



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:

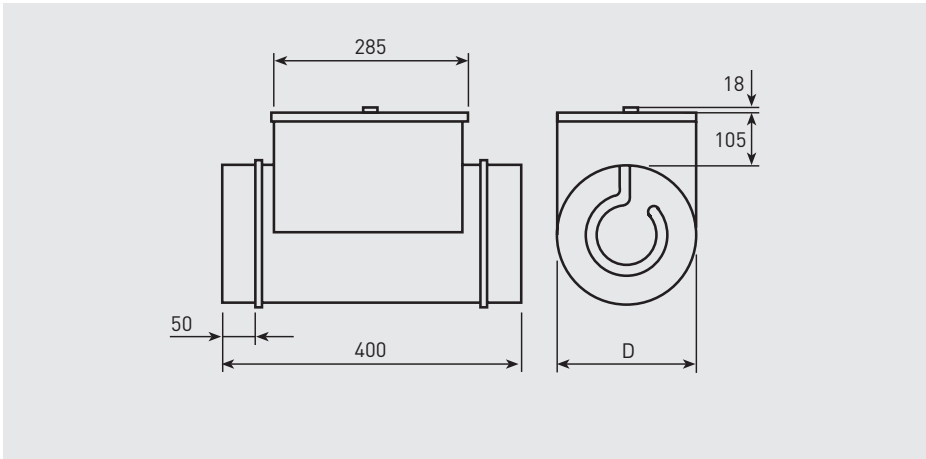
- Armoured heating element.
- Double protection circuit to connect to the heater control circuit by means of a safety overheat automatic thermostat connected in series with another safety overheat manual reset thermostat (RESET).
- Wiring box IP43.

Available temperature sensors in the duct, ambient temperature sensors and speed controllers to complete the installation and to adjust the air temperature according to every need.

#### TECHNICAL CHARACTERISTICS

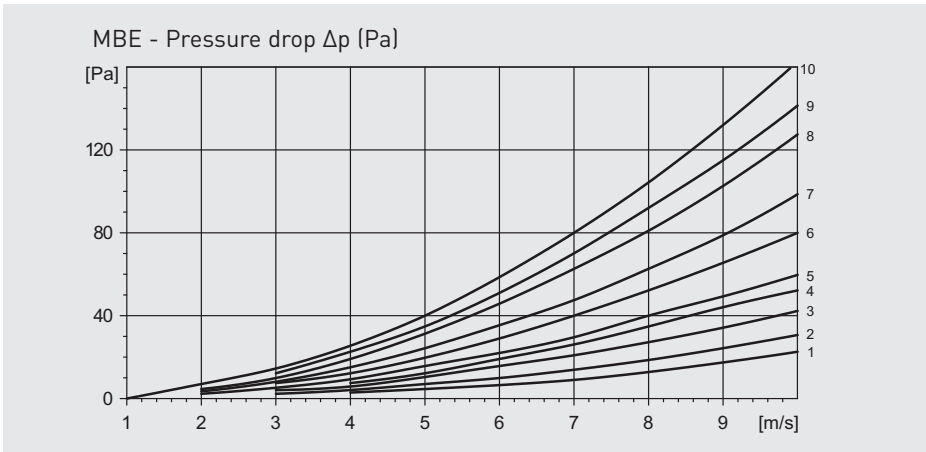
Models	Voltage (V)	Power (W)	Minimum airflow (m <sup>3</sup> /h)	Ø (mm)	Controller type
MBE-100/04B	1/230	400	50	100	PULSER
MBE-100/08B	1/230	800	50	100	PULSER
MBE-125/04B	1/230	400	70	125	PULSER
MBE-125/08B	1/230	800	70	125	PULSER
MBE-125/12B	1/230	1200	70	125	PULSER
MBE-160/07B	1/230	700	110	160	PULSER
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.



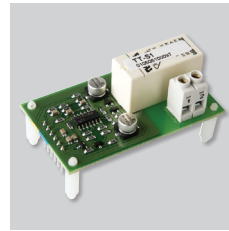
**PULSER**  
Single phase electric heater controller.



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



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



**TTS-1**  
Additional PCB to increase the output power controlled.



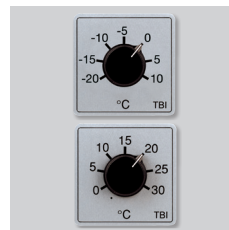
**TG-R**  
Room temperature sensor.  
TG-R430: Adjustable  
TG-R530: Not adjustable



**TG-K**  
Duct temperature sensor.



**PRESOSTATO DPS**  
Differential pressure switch.



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



**TTS-4**  
Module to increase the controller power TTC-40F, up to 66kW.



**TRAF0-15D**  
Transformer to power the TTS-4 to 24V.