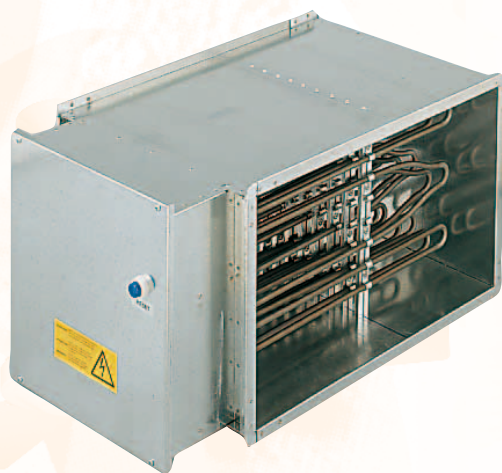


HEATER BATTERIES

IBE Series



SELECTION EXAMPLE

DATA:

- Airflow: 3.300 m³/hr (Q)
- Temp. of supplied air: -5° C
- Temp. of exhausted air: 20° C

HEATER BATTERY POWER REQUIRED:

$$P = Q \times 0,36 \times \Delta T = 3300 \times 0,36 \times (20 - (-5)) = 29700$$

$$W = 29,7 \text{ kW}$$

SELECTION OF IBE -315/30T or IBE-355/30T

HEATER (Diagram 2):

The final selection depends on:

- Total system pressure drop
- Desired sound level
- Available space

Pressure drop ΔP (PA)

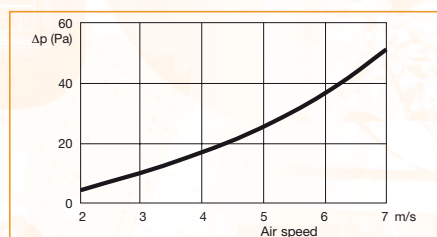


Diagram 1

Temperature difference ΔT between supplied and exhausted air (°C)

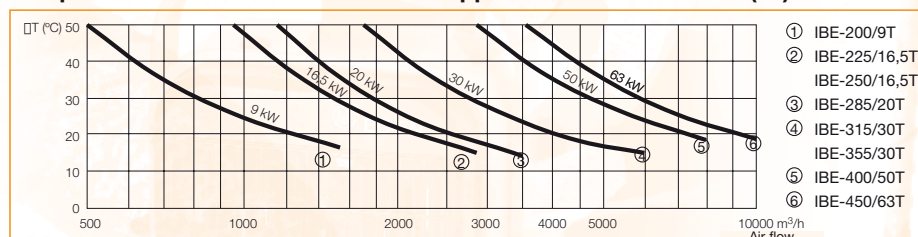


Diagram 2

Designed to be installed on the fans discharge side.

The minimum air speed through the heater batteries must be 2 m/s.

Maximum air temperature through the battery: 40°C.

The batteries are fitted with:

- Armoured heating elements to connect to the three phase net (3x400)
- Double protection circuit to connect to the battery control circuit by means of a safety overheat automatic thermostat (60°), 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. By means of this system the supplied air can reach up to 50°.

(See the electrical accessories section).

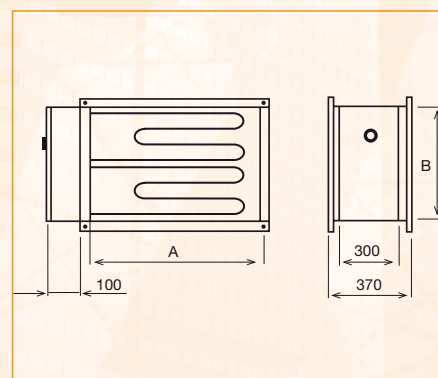
■ Dimensions (mm)

Minimum distance between the fan and the battery, 2,5xA (inner width of the flange)

Model	A	B
IBE-200	400	198
IBE-225	500	248
IBE-250	500	298
IBE-285	600	298
IBE-315	600	348
IBE-355	700	398
IBE-400	800	498
IBE-450	1000	498

■ Technical characteristics

Models	Supply voltage (V)	Power (kW)	Heather element subdivisions (kW)	Min. air flow (m³/h)	Controller type
IBE-200/9T	3/400	9	3x3	580	TTC-2000
IBE-225/16,5T	3/400	16,5	3x5,5	900	TTC-2000
IBE-250/16,5T	3/400	16,5	3x5,5	1100	TTC-2000
IBE-285/20T	3/400	20	3x6,7	1300	TTC-2000 + TTS-1
IBE-315/30T	3/400	30	6,8+6,8+8,2+8,2	1500	TTC-2000 + TTS-1
IBE-355/30T	3/400	30	6,8+6,8+8,2+8,2	2000	TTC-2000 + TTS-1
IBE-400/50T	3/400	50	3x16,7	2400	-
IBE-450/63T	3/400	63	3x21	3600	-



BATTERY HEATERS

■ Battery heater accessories

For more information, see electrical accessories.



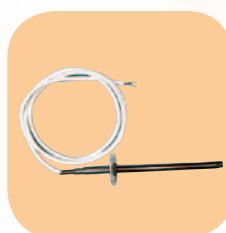
PULSER
Single-phase electric heater controller



TTC
Three-phase electric heater controller



Sensor TG-R
Room temperature sensor



Sensor TG-K
Duct temperature sensor



TBI
External potentiometer