

TD-MIXVENT fan (from model 250) and a MBE electric heater installed on the discharge side of the fan.

TD-MIXVENT + MBE ELECTRIC HEATER

MBE heater type

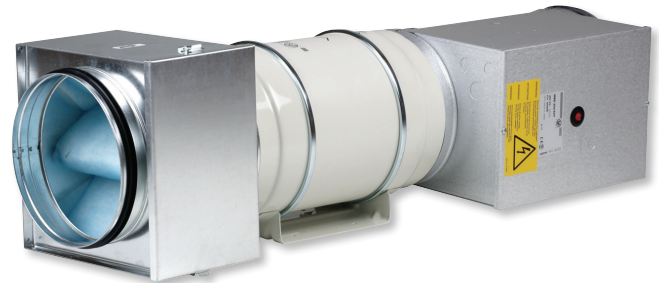
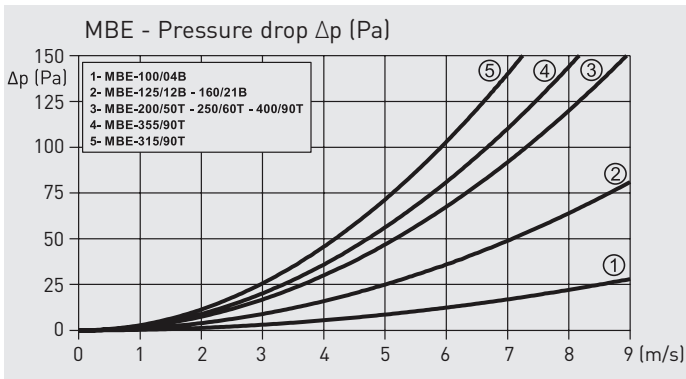
- Insulated element rods.
- Automatic overheat thermostat wired in series with an additional safety overheat manual reset thermostat (RESET). Units are available for single phase (models 100, 125 and 160) or three phase (other models) electrical supply connection, with a circuit protection supplied on 230V single phase.
- Connection box IP43.

A range of duct or ambient temperature sensors and controllers accessories to accompany the electric heater are available. These controller accessories modulate the heater output as a function of the required environmental temperature. With this system it is possible to achieve temperature rise up to 50° on the supply air.

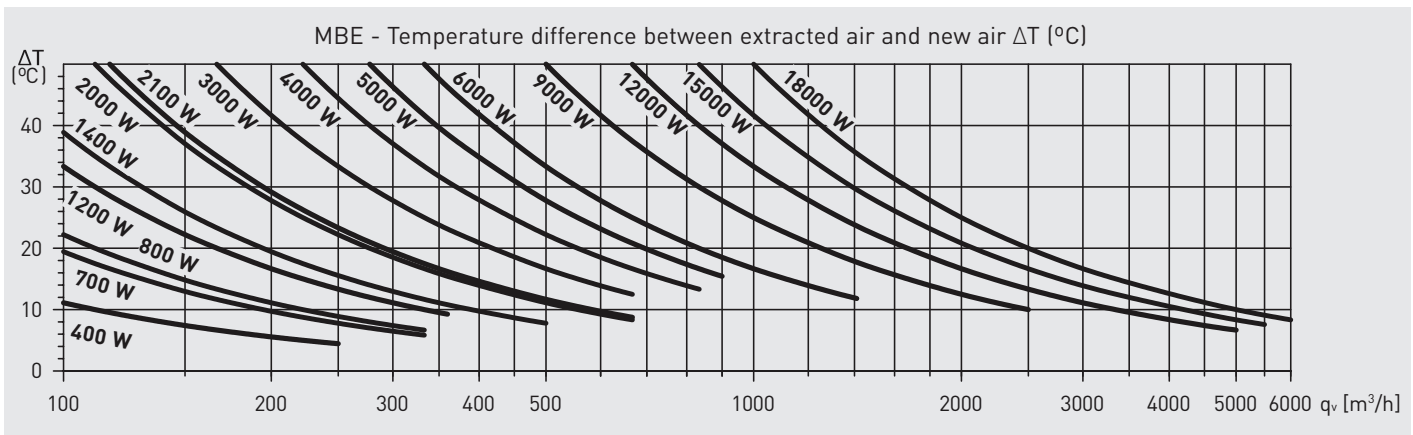


TD-MIXVENT

MBE electric heater (installed on the discharge side of the fan).



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



TECHNICAL CHARACTERISTICS MBE

TD-MIXVENT	MBE heater type	Heater power (W)	Batteries supply (V)	Minimum airflow (m³/h)	Ø (mm)	Speed controller type
250/100	MBE-100/04B	400	1/230	50	100	PULSER
	MBE-100/08B	800	1/230	50	100	PULSER
350/125	MBE-125/04B	400	1/230	70	125	PULSER
	MBE-125/08B	800	1/230	70	125	PULSER
	MBE-125/12B	1200	1/230	70	125	PULSER
	MBE-160/07B	700	1/230	110	160	PULSER
500/160	MBE-160/14B	1400	1/230	110	160	PULSER
	MBE-160/21B	2100	1/230	110	160	PULSER
	MBE-200/20T	2000	2/400	170	200	PULSER
800/200	MBE-200/30T	3000	2/400	170	200	PULSER
	MBE-200/40T	4000	2/400	170	200	PULSER
	MBE-200/50T	5000	2/400	170	200	PULSER
	MBE-200/60T	6000	2/400	170	200	PULSER
	MBE-200/90T	9000	3/400	170	200	TTC-25/TTC-2000
	MBE-250/20T	2000	2/400	270	250	PULSER
1000-1300/250	MBE-250/30T	3000	2/400	270	250	PULSER
	MBE-250/40T	4000	2/400	270	250	PULSER
	MBE-250/50T	5000	2/400	270	250	PULSER
	MBE-250/60T	6000	2/400	270	250	PULSER
	MBE-250/90T	9000	3/400	270	250	TTC-25/TTC-2000
	MBE-315/30T	3000	2/400	430	315	PULSER
2000/315	MBE-315/60T	6000	2/400	430	315	PULSER
	MBE-315/90T	9000	3/400	430	315	TTC-25/TTC-2000
	MBE-315/120T	12000	3/400	430	315	TTC-25/TTC-2000
	MBE-315/150T	15000	3/400	430	315	TTC-25/TTC-2000
4000/355	MBE-355/60T	6000	2/400	540	355	PULSER
	MBE-355/90T	9000	3/400	540	355	TTC-25/TTC-2000
	MBE-355/120T	12000	3/400	540	355	TTC-25/TTC-2000
	MBE-355/150T	15000	3/400	540	355	TTC-25/TTC-2000
	MBE-355/180T	18000	3/400	540	355	TTC-40F
6000/400	MBE-400/60T	6000	2/400	680	400	PULSER
	MBE-400/90T	9000	3/400	680	400	TTC-25/TTC-2000
	MBE-400/120T	12000	3/400	680	400	TTC-25/TTC-2000
	MBE-400/150T	15000	3/400	680	400	TTC-25/TTC-2000
	MBE-400/180T	18000	3/400	680	400	TTC-40F

SELECTION EXAMPLE

DATA:

- Airflow: 700 m³/h (Q)
- Input air temperature: +5 °C
- Required output temperature: +27 °C

REQUIRED HEAT POWER:

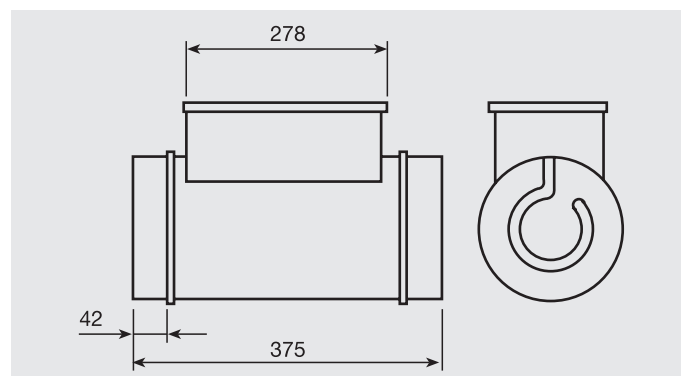
$$P = Q \times 0,36 \times \Delta T = 700 \times 0,36 \times 22 = 5544 \text{ W}$$

HEATER ELECTION: or: MBE-200/50T or: MBE-250/60T

Final election will depend of:

- Total pressure drop
- Desired sound level
- Available space

DIMENSIONS (mm)



ELECTRIC HEATERS ACCESSORIES MBE

For more information see Electrical accessories.



PULSER

Single phase electric heater controller.



TTC-2000 and TTC-25

Three phase electric heater controller.



TG-R

Room temperature sensor.



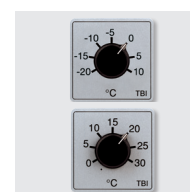
TG-K

Duct temperature sensor.



DPS

Differential pressure switch.



TBI-10 / TBI-30

External potentiometer.

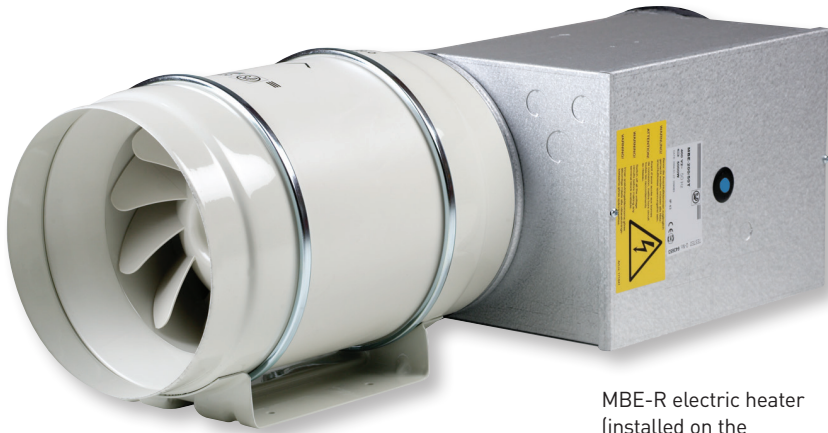
TD-MIXVENT fan (from model 250) and a MBE-R electric heater installed on the discharge side of the fan.

TD-MIXVENT + MBE-R ELECTRIC HEATER

MBE-R heater type

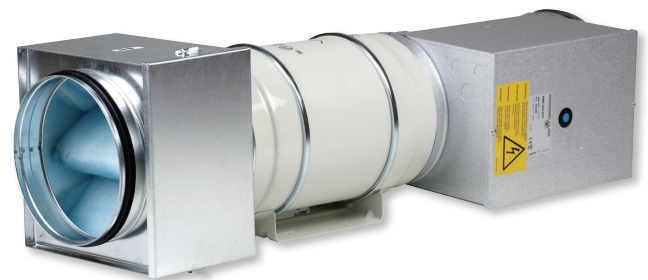
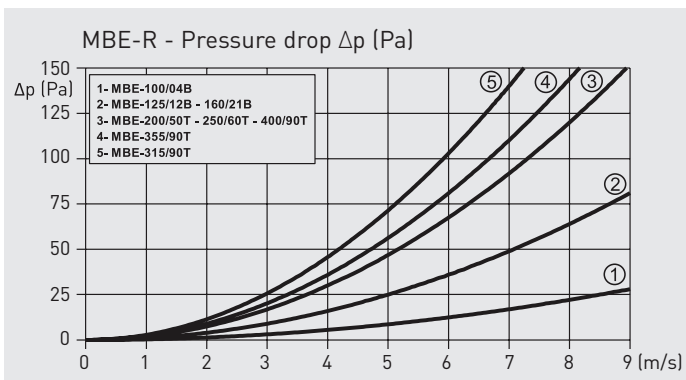
- Electric heater regulation, incorporated.
- Insulated element rods.
- Automatic overheat thermostat wired in series with an additional safety overheat manual reset thermostat (RESET). Units are available for single phase (models 100, 125 and 160) or three phase (other models) electrical supply connection, with a circuit protection supplied on 230V single phase.
- Connection box IP43.

A range of duct or ambient temperature sensors and controllers accessories to accompany the electric heater are available. These controller accessories modulate the heater output as a function of the required environmental temperature.

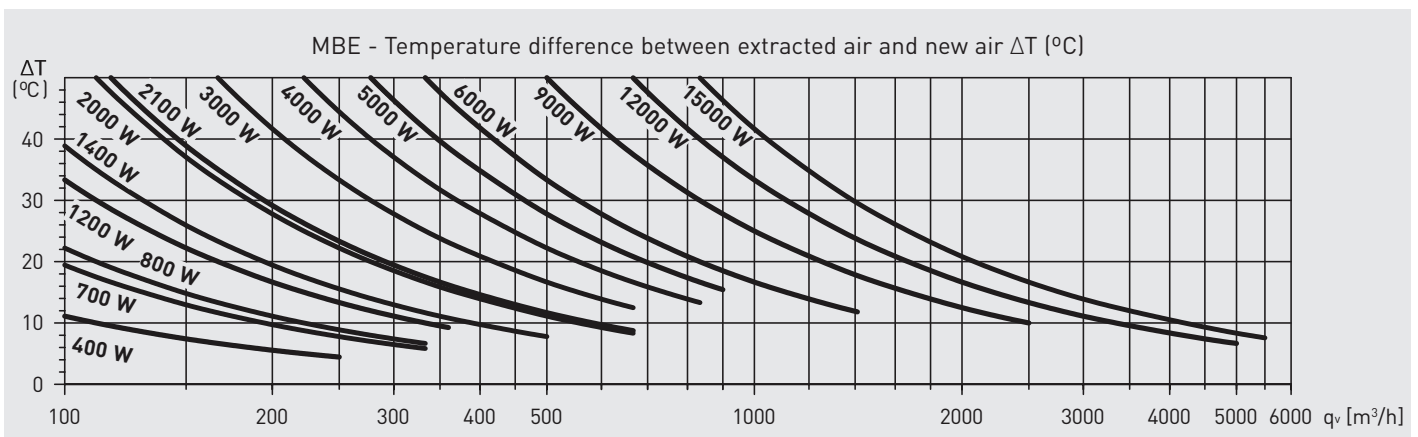


TD-MIXVENT

MBE-R electric heater (installed on the discharge side of the fan).



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



TECHNICAL CHARACTERISTICS MBE-R

TD-MIXVENT	MBE-R heater type	Heater power (W)	Batteries supply (V)	Minimum airflow (m³/h)	Ø (mm)
250/100	MBE-100/04B-R	400	1/230	50	100
	MBE-100/08B-R	800	1/230	50	100
350/125	MBE-125/04B-R	400	1/230	70	125
	MBE-125/08B-R	800	1/230	70	125
500/160	MBE-125/12B-R	1200	1/230	70	125
	MBE-160/07B-R	700	1/230	110	160
	MBE-160/14B-R	1400	1/230	110	160
800/200	MBE-160/21B-R	2100	1/230	110	160
	MBE-200/20T-R	2000	2/400	170	200
	MBE-200/30T-R	3000	2/400	170	200
	MBE-200/40T-R	4000	2/400	170	200
1000-1300/250	MBE-200/50T-R	5000	2/400	170	200
	MBE-250/20T-R	2000	2/400	270	250
	MBE-250/30T-R	3000	2/400	270	250
	MBE-250/40T-R	4000	2/400	270	250
	MBE-250/50T-R	5000	2/400	270	250
2000/315	MBE-250/60T-R	6000	2/400	270	250
	MBE-250/90T-R	9000	3/400	270	250
	MBE-315/30T-R	3000	2/400	430	315
	MBE-315/60T-R	6000	2/400	430	315
4000/355	MBE-315/90T-R	9000	3/400	430	315
	MBE-315/120T-R	12000	3/400	430	315
	MBE-355/60T-R	6000	2/400	540	355
6000/400	MBE-355/90T-R	9000	3/400	540	355
	MBE-355/120T-R	12000	3/400	540	355
	MBE-400/60T-R	6000	2/400	680	400
6000/400	MBE-400/90T-R	9000	3/400	680	400
	MBE-400/120T-R	12000	3/400	680	400
	MBE-400/150T-R	15000	3/400	680	400

SELECTION EXAMPLE

DATA:

- Airflow: 700 m³/h (Q)
- Input air temperature: +5 °C
- Required output temperature: +27 °C

REQUIRED HEAT POWER:

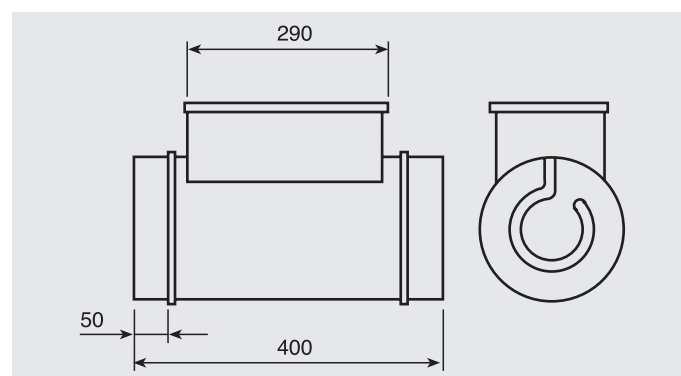
$$P = Q \times 0,36 \times \Delta T = 700 \times 0,36 \times 22 = 5544 \text{ W}$$

HEATER ELECTION: or: MBE-200/50T-R or: MBE-250/60T-R

Final election will depend of:

- Total pressure drop
- Desired sound level
- Available space

DIMENSIONS (mm)



MBE-R ELECTRIC HEATERS ACCESSORIES

For more information see Electrical accessories.



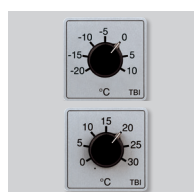
TG-R
Room temperature sensor.



TG-K
Duct temperature sensor.

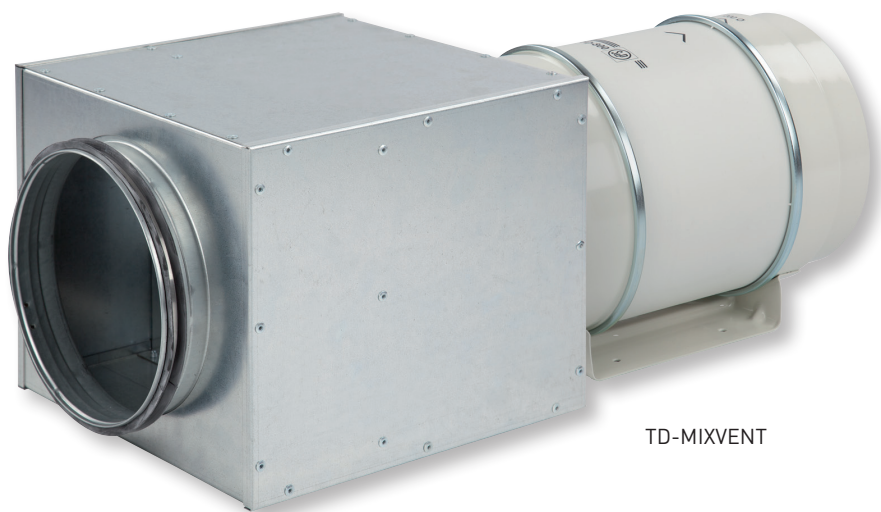


DPS
Differential pressure switch.



TBI-10 / TBI-30
External potentiometer.

TD-MIXVENT fan (from model 250) and a MBW water coil installed on the discharge side of the fan.



TD-MIXVENT

MBW water coil (advisable to install on the inlet side of the fan).

TD-MIXVENT + MBW WATER COIL

- MBW water coil type
- Range of connection diameters, 100 - 500 mm.
 - Galvanised steel housing.
 - Hot water coil with copper pipes and aluminium fins.
 - Removable side for maintenance purposes.
 - Can be mounted horizontally or vertically.
 - Connections with watertight seals.
 - Connection must be made between the coil and the hot water circuit.
 - Maximum pressure: 10 bar.
 - Maximum temperature: 100°C.

Shut-off valves must be installed on each water connection, so that the unit can be isolated if necessary (for cleaning filters, repairs, etc.) without the need to drain the entire circuit.

We recommend installing a filtration box with a filter (MFL-F + MFR) at the input to the unit, to capture water borne debris.



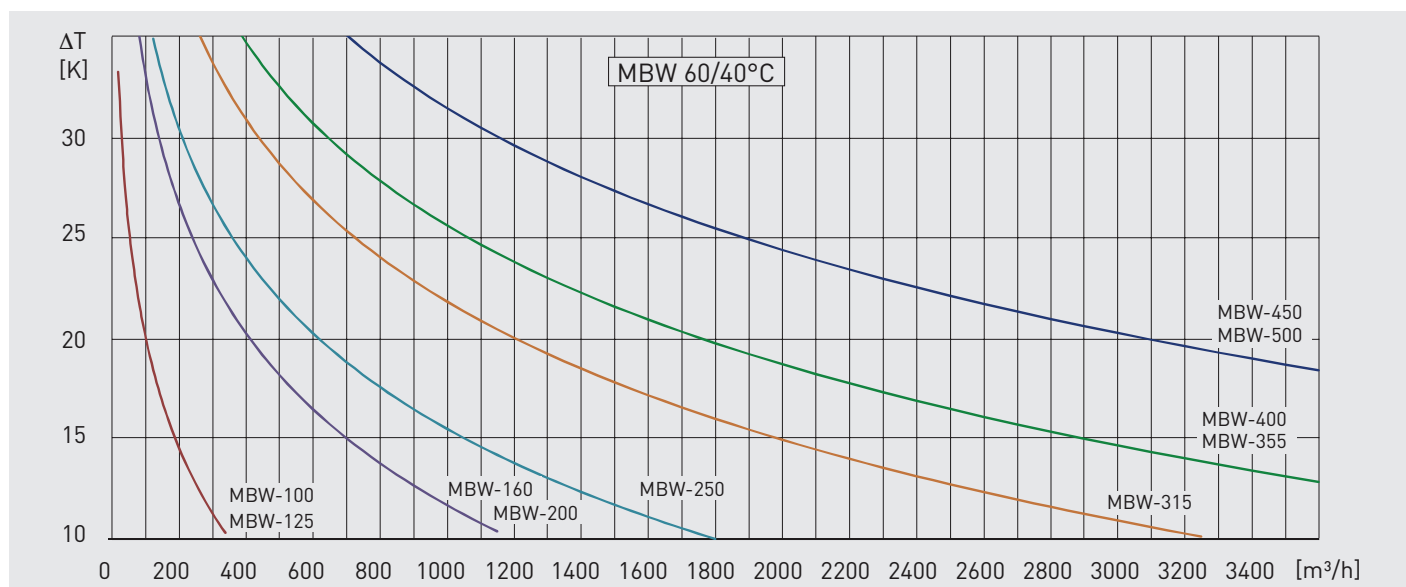
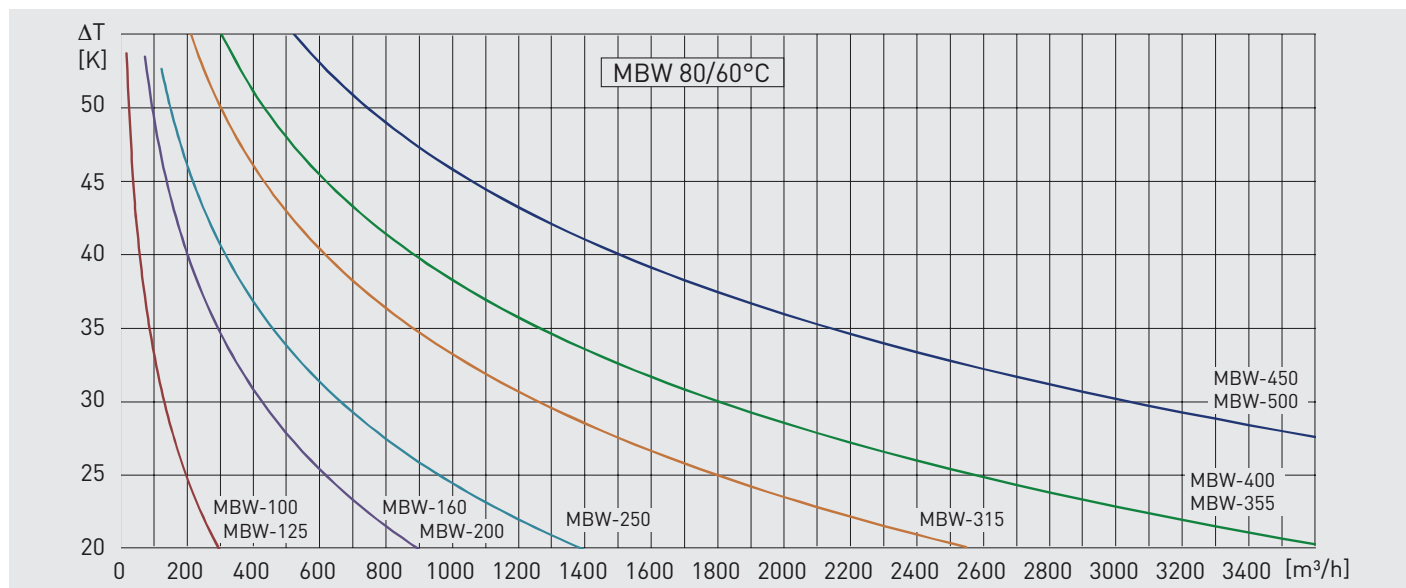
In those installations where MIXVENT HEATING system is required it is convenient to use filter boxes MFL to protect the coil from the dirt.

TECHNICAL CHARACTERISTICS MBW

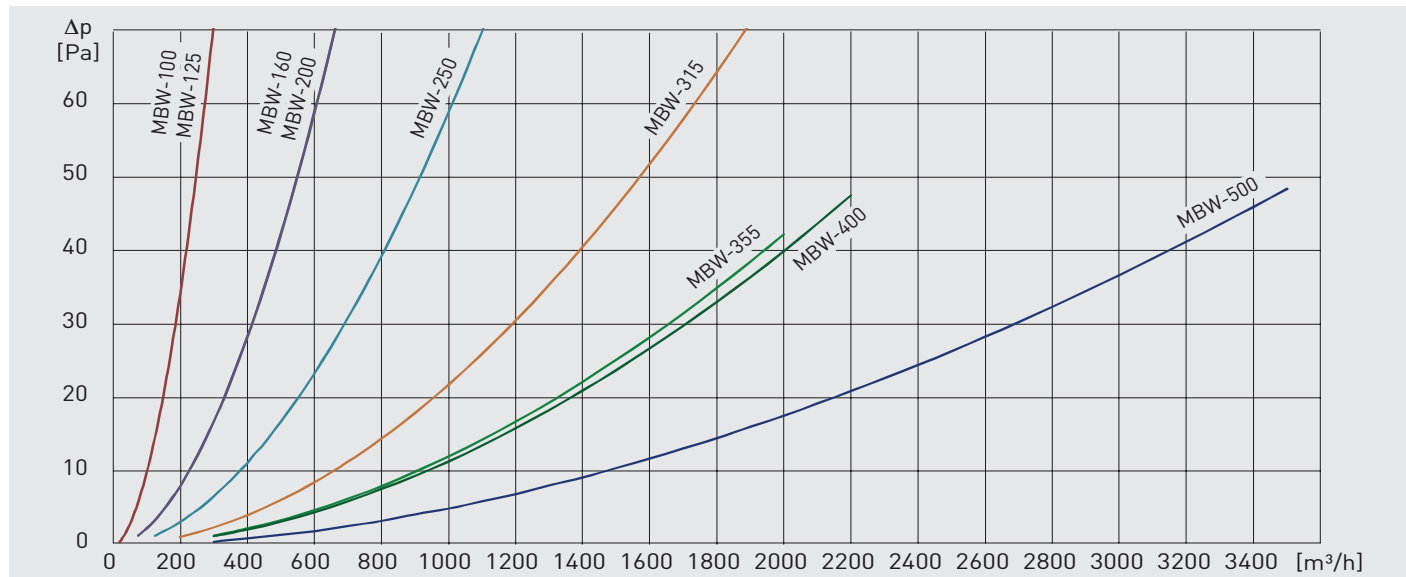
TD-MIXVENT	MBW water coil	Air data				Water data			Weight (kg)	Accessories					
		Heating power		Air		Airflow (m ³ /h) ^{1,2}	Pressure drop (kPa) ¹	Airflow (l/h) ¹		Manual temperature control	Manual temperature control*	Water coil mounting kit	Pump speed	Anti-frost thermostat	Thermostat for external installation*
		(kW) ¹	(kW) ²	(K) ¹	(K) ²										
250/100	MBW-100	1,7	1,0	33	18	150	1	70	5,8	TRW	3	-		THE-F	-
350/125	MBW-125	2,1	1,2	29	17	220	1	90	5,8	TRW	4	-		THE-F	-
500/160	MBW-160	4,6	3,0	39	25	360	4	200	7,7	TRW	5	-		THE-F	-
800/200	MBW-200	6,1	4,0	32	21	560	7	270	7,7	TRW	6	-		THE-F	-
1000-1300/250	MBW-250	9,7	6,2	32	20	900	4	430	9,6	-		PWW-SE1	1	-	THE 16/4 A
2000/315	MBW-315	16,6	10,9	35	23	1.400	6	730	11,9	-		PWW-SE1	1	-	THE 16/4 A
4000/355	MBW-355	22,3	14,9	36	24	1.800	9	980	14,5	-		PWW-SE1	2	-	THE 16/4 A
6000/400	MBW-400	25,6	16,9	34	22	2.300	9	1.130	20,5	-		PWW-SE1	2	-	THE 16/4 A

The data provided refers to an outdoor temperature of 0°C and input/output temperatures of: 180/60°C, 260/40°C.
 * Only necessary when the pump cannot be connected via the operating boiler.

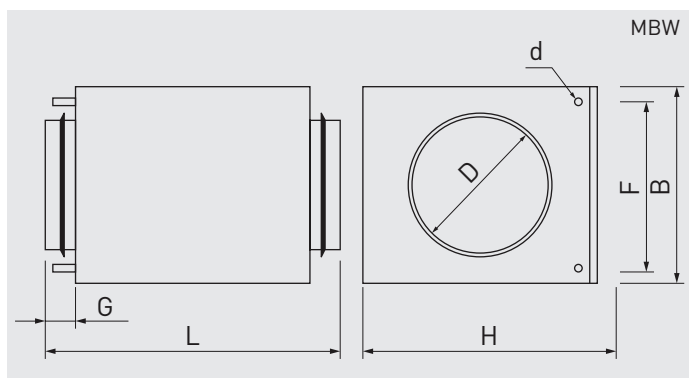
MBW - AIR TEMPERATURE INCREASES ΔT (°C)



MBW - PRESSURE DROP Δp (Pa)

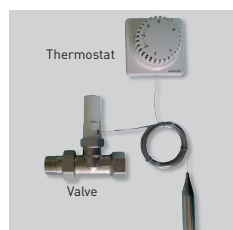


DIMENSIONS (mm)

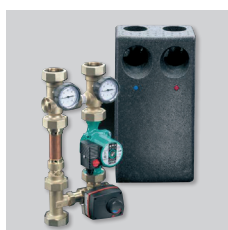


Model	D	B	H	d	F	G	L
MBW-100	100	183	225	10	140	40	380
MBW-125	125	183	225	10	140	40	380
MBW-160	160	258	305	10	215	40	380
MBW-200	200	258	305	10	215	40	380
MBW-250	250	333	385	22	290	40	380
MBW-315	315	408	460	22	365	40	380
MBW-355	355	479	534	22	400	65	430
MBW-400	400	479	534	22	400	65	430
MBW-450	450	529	685	22	425	65	465
MBW-500	500	529	685	22	425	65	465

ACCESSORIES FOR MBW WATER COIL



TRW
 Temperature control unit.



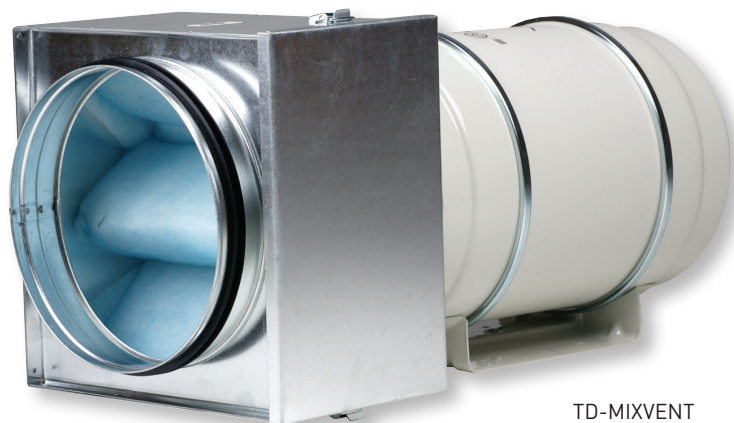
PWV
 Mounting kits.



THE-F
 Thermostat with capillary tube anti-frost sensor.



THE 16/4 A
 External thermostat.

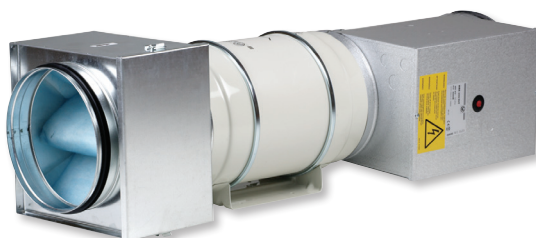


TD-MIXVENT

Filter box MFL

TD-MIXVENT + FILTER BOX MFL-G4

The MIXVENT HEATING system consists on a MFL filtration box installed on the inlet side of the TD-MIXVENT fan and are used when the installation requires supplying filtered clean air. MFL filtration boxes are of EU4 grade filtration and are designed for direct connection with standard circular ducting.



A usual application of MFL filtration boxes is to protect the electric heaters from the dirt, in installations where MIXVENT HEATING system is used.



The MFL filtration boxes are supplied with a cover easily removable to replace the filter.

DIMENSIONS (mm)

Model	A	B	D	E	F
MFL-100 G4	200	200	100	160	196
MFL-125 G4	200	200	125	160	196
MFL-160 G4	200	200	160	154	196
MFL-200 G4	243	244	200	154	202
MFL-250 G4	293	294	250	154	206
MFL-315 G4	342	343	315	154	206
MFL-355 G4	447	448	355	154	254
MFL-400 G4	447	448	400	154	254

PRESSURE DROP OF THE FILTER BOXES Δp (Pa)

