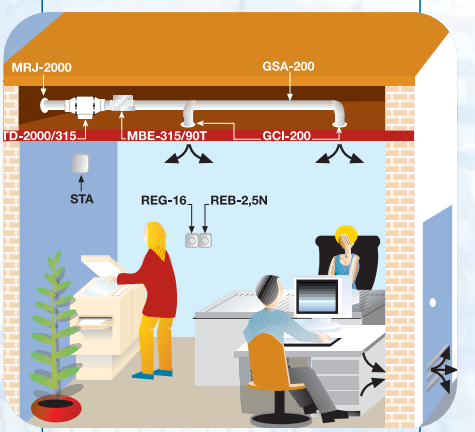
Workshop



Parkings

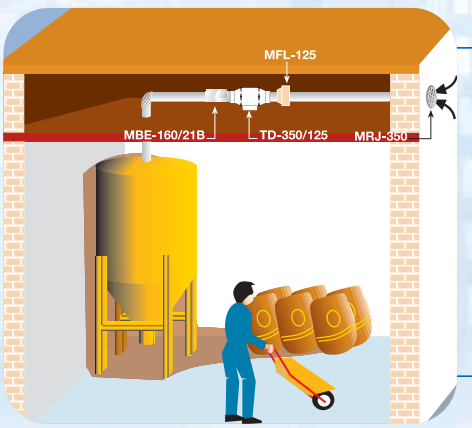


Bread oven

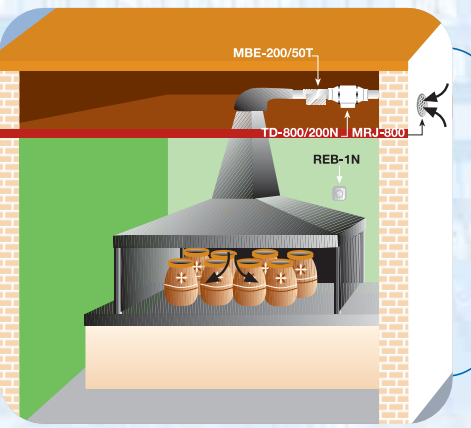


Warm air

Drying installations

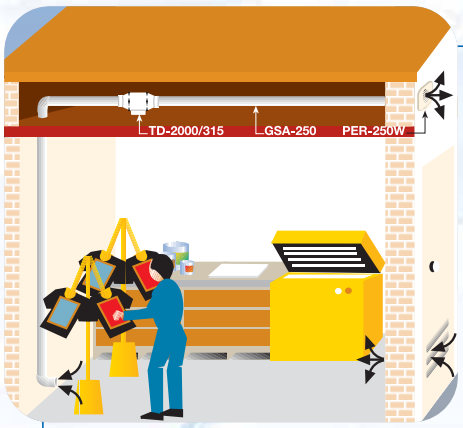


Dried fruit hopper

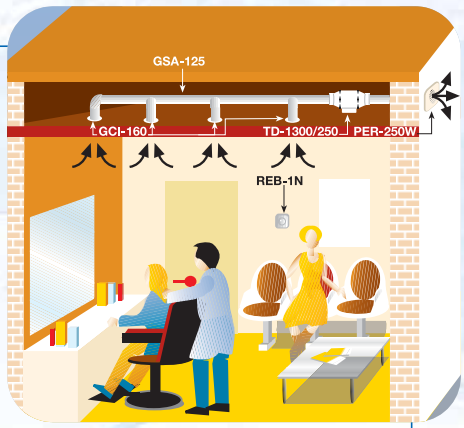


Drying ceramics tunnel

Residential & Commercial

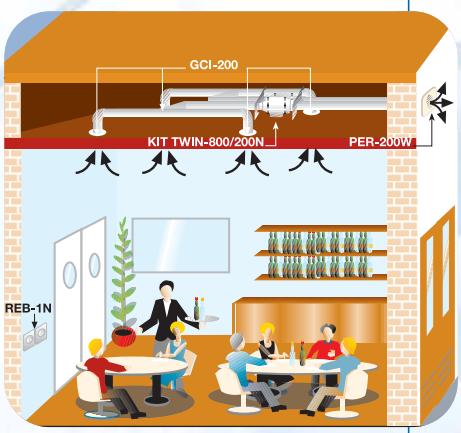


Screen-printing workshop

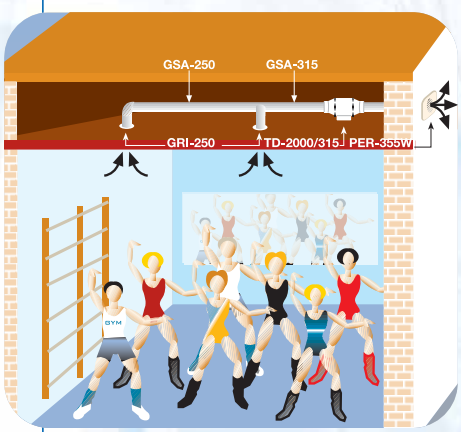


Hair salon

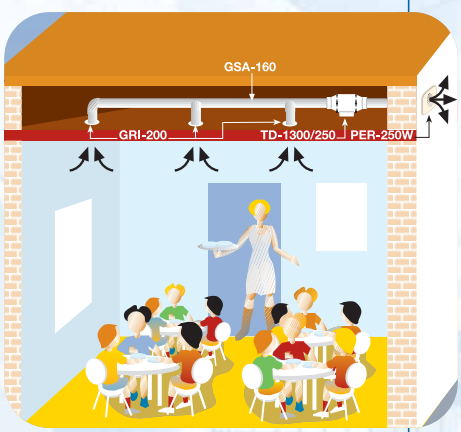
Meeting room



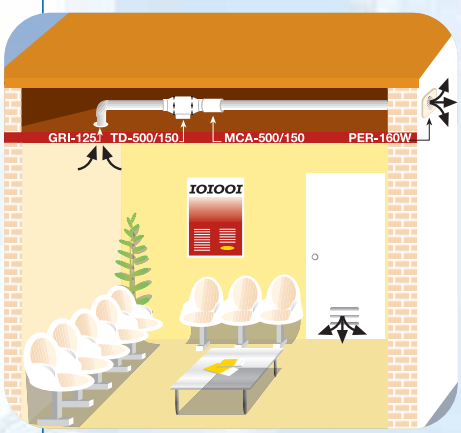
Catering



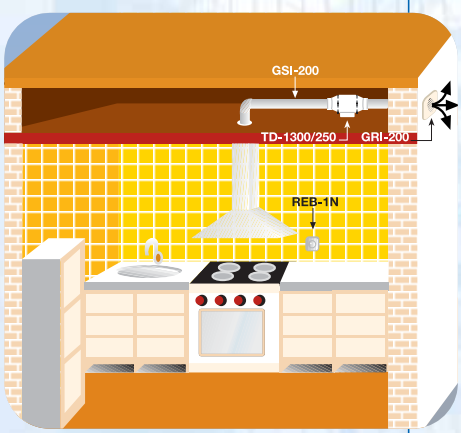
Gym



Children's dinning hall



Waiting room in a health care center



Domestic kitchen extract hood

Design characteristics

	160	250	350	500	800	800N	1000	1300	2000	4000	6000
Polypropylene casing	•	•	•	•	•	•					
Steel casing							•	•	•	•	•
ABS impeller	•	•	•	•	•						
Aluminium impeller						•	•	•	•	•	•
Protection class	II	II	II	II	II	II	I	I	I	I	I
Thermal protection by fuse	•	•	•								
Self- resetting thermal protection				•	•	•	•	•	•	•	•
Ball bearings greased for life	•	•	•	•	•	•	•	•	•	•	•
1 speed controllable motor										•	•
2 speed controllable (*) motor	•	•	•	•	•	•	•	•	•		

(*) Models with Run-On-Timer fitted (TD-MIXVENT-T) are not controllable.

Technical characteristics

TD-MIXVENT	Speed (r.p.m.)	Maximum power absorbed (W)	Maximum absorbed current (A)	Airflow at free discharge (m³/h)	Maximum operating temperature (°C)	Sound pressure level* (dB(A))	Ø Duct (mm)	Weight (kg)
TD-160/100 N SILENT	2500 2200	20 12	0,16 0,10	180 140	40 40	24 21	100	1,4
TD-250/100	2200 1850	24 18	0,11 0,10	240 180	40 40	31 26	100	2,0
TD-350/125	2250 1900	30 22	0,13 0,10	360 280	40 40	33 28	125	2,0
TD-500/150	2500 1950	50 44	0,22 0,19	580 430	60 60	33 29	150	2,7
TD-500/160	2500 1950	50 44	0,22 0,19	580 430	60 60	33 29	160	2,7
TD-800/200N	2780 2480	70 60	0,30 0,26	880 700	60 60	37 33	200	4,9
TD-800/200	2500 2000	120 100	0,50 0,45	1100 800	60 60	39 33	200	4,9
TD-1000/250	2800 2610	125 85	0,50 0,35	1010 900	60 60	40 38	250	9,4
TD-1300/250	2520 2000	180 140	0,80 0,60	1300 1100	60 60	43 39	250	9,4
TD-2000/315	2700 2000	255 160	1,20 0,80	2000 1550	60 60	47 42	315	14,0
TD-4000/355	1400	345	1,53	3800	40	44	355	19,0
TD-6000/400	1400	665	2,97	5500	40	44	400	26,0

*Sound pressure level radiated at 3 m at free air conditions with rigid ducts at the inlet and at the outlet.

TD-MIXVENT-T	Speed (r.p.m.)	Maximum power absorbed (W)	Maximum absorbed current (A)	Airflow at free discharge (m³/h)	Maximum operating temperature (°C)	Sound pressure level* (dB(A))	Ø Duct (mm)	Weight (kg)
TD-160/100 NT SILENT	2500	20	0,16	180	40	24	100	1,4
TD-250/100 T	2200	24	0,11	240	40	31	100	2,0
TD-350/125 T	2250	30	0,13	360	40	33	125	2,0
TD-500/150 T	2500	50	0,22	580	60	33	150	2,7
TD-500/160 T	2500	50	0,22	580	60	33	160	2,7
TD-800/200 T	2500	120	0,50	1100	60	39	200	4,9

*Sound pressure level radiated at 3 m at free air conditions with rigid ducts at the inlet and at the outlet.

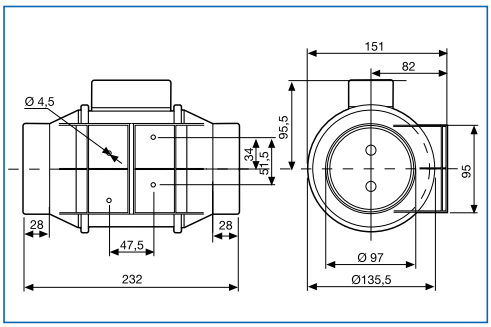
Acoustic power spectrum in dB(A), for every frequency band, at the inlet and radiated, at high speed

AT INLET	63	125	250	500	1000	2000	4000	8000
TD-160/100 N SILENT	24	32	39	46	52	49	40	21
TD-250/100	28	47	46	53	52	47	39	33
TD-350/125	35	47	46	53	54	50	41	33
TD-500/150	32	35	55	57	59	62	56	48
TD-500/160	32	35	55	57	59	62	56	48
TD-800/200N	37	42	62	64	66	64	60	52
TD-800/200	37	47	61	63	68	67	64	54
TD-1000/250	35	45	58	66	72	69	62	54
TD-1300/250	37	52	64	67	75	73	66	61
TD-2000/315	41	57	66	71	77	74	67	62
TD-4000/355	40	49	61	66	73	70	66	57
TD-6000/400	43	56	67	72	76	74	69	60

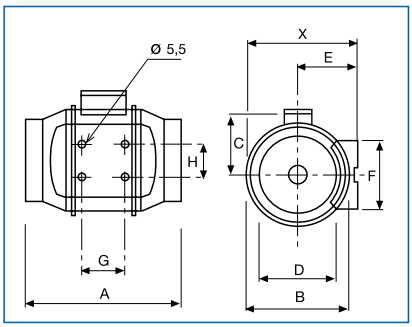
RADIATED	63	125	250	500	1000	2000	4000	8000
TD-160/100 N SILENT	24	24	37	34	36	41	32	21
TD-250/100	27	46	45	44	43	43	32	25
TD-350/125	33	46	46	47	47	45	33	24
TD-500/150	25	32	43	39	44	53	42	29
TD-500/160	25	32	43	39	44	53	42	29
TD-800/200N	26	32	48	47	52	53	44	31
TD-800/200	29	36	47	46	54	57	48	33
TD-1000/250	23	34	44	46	58	57	46	43
TD-1300/250	22	36	39	47	60	59	52	47
TD-2000/315	29	41	52	55	64	63	57	53
TD-4000/355	31	49	55	55	63	57	51	40
TD-6000/400	30	53	59	55	61	55	54	45

Dimensions (mm)

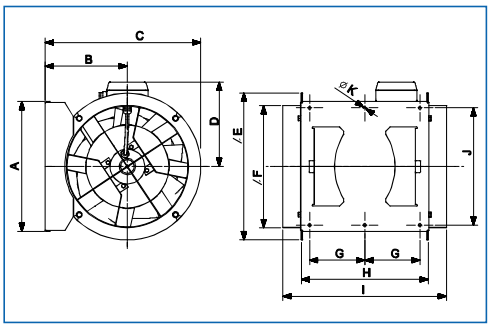
TD-160/100 N SILENT



TD-250 a TD-2000



TD-4000 / TD-6000



Model	X	A	Ø B	C	Ø D	E	F	G	H
TD-250/100	188	303	176	115	97	100	90	80	60
TD-350/125	188	258	176	115	123	100	90	80	60
TD-500/150	212	295	200	127	147	112	130	80	60
TD-500/160	212	275	200	127	157	112	130	80	60
TD-800/200N	232,5	302	217	141	198	124	140	100	94
TD-800/200	232,5	302	217	141	198	124	140	100	94
TD-1000/250	291	386	272	192	248	155	168	145	140
TD-1300/250	291	386	272	192	248	155	168	145	140
TD-2000/315	356	450	336	224	312	188	210	182	178

Model	A	B	C	D	Ø E	Ø F	G	H	I	J	Ø K
TD-4000/355	377	238	451	224	426	354	150	368	474	340	8.5
TD-6000/400	407	249	492	267	487	399	160	425	547	370	8.5

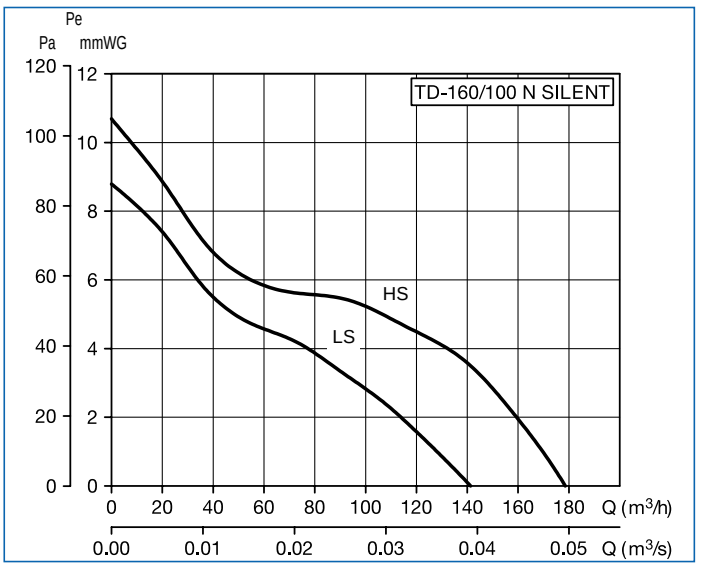
Accessories (see pages from 527 to 546)

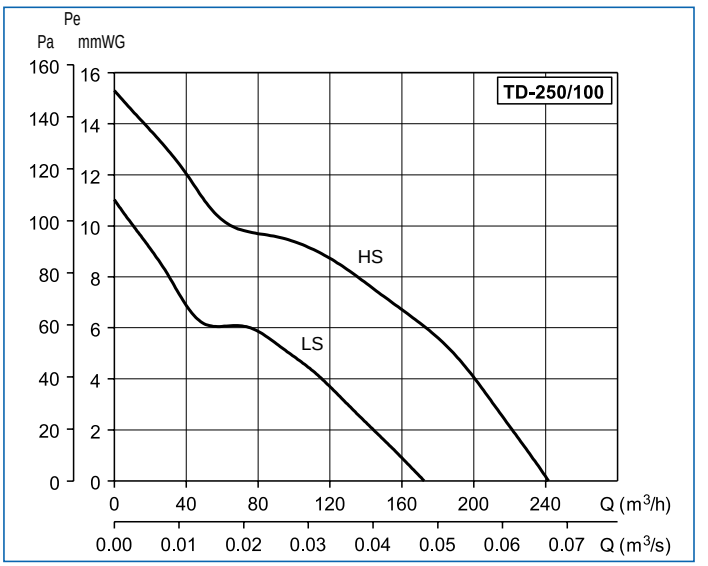
OJO!

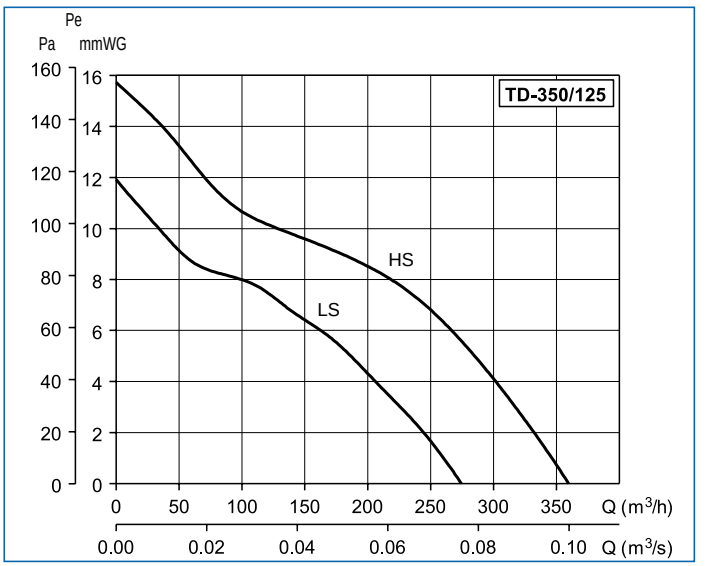
Performance curves

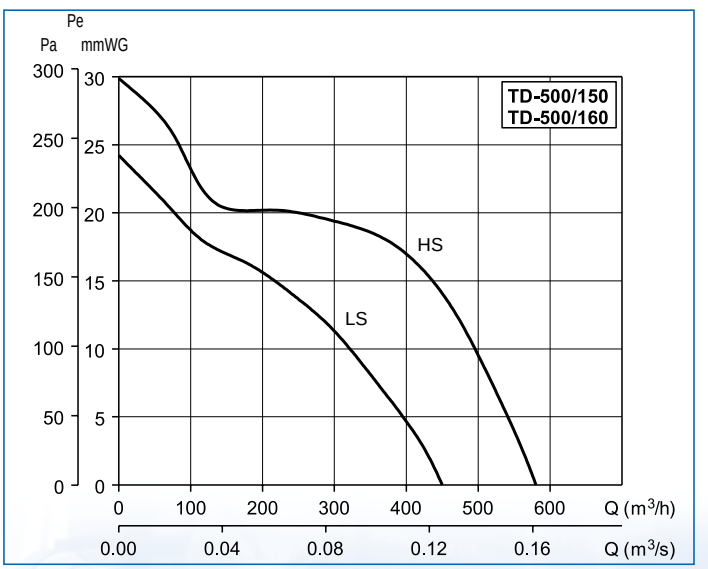
– Q = Air volume in, m^3/hr and m^3/s.
– Pe = Static pressure in mmWG and Pa.
– Dry air at 20ºC and 760 mmHg.
– Air flow data in accordance with the following standards: UNE 100-212-89, BS 848, Part 1; AMCA 210-85 and ASHRAE 51-1985.

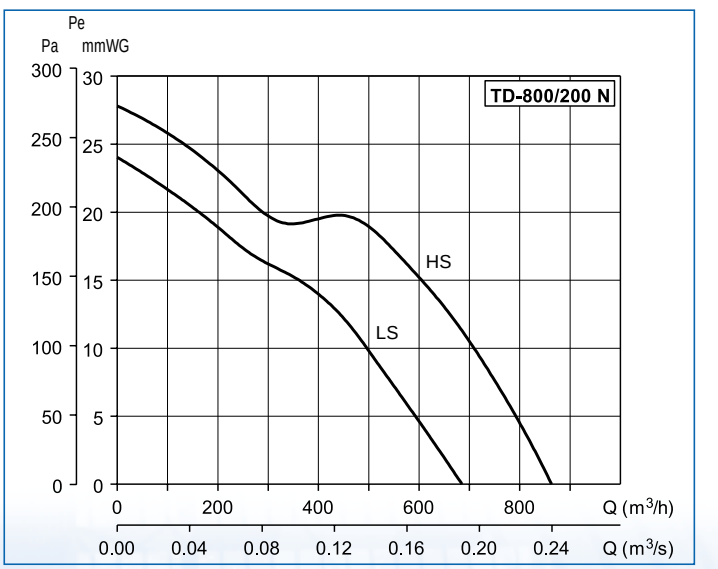
HS = High speed
LS = Low speed





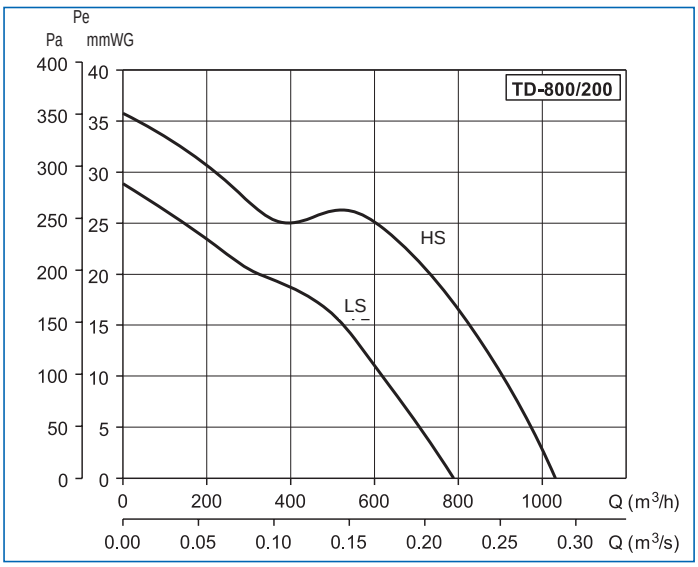


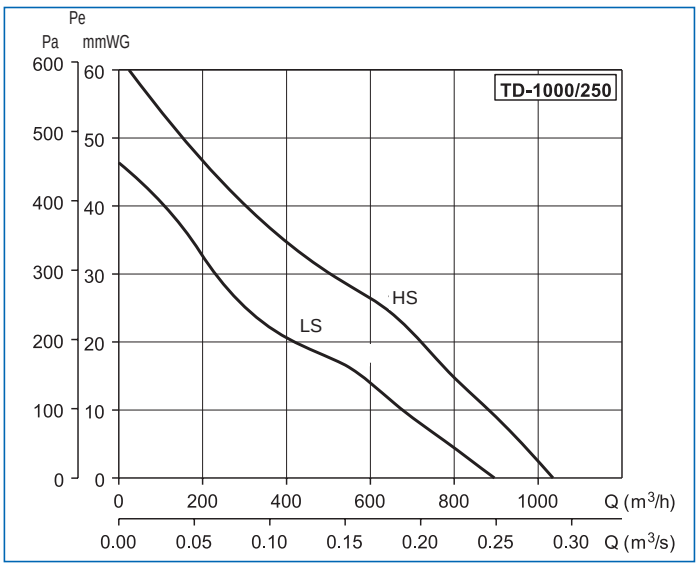


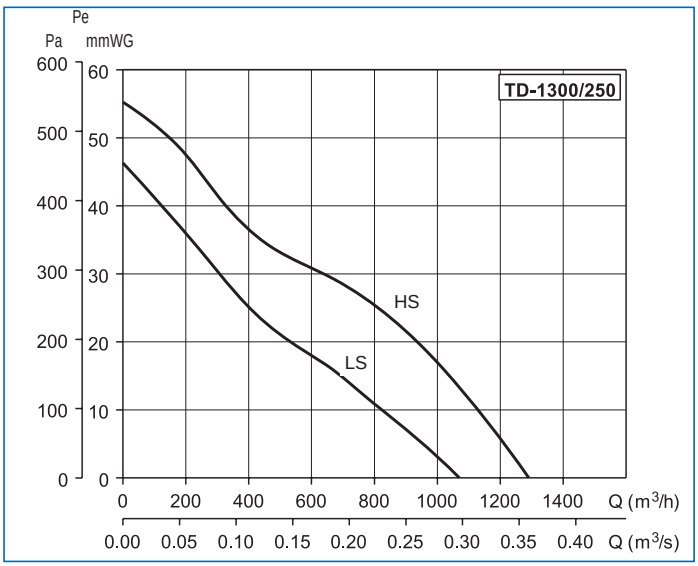


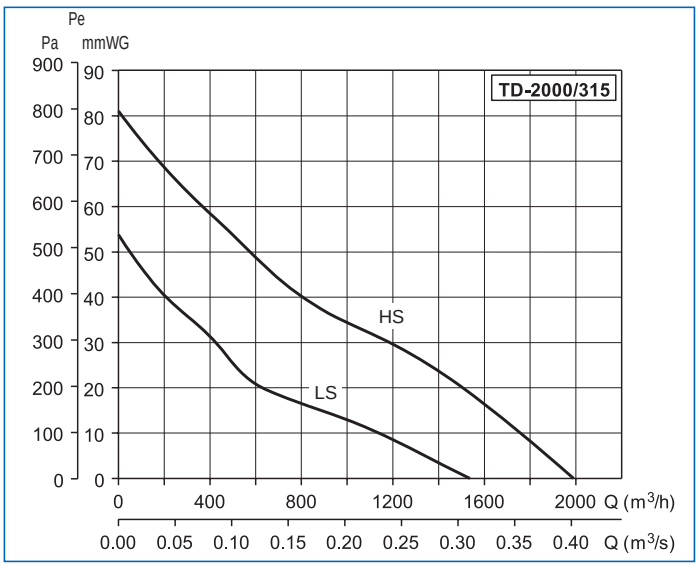
Performance curves

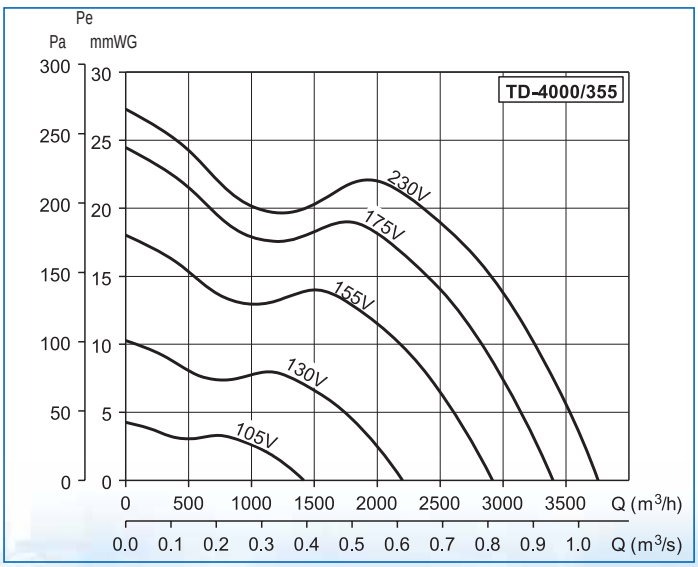
– Q = Air volume in, m^3/hr and m^3/s.
– Pe = Static pressure in mmWG and Pa.
– Dry air at 20ºC and 760 mmHg.
– Air flow data in accordance with the following standards: UNE 100-212-89, BS 848, Part 1; AMCA 210-85 and ASHRAE 51-1985.

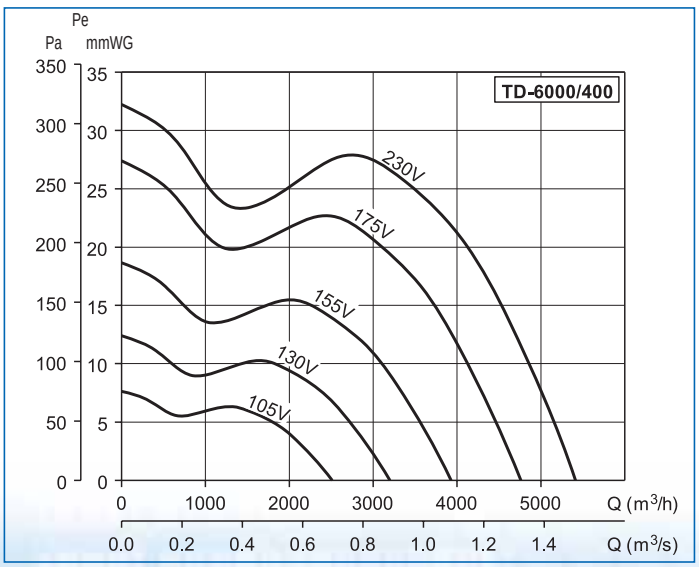












MIXVENT KITS

The TD Extraction Kits of the MIXVENT Series are assemblies of accessories plus fan designed for the ventilation of small rooms such as bathrooms, toilets or utility rooms.

There are 3 Kit models available

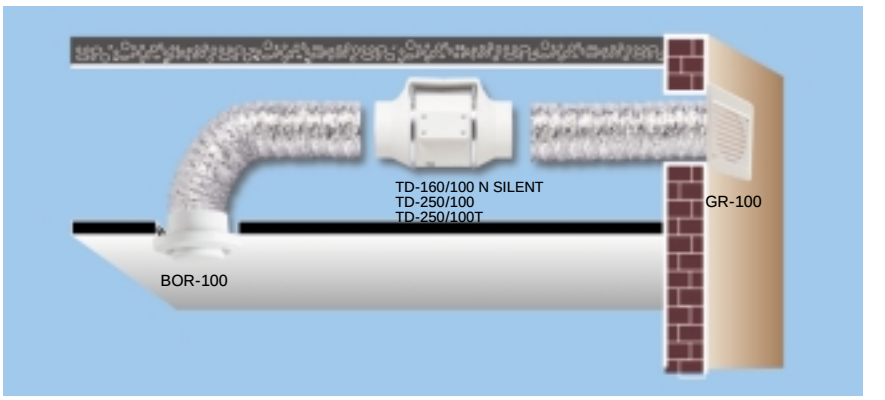
KIT TD-160/100 N SILENT
Which include:
1 TD-160/100 N SILENT fan
+ 4m flexible duct GSA / flexible aluminium ducting
+ 1 Circular air valve BOR-100/ interior circular air valve
+ 1 inlet guard GR-100 / exterior mounted grille
+ 1 adhesive duct tape / roll of tough ducting tape

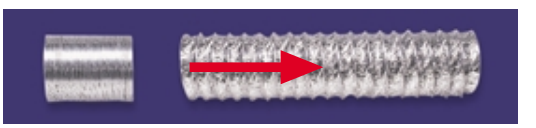
KIT TD-250/100
Which include:
1 TD-250/100 fan
+ 4m flexible duct GSA
+ 1 Circular air valve BOC-100
+ 1 inlet guard GR-100
+ 1 adhesive duct tape BA

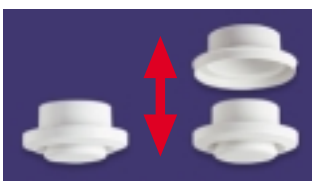
KIT TD-250/100T
Which include:
1 TD-250/100 T fan
+ 4 m flexible duct GSA
+ 1 Circular air valve BOC-100
+ 1 inlet guard GR-100
+ 1 adhesive duct tape BA

The TD-250 T extractor is fitted with a Run-On-Timer adjustable between 1 and 30 minutes, keeping the fan in operation for the selected period of time after being switched off.

Installation and mounting





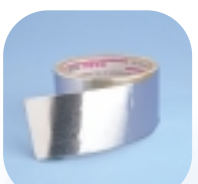


Accessories included

GSA-100
Flexible circular aluminium duct of 100 mm diameter. 4 m long.

GR-100
External guard

BOR-100
Circular air valves



BA-50
Adhesive aluminium duct tape to fix the elements that compound the extraction remote kits (duct, flange, hood and extractor), 5 m long.

TD Series MIXVENT-TD System

S&P has designed **MIXVENT-TD system** to provide a **wide range of solutions based on fans from TD range**, maintaining the concept that makes the difference: **deliver the maximum airflow using the minimum space**.

MIXVENT-TDx2 and MIXVENT-TDx3
Increase of pressure

0 025972 402065

MIXVENT-TWIN
Double airflow

MIXVENT-TWINx2
Increase of pressure and double airflow

MIXVENT-TDx2

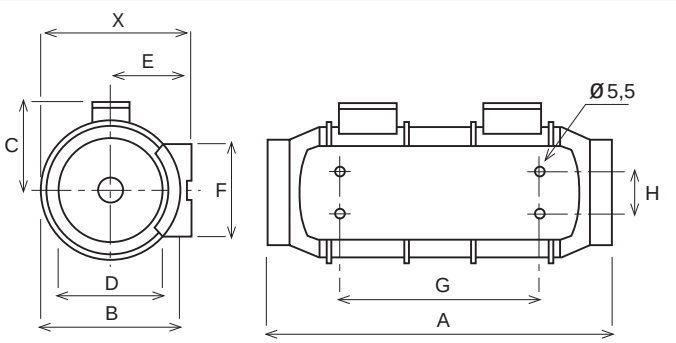
System specially recommended when the fan has the suitable airflow, but an increase of the pressure is required due to the high pressure drop.
MIXVENT-TD x 2 system is a standard catalogue product from 350 to 1300 model.
A TDx2 can also be obtained coupling 2 TD model fans using a flange MBR (see the accessories section).

Technical characteristics

MIXVENT-TDx2	Speed (r.p.m.)	Maximum absorbed power (W)	Maximum current (A)	Duty at free discharge (m³/h)	Maximum operating temperature (°C)	Sound pressure level* (dB(A))	Weight (kg)
TDx2-350/125	2250 1900	60 44	0,26 0,20	395 320	40 40	36 31	5,4
TDx2-500/150 160	2500 1950	100 88	0,44 0,38	580 475	60 60	48 41	5,0
TDx2-800/200N	2780 2480	140 120	0,60 0,52	880 690	60 60	48 44	8,7
TDx2-800/200	2500 2000	240 200	1,00 0,90	1020 790	60 60	52 48	8,7
TDx2-1000/250	2800 2610	250 170	1,00 0,70	1020 900	60 60	57 51	18,7
TDx2-1300/250	2520 2000	360 280	1,60 1,20	1320 980	60 60	57 52	18,7

*Sound pressure level radiated at 3 m at free air conditions with rigid ducts at the inlet and at the outlet.

Dimensions (mm)



MIXVENT-TDx2	X	A	ø B	C	ø D	E	F	G	H
TDx2-350/125	188,0	417	176	115	123	100	90	253	60
TDx2-500/150	212,5	464	200	127	147	111,5	130	249	60
TDx2-500/160	212,5	444	200	127	147	111,5	130	249	60
TDx2-800/200	232,5	500	217	141	198	124	140	298	94
TDx2-1000/250	291,0	654	272	192	248	155	168	416	145
TDx2-1300/250	291,0	654	272	192	248	155	168	416	145

Acoustic power spectrum in dB(A) for every frequency band at the inlet and radiated, at a high speed.

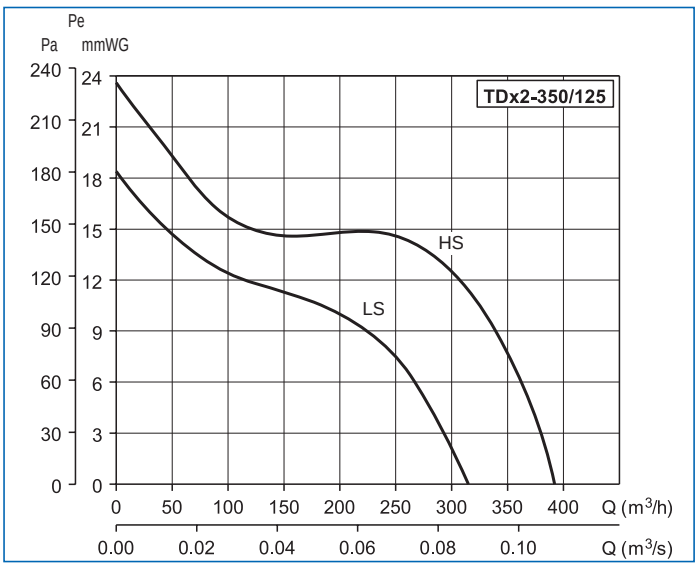
AT THE INLET	63	125	250	500	1000	2000	4000	8000
TDx2-350/125	41	53	52	59	60	56	47	39
TDx2-500/150	38	41	61	63	65	68	62	54
TDx2-500/160	38	41	61	63	65	68	62	54
TDx2-800/200N	43	48	68	70	72	70	66	58
TDx2-800/200	43	53	67	69	74	73	70	60
TDx2-1000/250	41	51	64	72	78	75	68	60
TDx2-1300/250	43	58	70	73	81	79	72	67

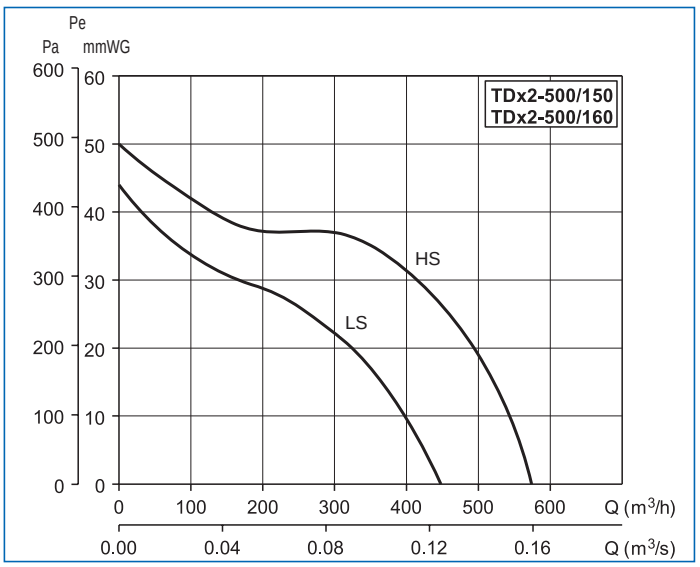
RADIATED	63	125	250	500	1000	2000	4000	8000
TDx2-350/125	39	52	52	53	53	51	39	30
TDx2-500/150	31	38	49	45	50	59	48	35
TDx2-500/160	31	38	49	45	50	59	48	35
TDx2-800/200N	32	38	54	53	58	59	50	37
TDx2-800/200	35	42	53	52	60	63	54	39
TDx2-1000/250	29	40	50	52	64	63	52	49
TDx2-1300/250	28	42	45	53	66	65	58	53

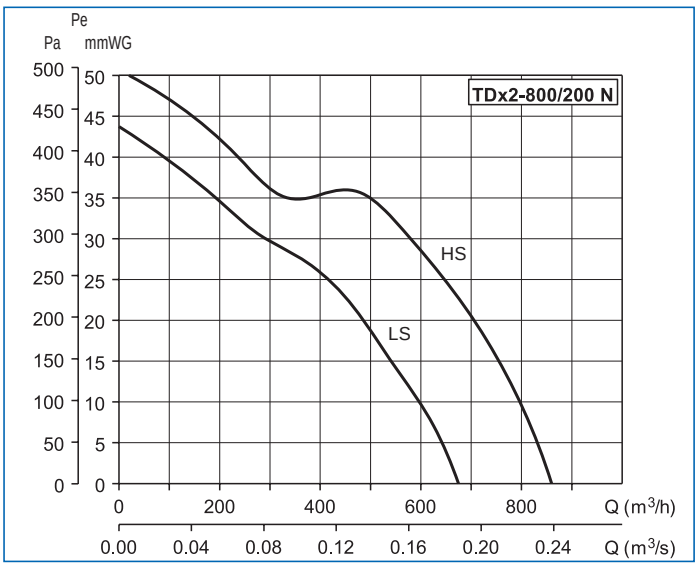
Performance curves

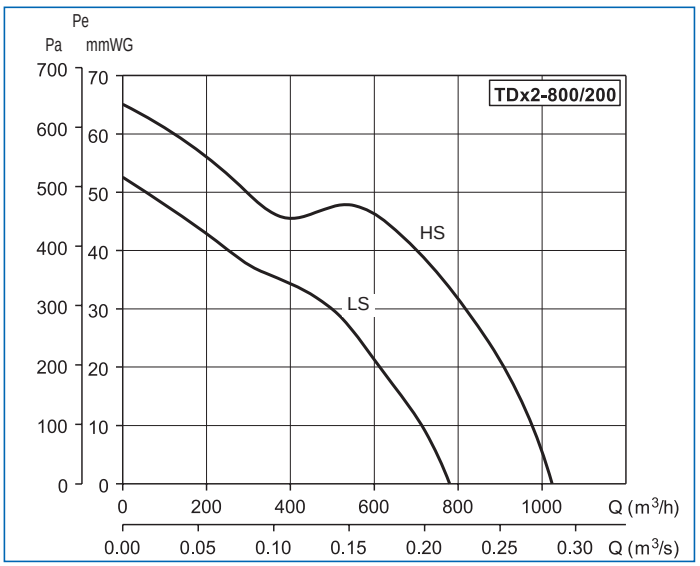
– Q = Air volume in, m^3/hr and m^3/s.
– Pe = Static pressure in mmWG and Pa.
– Dry air at 20ºC and 760 mmHg.
– Air flow data in accordance with the following standards: UNE 100-212-89, BS 848, Part 1; AMCA 210-85 and ASHRAE 51-1985.

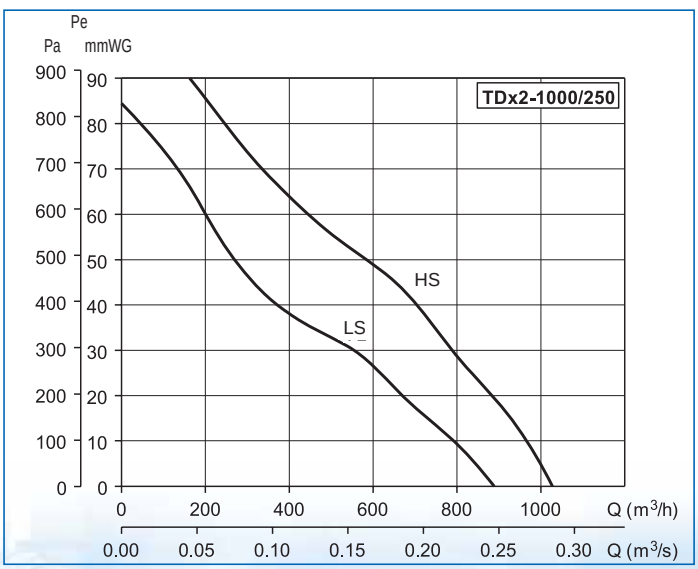
HS = High speed
LS = Low speed

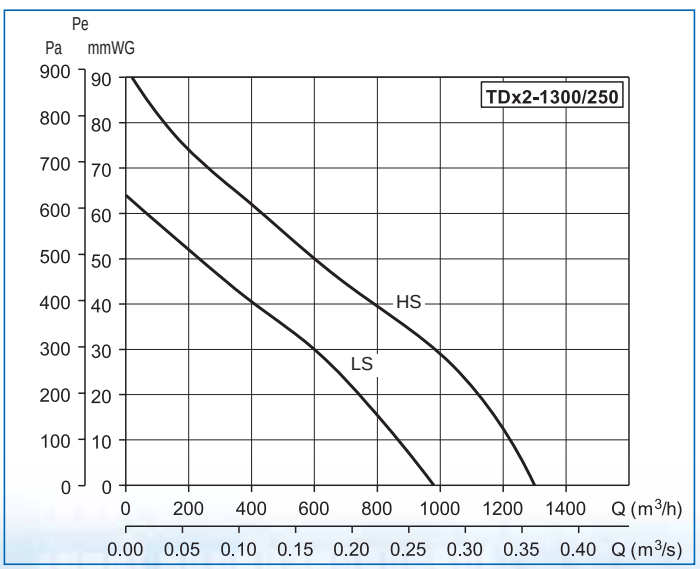










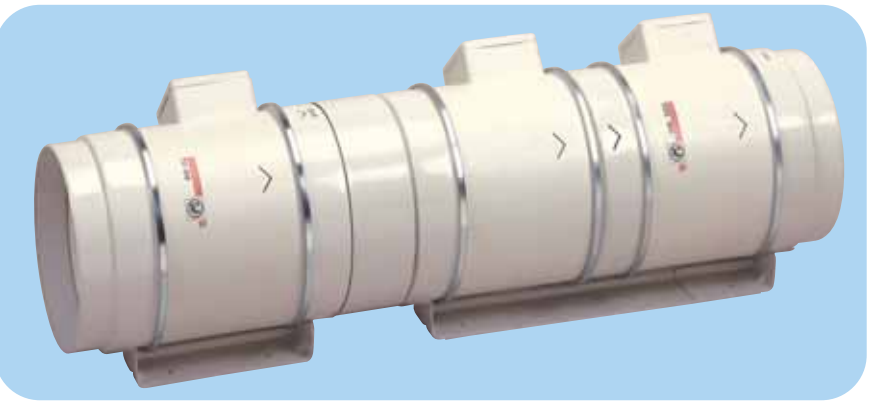


MIXVENT-TDx3

System specially recommended when the fan has the suitable airflow but an increase of the pressure is required due to the very high pressure drop.

A MIXVENT-TD x 3 can be obtained coupling a MIXVENT-TD x 2 model with a TD fan using an MBR flange.

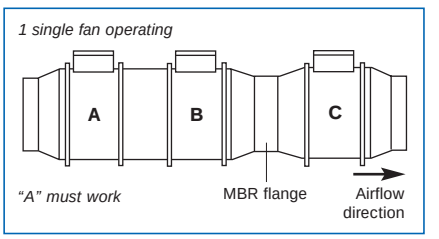
Technically more units could be installed in series to increase the pressure but it is recommended to carry out a study before.

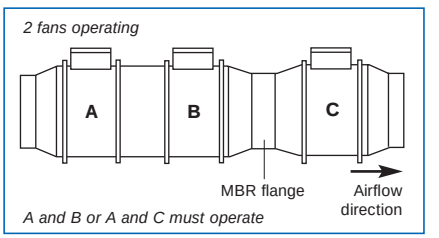


MIXVENT-TDx3 design

MIXVENT-TDx3	Composition
TDx3-350/125	TD-350/125+TDx2-350/125+MBR-350
TDx3-500/150	TD-500/150+TDx2-500/150+MBR-500/150
TDx3-500/160	TD-500/160+TDx2-500/160+MBR-500/160
TDx3-800/200	TD-800/200+TDx2-800/200+MBR-800
TDx3-1000/250	TD-1000/250+TDx2-1000/250+MBR-1000
TDx3-1300/250	TD-1300/250+TDx2-1300/250+MBR-1000

MBR flange

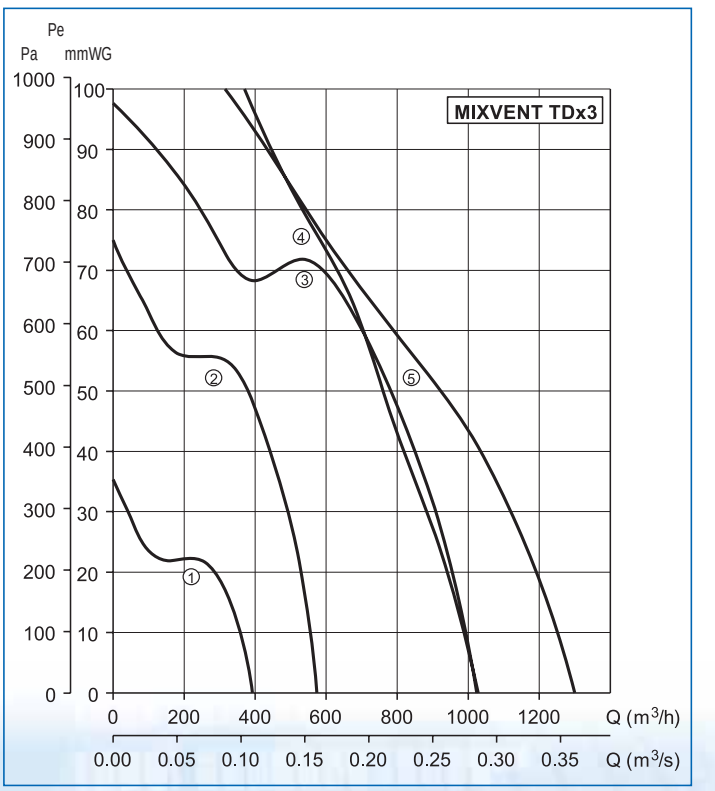




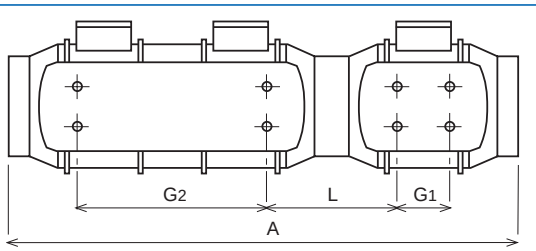
Performance curves

- Q = Air volume in, m^3/hr and m^3/s.
- Pe = Static pressure in mmWG and Pa.
- Dry air at 20ºC and 760 mmHg.
- Air flow data in accordance with the following standards: UNE 100-212-89, BS 848, Part 1; AMCA 210-85 and ASHRAE 51-1985.

①	TD x 3-350
②	TD x 3-500
③	TD x 3-800
④	TD x 3-1000
⑤	TD x 3-1300



Dimensions (mm)



MIXVENT-TDx3	A	G_1	G_2	L
TD x 3-350/125	755	80	253	213
TD x 3-500/150	766	80	249	223
TD x 3-500/160	726	80	249	203
TD x 3-800/200	801	100	298	207
TD x 3-1000/250	1055	145	416	246
TD x 3-1300/250	1055	145	416	246

MIXVENT-TWIN

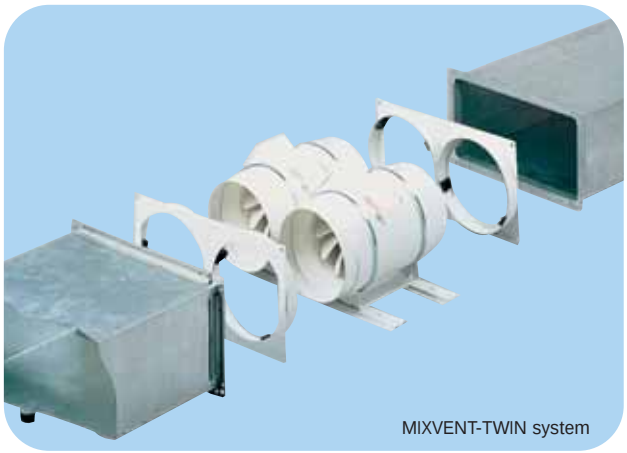
System specially recommended when a large airflow is required within a confined space, or where a supplementary airflow is occasionally needed. It is also needed in installations where it is necessary to mount a twin fan **extraction - supply system**, with the same characteristics.

MIXVENT-TWIN system can be mounted by the installer using fans in series.

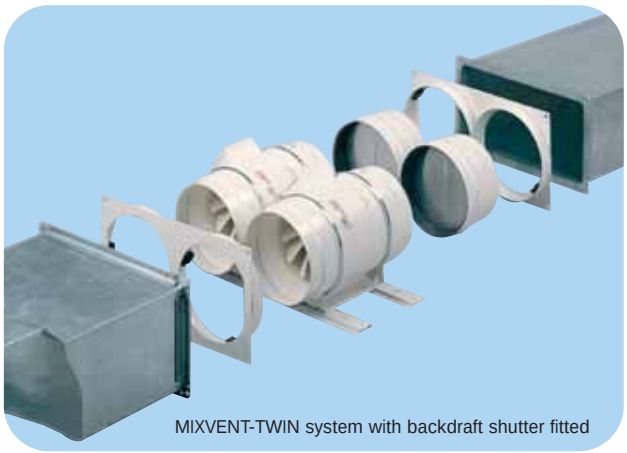
Therefore, it is necessary a kit (KIT TWIN BASE) which allows a parallel mounting of two TD of the same model (suitable from 250 to 2000 model).

Once mounted, the whole assembly is ready, fitted with inlet and outlet flanges, to be connected to a rectangular duct.

If the fans are not need to operate simultaneously it is recommended to mount backdraft shutters to avoid the backdraft of air when the fan is disconnected.



MIXVENT-TWIN system



MIXVENT-TWIN system with backdraft shutter fitted

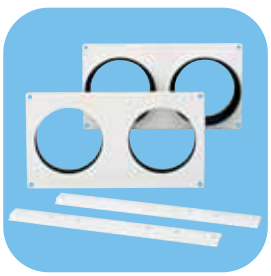
Accessories to mount MIXVENT-TWIN system

KIT TWIN BASE-250 + 2 TD -160/100	KIT TWIN BASE-500/150 + 2 TD-500/150	KIT TWIN BASE-1000 + 2 TD-1000/250
KIT TWIN BASE-250 + 2 TD 250/100	KIT TWIN BASE-500/160 + 2 TD-500/160	KIT TWIN BASE-1000 + 2 TD-1300/250
KIT TWIN BASE-350 + 2 TD -350/125	KIT TWIN BASE-800 + 2 TD-800/200	KIT TWIN BASE-2000 + 2 TD-2000/315

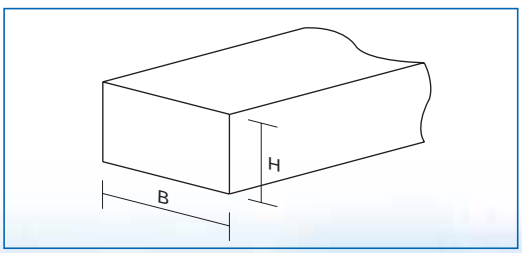
Backdraft shutter, see accessories page.

KIT TWIN BASE

It is constituted by two rectangular couplings of normal dimensions and two supports allowing the mounting of two TD or two TD x 2 models in parallel.

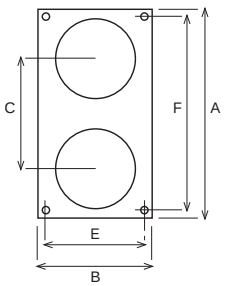


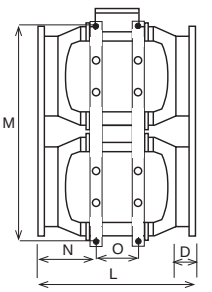
KIT TWIN BASE	Dimensions (mm)		Nominal dimensions of the rectangular duct (mm)	
	L	H	L	H
KIT TWIN BASE 250	320	180	280	140
KIT TWIN BASE 350	320	180	280	140
KIT TWIN BASE 500/150	395	220	355	180
KIT TWIN BASE 500/160	395	220	355	180
KIT TWIN BASE 800	440	240	400	200
KIT TWIN BASE 1000	540	290	500	250
KIT TWIN BASE 2000	690	355	630	315

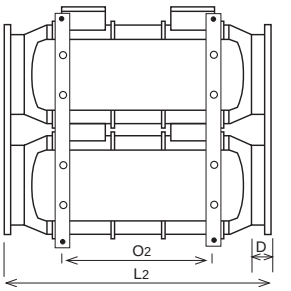


Due to the isolated operation of TD models, backdraft shutters mounted at the outlet of TD fans is required in order to avoid the backdraft of air when the fan is disconnected.

Dimensions (mm)





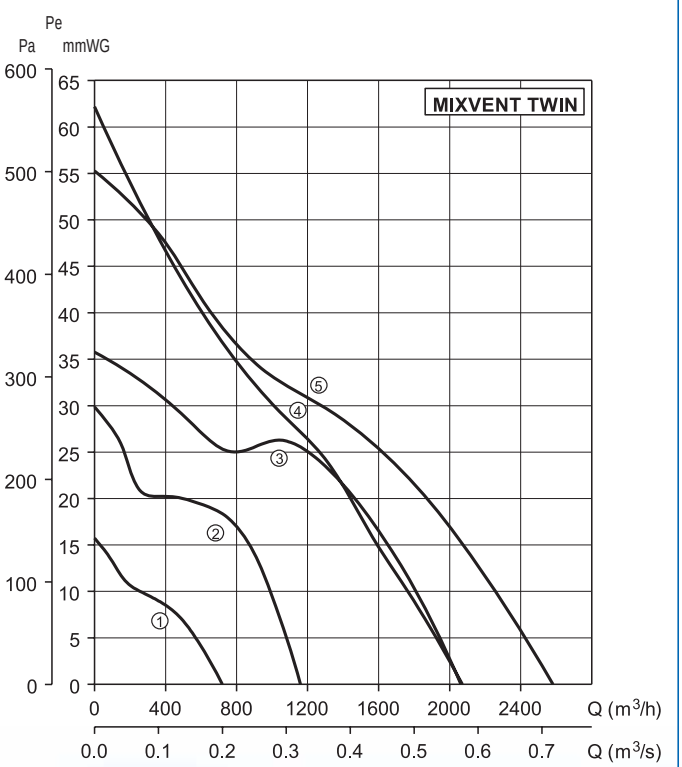


Model	A	B	C	D	E	F	L	L_2	M	N	O	O_2
Twin-250	320	180	184	36	160	300	305	–	375	113	80	–
Twin-350	320	180	184	33,5	160	300	305	475	333	91	80	253
Twin-500 (150)	395	220	206	37	200	375	310	481	417	110	80	249
Twin-500 (160)	395	220	206	37	200	375	290	461	417	100	80	249
Twin-800	440	240	225	37	220	420	317	509	456	103	100	298
Twin-1000	540	290	282	44	270	520	401	679	566	123	145	416
Twin-1300	540	290	282	44	270	520	401	679	566	123	145	416
Twin-2000	690	355	347	53	335	650	451	–	699	136	182	–

Performance curves

- Q = Air volume in, m^3/hr and m^3/s.
- Pe = Static pressure in mmWG and Pa.
- Dry air at 20ºC and 760 mmHg.
- Air flow data in accordance with the following standards: UNE 100-212-89, BS 848, Part 1; AMCA 210-85 and ASHRAE 51-1985.

①	Twin 350	Twin x 2-350
②	Twin 500	Twin x 2-500
③	Twin 800	Twin x 2-800
④	Twin 1000	Twin x 2-1000
⑤	Twin 1300	Twin x 2-1300



Acoustic power spectrum in dB(A) for every frequency band at the inlet and radiated, at a high speed

AT THE INLET	63	125	250	500	1000	2000	4000	8000
TWIN-350/125	38	50	49	56	57	53	44	36
TWIN-500/150	35	38	58	60	62	65	59	51
TWIN-500/160	35	38	58	60	62	65	59	51
TWIN-800/200N	40	45	65	67	69	67	63	55
TWIN-800/200	40	50	64	66	71	70	67	57
TWIN-1000/250	38	48	61	69	75	72	65	57
TWIN-1300/250	40	55	67	70	78	76	69	64
TWIN-2000/315	44	60	69	74	80	77	70	65

RADIATED	63	125	250	500	1000	2000	4000	8000
TWIN-350/125	36	49	49	50	50	48	36	27
TWIN-500/150	28	35	46	42	47	56	45	32
TWIN-500/160	28	35	46	42	47	56	45	32
TWIN-800/200N	29	35	51	50	55	56	47	34
TWIN-800/200	32	39	50	49	57	60	51	36
TWIN-1000/250	26	37	47	49	61	60	49	46
TWIN-1300/250	25	39	42	50	63	62	55	50
TWIN-2000/315	32	44	55	58	67	66	60	56

MIXVENT-TWINx2

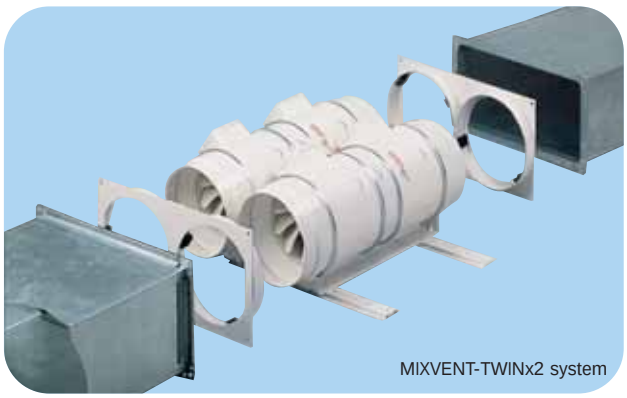
System specially recommended when a higher airflow and pressure is required within a reduced space.

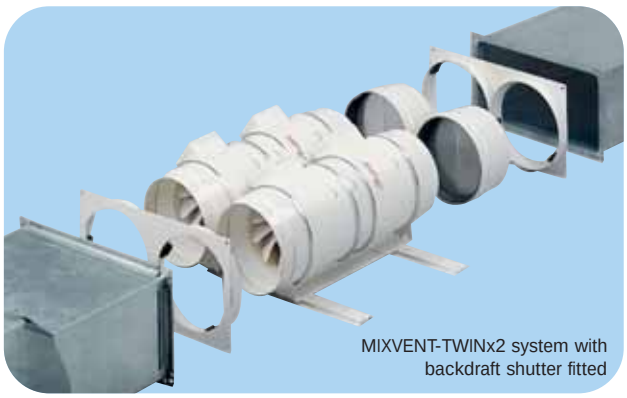
MIXVENT-TWIN x 2 system can be mounted by the installer using fans in series.

Therefore, it is necessary to use a kit (KIT TWIN BASE) which allows a parallel mounting of two TD x 2 of the same model (suitable from 350 to 1000 model).

Once mounted, the whole assembly is ready with flanges at the inlet and at the outlet, to be connected to a rectangular duct.

If the fans do not need to operate simultaneously it is recommended to mount backdraft shutters to avoid the backdraft of air when the fan is not operating.


MIXVENT-TWINx2 system


MIXVENT-TWINx2 system with backdraft shutter fitted

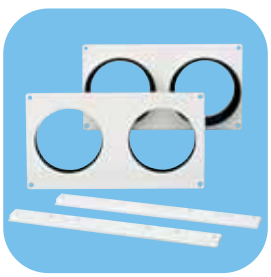
Elements to mount MIXVENT-TWIN x 2 system

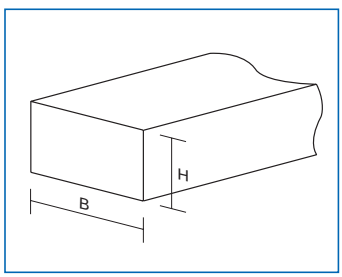
KIT TWIN BASE-350 + 2 TDx2-350/125
KIT TWIN BASE-500/150 + 2 TDx2-500/150
KIT TWIN BASE-500/160 + 2 TDx2-500/160
KIT TWIN BASE-800 + 2 TDx2-800/200
KIT TWIN BASE-1000 + 2 TDx2-1000/250
KIT TWIN BASE-1000 + 2 TDx2-1300/250

Backdraft shutter, see accessories page.

KIT TWIN BASE

It is fitted with two rectangular couplings of normal dimensions and two supports allowing the mounting of two TD or two TD x 2 models in parallel.





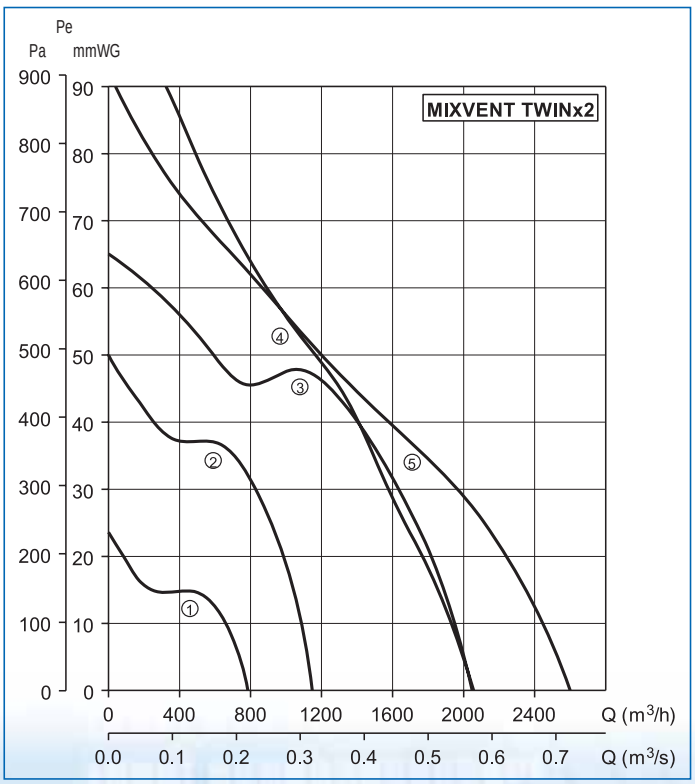
KIT TWIN BASE	Dimensions (mm)		Nominal dimensions of the rectangular duct (mm)	
	L	H	L	H
KIT TWIN BASE 250	320	180	280	140
KIT TWIN BASE 350	320	180	280	140
KIT TWIN BASE 500/150	395	220	355	180
KIT TWIN BASE 500/160	395	220	355	180
KIT TWIN BASE 800	440	240	400	200
KIT TWIN BASE 1000	540	290	500	250
KIT TWIN BASE 2000	690	355	630	315

Due to the isolated operation of TD models, backdraft shutters mounted at the outlet of TD fans are required in order to avoid the backdraft of air when the fan is not operating.

Performance curves

- Q = Air volume in, m^3/hr and m^3/s.
- Pe = Static pressure in mmWG and Pa.
- Dry air at 20ºC and 760 mmHg.
- Air flow data in accordance with the following standards: UNE 100-212-89, BS 848, Part 1; AMCA 210-85 and ASHRAE 51-1985.

①	Twin 350	Twin x 2-350
②	Twin 500	Twin x 2-500
③	Twin 800	Twin x 2-800
④	Twin 1000	Twin x 2-1000
⑤	Twin 1300	Twin x 2-1300



MIXVENT HEATING System (TD-MIXVENT + MBE battery)

The MIXVENT heating system offers the most economic solution for the heating of fresh air supply systems.

The MIXVENT HEATING system is created basically by a TD-MIXVENT fan in series (from 250 model) which is then directly connected with an electrical heater battery at the outlet from MBE series, specially designed to provide the maximum performance with the minimum pressure drop. Minimum airflow speed within the battery should be 1.5 m/s.

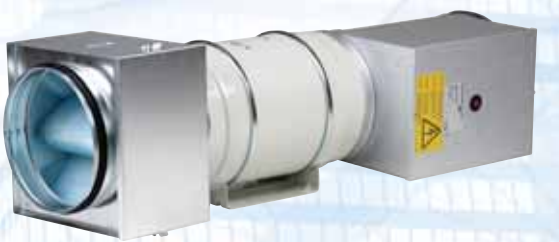
The batteries are fitted with:
- Armoured heating elements.
- Automatic safety thermostat connected in series with another safety thermostat (RESET). Units are prewired to connect to single phase (models 100, 125 and 160) or three phase (other models), with a protection circuit supplied on 230V single phase models.
- Connection box IP43.

The installation can be completed with duct or ambient temperature sensors and speed controllers, obtaining an air delivery with the temperature according to the environmental requirements.
With this system it is possible to achieve a temperature rise of 50º on the supply air.

TD-MIXVENT *MBE Electrical heater battery*

0 026072 402061

TD-MIXVENT	MBE battery type	Battery power (W)	Batteries supply	Minimum airflow (m^3/s)	Speed controller type
250/100	MBE-100/04B	400	1/230	50	PULSER
350/125	MBE-125/12B	1200	1/230	70	PULSER
500/160	MBE-160/21B	2100	1/230	110	PULSER
800/200	MBE-200/50T	5000	2/400	170	PULSER
1000-1300/250	MBE-250/60T	6000	2/400	270	PULSER
2000/315	MBE-315/90T	9000	3/400	420	TTC-2000
4000/355	MBE-355/90T	9000	3/400	570	TTC-2000
6000/400	MBE-400/120T	12000	3/400	570	TTC-2000



In those installations where MIXVENT HEATING system is required it is convenient to use filter boxes MFL to protect the electrical batteries from the debris.

SELECTION EXAMPLE

DATA:

– Airflow: 700 m^3/h (Q)
– Input air temperature: +5 ºC
– Required output temperature: +27 ºC

REQUIRED HEAT POWER:

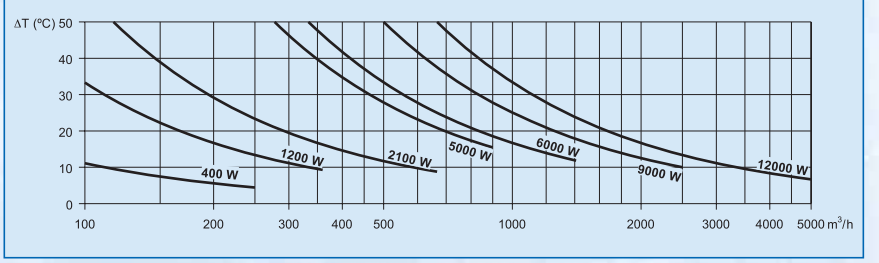
P = Q x 0,36 x ΔT
= 700 x 0,36 x 22
= 5544 W

BATTERY ELECTION

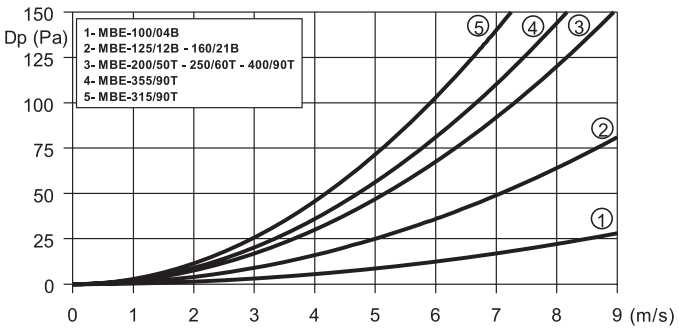
Or: MBE-200/50T
Or: MBE-250/60T

Final election will depend of:
– Total pressure drop
– Desired sound level
– Available space

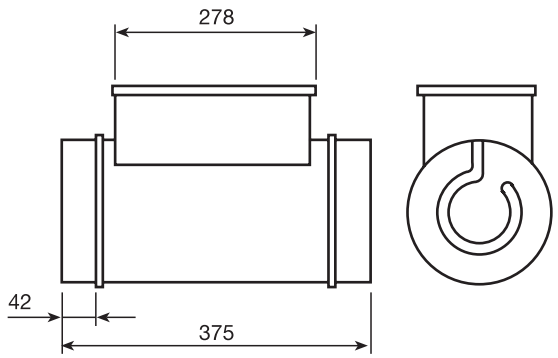
Difference of temperature between external and internal air ΔT (ºC)



Battery pressure drop
Δp (Pa)



Dimensions (mm)



MBE heater batteries accessories

PULSER controller
Electronic controller for electrical heater batteries.
To install in the room that needs to be heated. Depending on the selected temperature, the controller will activate the battery to maintain that temperature in the whole installation.

Dimensions LxAxH (mm):
92x45x150

TTC-2000 controller
Electronic controller for three phase electrical heater batteries to 16,5 kW.
For those higher, module TTS-1* (up to 30 kW) must be connected.
TTC-2000 controls the time of operation of the three phase electrical batteries.
TTC-2000 is designed to be mounted in standard board and has to be connected at a temperature sensor placed on the room to be heated or in the heat air duct.
Power 50 kW.
** The module TTS-1 is an electronic plate to place in TTC-2000*

Dimensions LxAxH (mm):
160x140x280

Temperature sensor TG-R530
To place in the ambient to be heated:

– NTC type with linear scale
– Operating temperature: 0 -30ºC
– IP-20

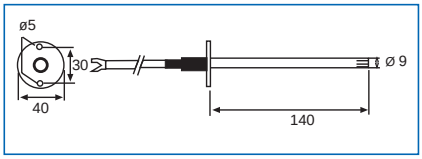
Suitable for the controllers type TTC-2000 controlling MBE or IBE batteries.

Dimensions LxAxH (mm):
70x30x70

Sensor TG-K330
Temperature sensor to place in the heating air duct.

– NTC type with linear scale
– Operating temperature: 0 -30ºC
– IP-20

Suitable for controllers type TTC-2000 , controlling MBE or IBE batteries.

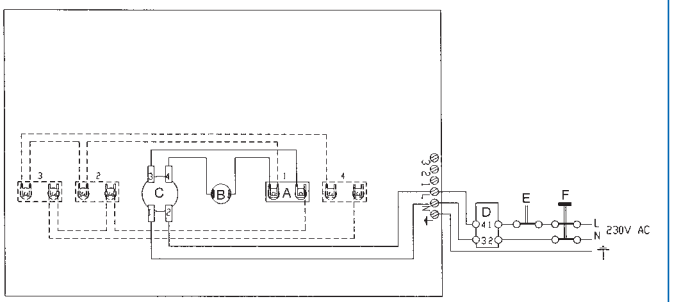


Wiring diagrams for MBE electric batteries

WIRING DIAGRAM E10

ELECTRIC HEATER BATTERY TYPE: MBE–100/04B
MBE–125/12B
MBE–160/21B

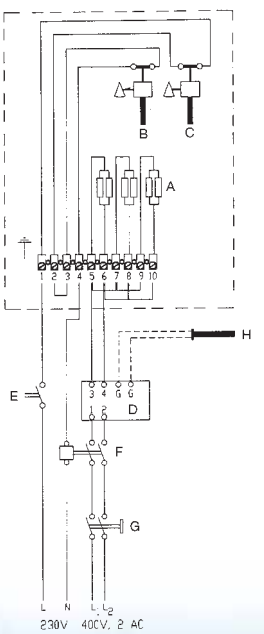
A : HEATING ELEMENTS
B : AUTO-RESET THERMAL PROTECTION
C : MANUAL-RESET THERMAL PROTECTION
D : PULSER (REG 16) (MÁX. 3,2 KW 320V)
E : SWITCH
F : ELECTRICAL LINE PROTECTION



WIRING DIAGRAM E20

ELECTRIC HEATER BATTERY TYPE: MBE–200/50T
MBE–250/60T

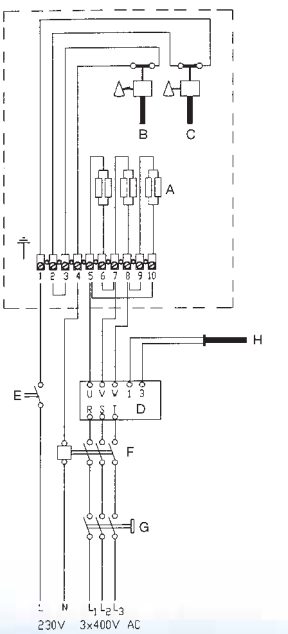
A : heating elements
B : auto-reset thermal protection
C : manual-reset thermal protection
D : PULSER (REG 6) (Máx. 6 kW 400V)
E : switch
F : contactor
G : electrical line protection
H : optional temperature sensor (ducted 1G-K330 or ambient TG-R530)



WIRING DIAGRAM E30

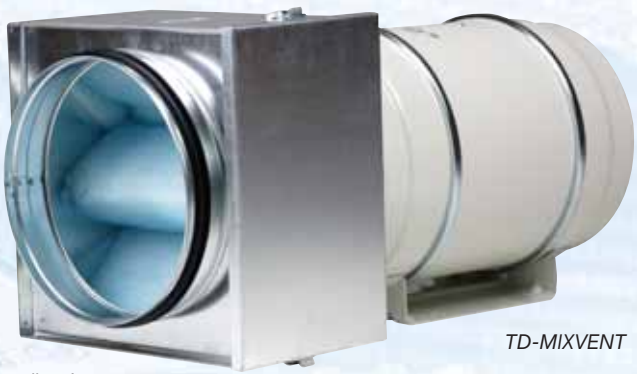
ELECTRIC HEATER BATTERY TYPE: MBE–315/90T

A : heating elements
B : auto-reset thermal protection
C : manual-reset thermal protection
D : TTC-2000
F : contactors
G : electrical line protection
H : optional temperature sensor (ducted TG-K330 or ambient TG-R530)



MIXVENT FILTER System (TD-MIXVENT + Filter box MFL)

The MIXVENT Filter systems are used when the installation requires the supply of fittered clear air. MIXVENT FILTER system is made of a standard TD-MIXVENT fan (from model 250 on), and a filter box from MFL series.
MFL filter boxes are of EU3 and Gravimetric type, with filter efficiencies of between 80 and 95% of the particles higher than 10 microns.



TD-MIXVENT

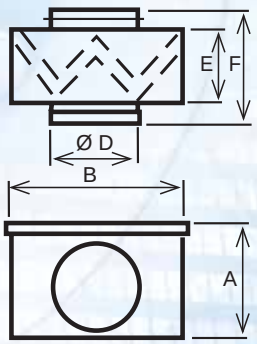
Filter box MFL

0 026172 402060

A usual application of MFL filter boxes is to protect the electrical batteries from the dirt, in those installations where MIXVENT HEATING is used.

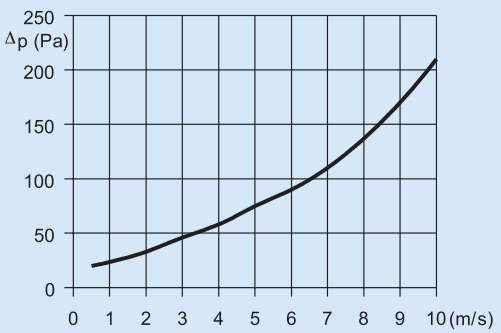
MFL filter boxes are fitted with an easy acces cover to change the filter quickly.

Dimensions (mm)



Model	A	B	D	E	F
MFL-100	200	200	100	160	196
MFL-125	200	200	125	160	196
MFL-160	200	200	160	154	196
MFL-200	243	244	200	154	202
MFL-250	293	294	250	154	206
MFL-315	342	343	315	154	206
MFL-355	447	448	355	154	254
MFL-400	447	448	400	154	254

Pressure drop of the filter boxes Δp (Pa)



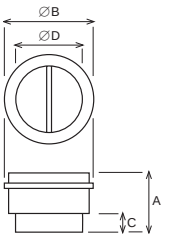
TD-MIXVENT Mounting accessories

Specific accessories for TD Series

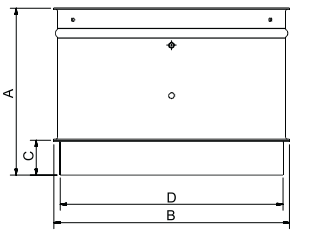
MCA

Backdraft shutters to install at the outlet of the fans preventing the entry of outdoors or external air and avoiding heat leaks when the fan is not in use.
To apply in TD, TD x 2, TD x 3 and TWIN model series.

Model MCA/JCA	Type of TD - TDx2 - TDx3 - TWIN
MCA - 250	160/100N - 250/100
MCA - 350	350/125
MCA - 500/150	500/150
MCA - 500/160	500/160
MCA - 800	800/200 - 800/200N
MCA - 1000	1000/250 - 1300/250
MCA - 2000	2000/315
MCA - 4000	4000/355
MCA - 6000	6000/400



MCA-250 to 2000



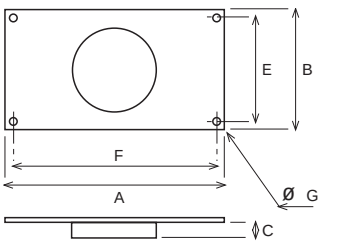
MCA-4000/6000

Model MCA	A	Ø B	C	Ø D
MCA - 250	107	111	31,5	94,5
MCA - 350	107	136	31,5	119,5
MCA - 500/150	121	163,5	35	147
MCA - 500/160	121	173,5	35	157
MCA - 800	131,5	214	35	197,5
MCA - 1000	164	264,5	42	248
MCA - 2000	205	330	50	312
MCA - 4000	265	374	55	354
MCA - 6000	307	419	65	399

MAR

Rectangular Duct Adapter enables TD, TD x 2 and TD x 3 model series to be mounted on rectangular ducting.

Model MAR	Type of TD-TDx2-TDx3	Nominal dim. of ducting L x H
MAR - 250	160/100N - 250/100	224 x 140
MAR - 350	350/125	224 x 140
MAR - 500/150	500/150	280 x 180
MAR - 500/160	500/160	280 x 180
MAR - 800	800/200-800/200N	315 x 200
MAR - 1000	1000/250-1300/250	400 x 250
MAR - 2000	2000/315	500 X 315



Model MAR	A	B	C	E	F	Ø G
MAR - 250	264	180	33,3	160	244	9
MAR - 350	264	180	33,5	160	244	9
MAR - 500/150	320	220	37	200	300	9
MAR - 500/160	320	220	37	200	300	9
MAR - 800	355	240	37	220	335	9
MAR - 1000	440	290	42	270	420	9
MAR - 2000	540	355	52	355	520	9

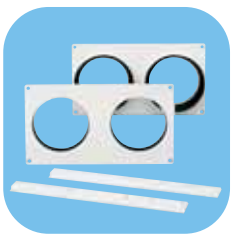
MRJ

Guards to mount either at the inlet of the fan or at the outlet. Avoiding the entry of foreign objects that could damage the fan.
To apply at TD, TD x 2, TD x 3 and TWIN model Series.

Model MRJ	Type of TD - TDx2 - TDx3 - TWIN
MRJ - 250	160/100N - 250/100
MRJ - 350	350/125
MRJ - 500/150	500/150
MRJ - 500/160	500/160
MRJ - 800	800/200 - 800/200N
MRJ - 1000	1000/250 - 1300/250
MRJ - 2000	2000/315
MRJ - 4000	4000/355
MRJ - 6000	6000/400

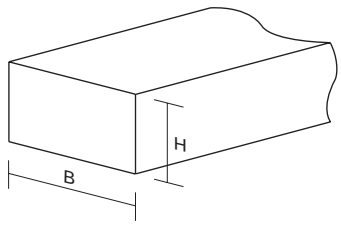
MBR
Flanges allowing the coupling of TD fans in series.

Model MBR	Ø of the duct
MBR-350	125
MBR-500/150	150
MBR-500/160	160
MBR-800	200
MBR-1000	250



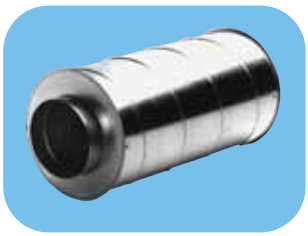
KIT TWIN BASE
Is fitted with two rectangular connectors and two supports allowing the mounting of two TD or two TD x 2 in parallel.

KIT TWIN BASE	Dimensions (mm)		Nominal dim. of rectangular duct (mm)	
	L	H	L	H
KIT TWIN BASE 250	320	180	280	140
KIT TWIN BASE 350	320	180	280	140
KIT TWIN BASE 500/150	395	220	355	180
KIT TWIN BASE 500/160	395	220	355	180
KIT TWIN BASE 800	440	240	400	200
KIT TWIN BASE 1000	540	290	500	250
KIT TWIN BASE 2000	690	355	630	315



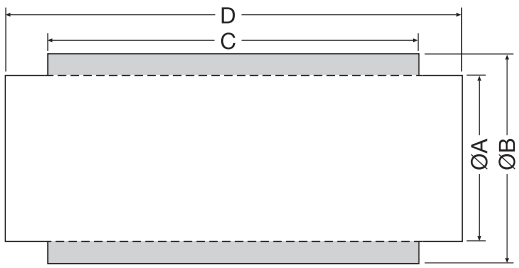
Due to the independent operation of TD models, backdraft shutters mounted at the outlet of TD fans are required in order to avoid the backdraft of air when the fan is disconnected.

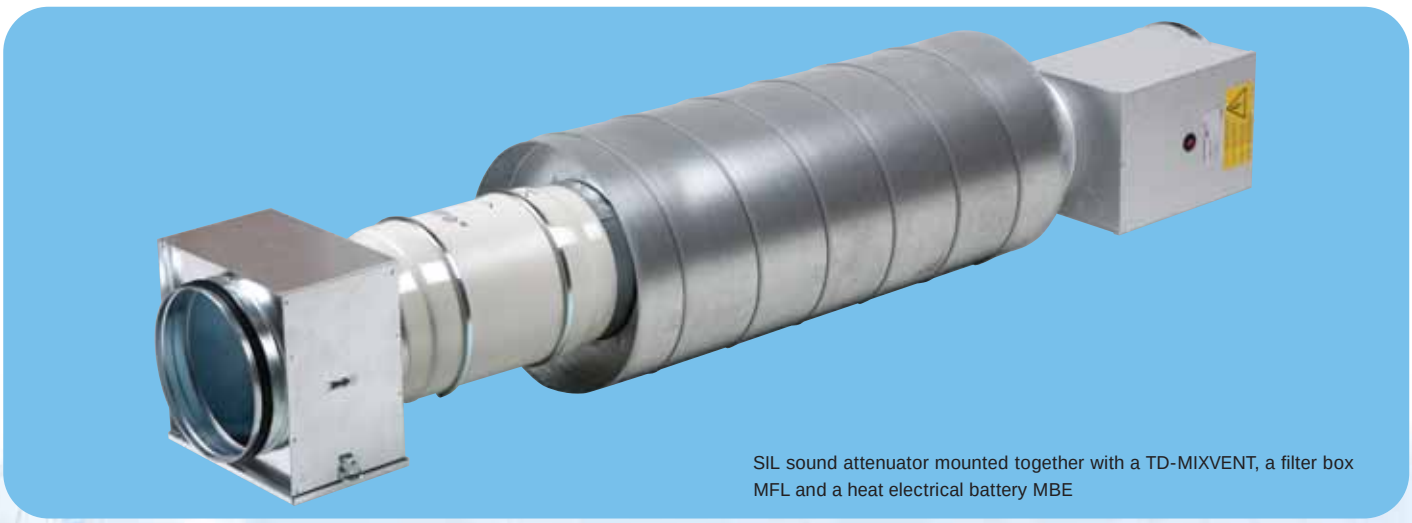
General mounting accessories



SIL
Sound attenuators

Model	ØA (mm)	ØB (mm)	C (mm)	D (mm)	Attenuation in dB					
					125	250	500	1000	2000	4000
SIL 125	125	250	700	900	5	13	21	37	37	31
SIL 160	160	250	700	900	9	14	23	25	17	9
SIL 200	200	315	700	900	8	11	23	25	17	9
SIL 250	250	355	700	900	6	10	19	25	16	7
SIL 315	315	400	700	860	2,2	3,3	9	21,2	7,6	4,1
SIL 355	355	450	700	860	4,1	6,7	13,2	14,3	3,4	8,1
SIL 400	400	500	700	860	3,1	4	9,5	13,7	5,6	0,4





SIL sound attenuator mounted together with a TD-MIXVENT, a filter box MFL and a heat electrical battery MBE

Mounting general accessories

GSA
Flexible ducts

GSI
Acoustic ducts

CX
Worm drive clips

PER-W
Outdoor plastic louvre shutters

BOC
Circular air valves

RED
Reducer

MRT
Joining piece

CT
Cowl

GRA
Aluminium supply air guards

GRI
Internal guards painted in extruded aluminium.

RP
Plenums for the supply of air in ceiling voids.

GCI
Circular diffusers

Electrical accessories

REGUL 2
2 Speed switches

REB
Single-phase electronic speed controller

RMB
Single-phase auto-transformer speed controller