



Designed to be installed on the fans discharge side. The minimum air speed through the heater must be 1,5 m/s.

Maximum air temperature through the heater: 40°C.

The heaters are fitted with:

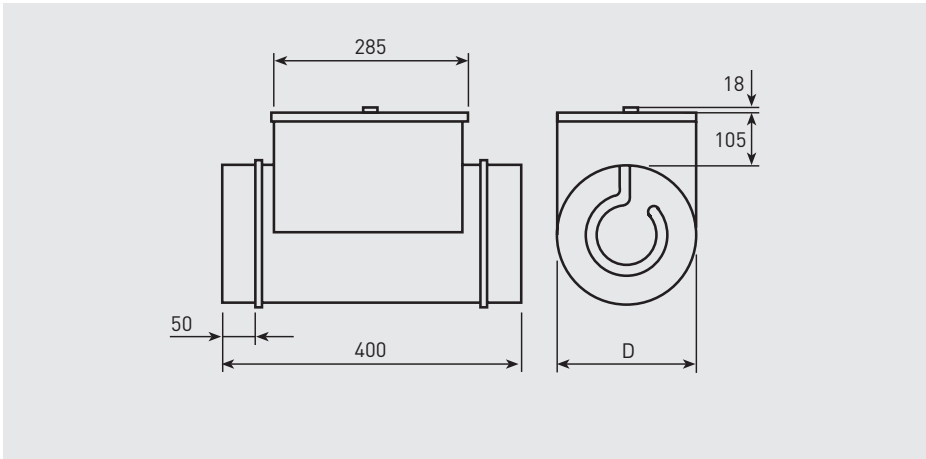
- Tubular structure made of galvanized steel with watertight joints at the entrance and outlet.
- Stainless steel AISI-304 / AISI-321 armoured heating element.
- Double protection circuit to connect to the heater control circuit by means of a safety overheat automatic thermostat connected in series with another safety overheat manual reset thermostat (RESET).
- Wiring box IP43.

For the correct operation of the electric coils it is necessary to use different accessories and installation elements (temperature probe, protection pressure switch, contactors, etc.) which are specified in the corresponding instructions, depending on the installation to be carried out.

#### TECHNICAL CHARACTERISTICS

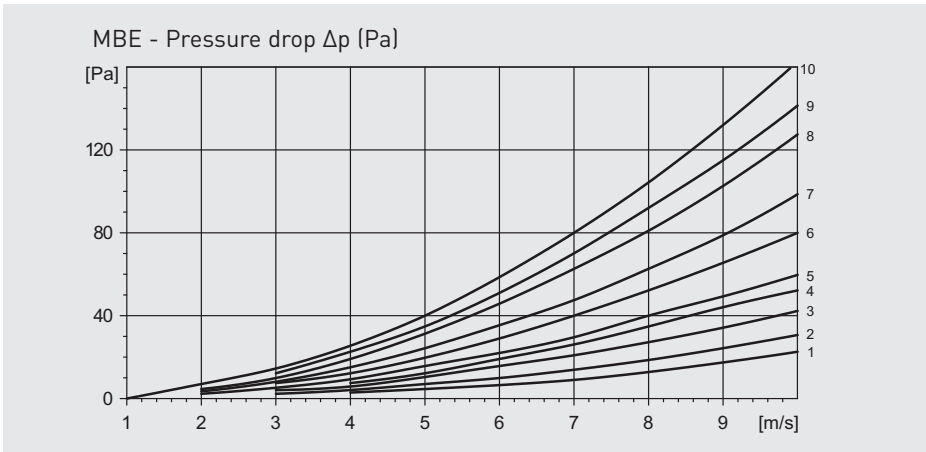
Models	Voltage (V)	Power (W)	Minimum airflow (m <sup>3</sup> /h)	Ø (mm)	Controller type
MBE-100/04B	1/230	400	50	100	PULSER
MBE-100/08B	1/230	800	50	100	PULSER
MBE-125/04B	1/230	400	70	125	PULSER
MBE-125/08B	1/230	800	70	125	PULSER
MBE-125/12B	1/230	1200	70	125	PULSER
MBE-160/07B	1/230	700	110	160	PULSER
MBE-160/14B	1/230	1400	110	160	PULSER
MBE-160/21B	1/230	2100	110	160	PULSER
MBE-200/21B	1/230	2100	170	200	PULSER
MBE-200/20T	2/400z	2000	170	200	PULSER
MBE-200/30T	2/400	3000	170	200	PULSER
MBE-200/40T	2/400	4000	170	200	PULSER
MBE-200/50T	2/400	5000	170	200	PULSER
MBE-200/60T	2/400	6000	170	200	PULSER
MBE-200/90T	3/400	9000	170	200	TTC-25/TTC-2000
MBE-250/20T	2/400	2000	270	250	PULSER
MBE-250/30T	2/400	3000	270	250	PULSER
MBE-250/40T	2/400	4000	270	250	PULSER
MBE-250/50T	2/400	5000	270	250	PULSER
MBE-250/60T	2/400	6000	270	250	PULSER
MBE-250/90T	3/400	9000	270	250	TTC-25/TTC-2000
MBE-315/30T	2/400	3000	430	315	PULSER
MBE-315/60T	2/400	6000	430	315	PULSER
MBE-315/90T	3/400	9000	430	315	TTC-25/TTC-2000
MBE-315/120T	3/400	12000	430	315	TTC-25/TTC-2000
MBE-315/150T	3/400	15000	430	315	TTC-25/TTC-2000
MBE-355/60T	2/400	6000	540	355	PULSER
MBE-355/90T	3/400	9000	540	355	TTC-25/TTC-2000
MBE-355/120T	3/400	12000	540	355	TTC-25/TTC-2000
MBE-355/150T	3/400	15000	540	355	TTC-25/TTC-2000
MBE-355/180T	3/400	18000	540	355	TTC-40F
MBE-400/60T	2/400	6000	680	400	PULSER
MBE-400/90T	3/400	9000	680	400	TTC-25/TTC-2000
MBE-400/120T	3/400	12000	680	400	TTC-25/TTC-2000
MBE-400/150T	3/400	15000	680	400	TTC-25/TTC-2000
MBE-400/180T	3/400	18000	680	400	TTC-40F
MBE-500/60T	2/400	6000	1.070	500	PULSER
MBE-500/90T	3/400	9000	1.070	500	TTC-25
MBE-500/120T	3/400	12000	1.070	500	TTC-25
MBE-500/150T	3/400	15000	1.070	500	TTC-25
MBE-500/180T	3/400	18000	1.070	500	TTC-40F

**DIMENSIONS (mm)**



Model	D
MBE-100	100
MBE-125	125
MBE-160	160
MBE-200	200
MBE-250	250
MBE-315	315
MBE-355	355
MBE-400	400
MBE-500	500

**PERFORMANCE CURVES**



**SELECTION EXAMPLE**

DATA:  
 - Airflow: 700 m<sup>3</sup>/h (Q)  
 - Temp. of supplied air: 5°C  
 - Temp. of exhausted air: 27°C

ELECTRIC HEATER POWER REQUIRED:  
 $P = Q \times 0,36 \times \Delta T = 700 \times 0,36 \times 22 = 5544 \text{ W}$

HEATER SELECTION MBE-200/50T or MBE-250/60T (Diagram 2)  
 The final selection depends on:  
 - Total system pressure drop  
 - Desired sound level  
 - Available space

Model	Curve
100/04B	1
100/08B	7
125/04B	1
125/08B	5
125/12B	6
160/07B	1
160/14B	4
160/21B	5
200/21B	2
200/20T	2
200/30T	4
200/40T	5
200/50T	6
200/60T	7

Model	Curve
200/90T	10
250/20T	1
250/30T	2
250/40T	2
250/50T	4
250/60T	5
250/90T	7
315/30T	1
315/60T	2
315/90T	4
315/120T	5
315/150T	8
355/60T	2
355/90T	3

Model	Curve
355/120T	4
355/150T	7
355/180T	9
400/60T	1
400/90T	2
400/120T	3
400/150T	8
400/180T	10
500/60T	1
500/90T	1
500/120T	2
500/150T	4
500/180T	7

**ELECTRIC HEATER ACCESSORIES**

For more information see electrical accessories.



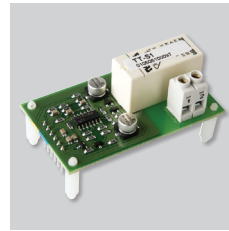
**PULSER**  
Single phase electric heater controller.



**TTC-25 and TTC-40F**  
Three phase electric heater controller.



**TTC-2000**  
Three phase electric heater controller.



**TT-S1**  
Additional PCB to increase the output power controlled.



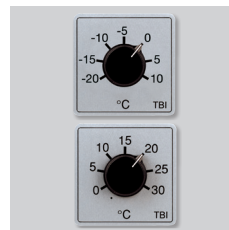
**TG-R**  
Room temperature sensor.  
TG-R430: Adjustable  
TG-R530: Not adjustable



**TG-K**  
Duct temperature sensor.



**PRESOSTATO DPS**  
Differential pressure switch.



**TBI-10 / TBI-30**  
External potentiometer.



**TT-S4/D**  
Module to increase the controller power TTC-40F, up to 66kW.



**TRAFO-15D**  
Transformer to power the TT-S4/D to 24V.