



Air Conditioning

**X-Heat Electric Duct Heater**

At Gerhman we are driven by a strong desire to continuously generate improvements. We do that by developing products and systems that are easy to use and energy efficient, together with industry-leading knowledge, support, logistics and efficient availability.



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## Air Conditioning

### X-Heat

### Electric Duct Heaters



The X-Heat electric duct heater with integrated temperature control. An easy to install solution for all areas where a constant room or air supply temperature is required.

It is equipped with an integrated temperature controller and can be mounted in the ducting in almost any position.

#### Benefits

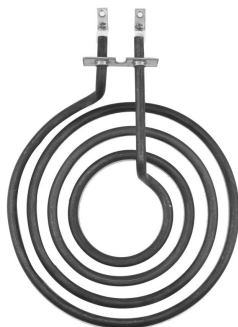
- Minimal Energy Loss
- Quick Installation
- Quality Guarantee

#### Options

- Airflow sensor
- Fan-off delay timer
- BMS input/output
- Remote adjustment

#### Applications

- Pre-heat fresh air
- Re-heat air from heat exchanger
- Room heating
- Vary individual room temperature



## Design

### X-Heat

Low surface temperature high-grade steel heating elements enclosed in a galvanised steel casing with integrated temperature control, equipped with an automatic temperature cut- out, resetting temperature cut out resets itself below 50°C and manual safety trip needs manual resetting above 70°C. A duct sensor and air flow monitor is also included.

	Standard	Optional
<b>Casing</b>	Galvanised	AISI 304, AISI 316
<b>Heating Elements</b>	AISI 304	AISI 316
<b>Temp. Control</b>	Integrated temp control, automatic cut-out	
<b>Safety Trip</b>	Yes	
<b>Duct Sensor</b>		Optional
<b>Air Flow Monitor</b>		Optional
<b>Control</b>	Standard Connection Box	Automation
<b>Casing Leakage</b>	Class C ( EN1751 )	

- Electric resistance heaters comprise of plain sheathed stainless steel mineral insulated type elements mounted in standard ISO duct sizes.
- The terminal box has knockouts for power input & signal inputs.
- A mains isolator will be required adjacent to the heater.
- Heating elements are stainless steel mineral insulated type, sized for air heating application.
- Overheat cut-out is fail safe, 120c pre-set, liquid gas type with contacts rated for direct load switching (single phase).

## Capacity

### X-Heat

Diameter [mm]	Min. airflow [m <sup>3</sup> /h]	Voltage V/50Hz]	Power [kW]	Nominal current, In [A]
100	40	1~ 230	0,3/0,6/1,0	1,4/2,8/4,3
125	70	1~ 230	0,6/1,0/1,3/1,5/1,8/2,5	1,4/4,3/5,5/6,8/8,2/10,9
160	110	1~ 230	1,3/2,0/2,5/3,0/5,0	5,5/9,1/10,9/13,0/21,7
		3~ 400	6,0	8,7
200	170	1~ 230	1,3/2,0/2,5/5,0	5,5/9,1/10,9/21,7
		3~ 400	6	8,7
250	270	1~ 230	1,3/2,0/3,0/5,0	5,5/9,1/13,0/21,7
		3~ 400	6,0/9,0	8,7/13,0
315	415	1~ 230	6	27,27
		3~ 400	6,0/9,0/12,0	8,7/13,0/17,3
400	690	1~ 230	6	27,27
		3~ 400	6,0/9,0/12,0	8,7/13,0/17,3

**\* OTHER SIZES AND MODELS AVAILABLE ON REQUEST \***

## Calculation formula

$$P = 0,36 \times Q \times \rho \times C_p \times dT$$

P: Heating power (kW)

Q: Flow rate volume (m<sup>3</sup>/h)

ρ: 1,204 (kg/ m<sup>3</sup>)

C<sub>p</sub> :-1,005 (kJ/kg)

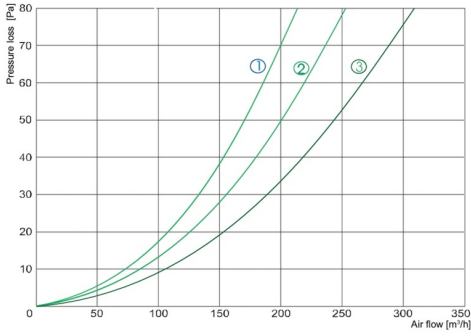
dT: Temperature difference °C

### **Warning !**

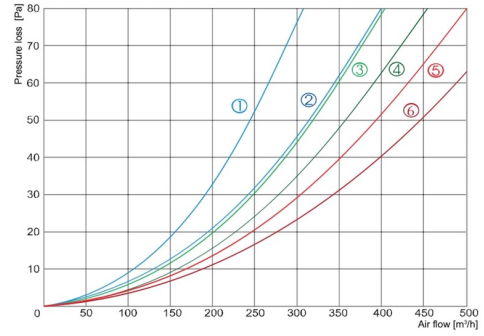
*Air speed must be at least 1,5 m/s over the heating elements. Otherwise heater will be damaged due to overheating*

# Performance data

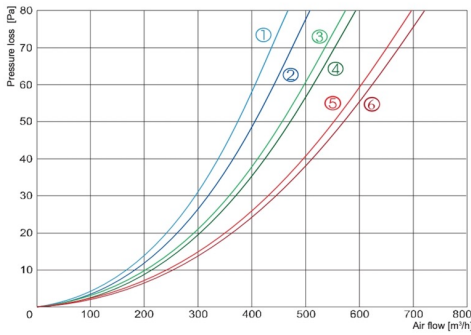
## X-Heat



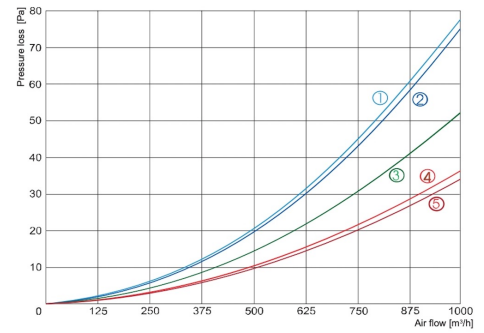
- ① 100-1,0
- ② 100-0,6
- ③ 100-0,3



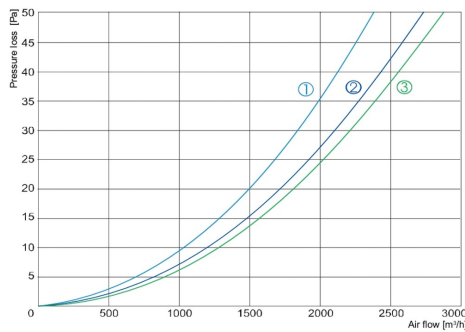
- ① 125-2,5
- ② 125-1,8
- ③ 125-1,5
- ④ 125-1,3
- ⑤ 125-1,0
- ⑥ 125-0,6



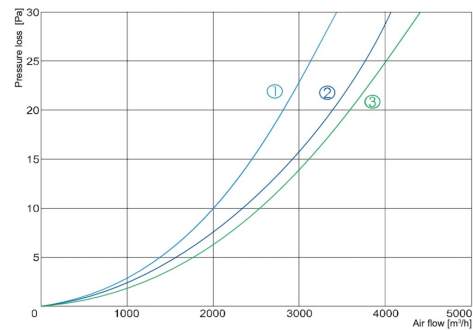
- ① 160-6,0
- ② 160-5,0
- ③ 160-3,0
- ④ 160-2,5
- ⑤ 160-2,0
- ⑥ 160-1,3



- ① 200-6,0
- ② 200-5,0
- ③ 200-2,5
- ④ 200-2,0
- ⑤ 200-1,3



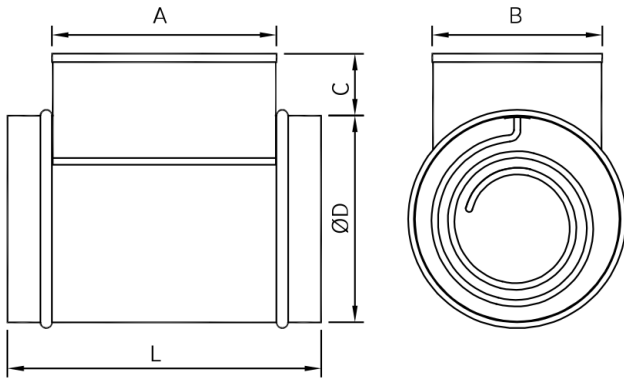
- ① 315-12,0
- ② 315-9,0
- ③ 315-6,0



- ① 400-12,0
- ② 400-9,0
- ③ 400-6,0

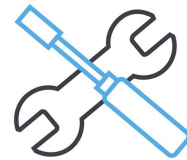
# Sizes

## X-Heat

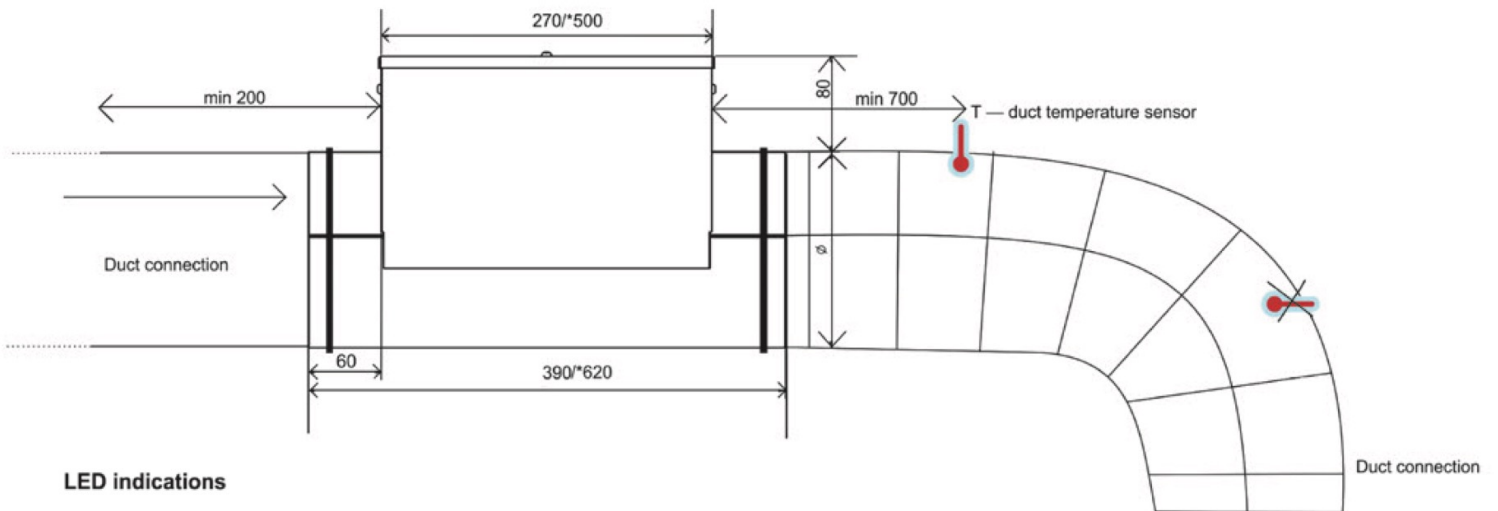


	Min	Max
<b>Dia</b>	100 mm	400 mm
<b>L</b>	390 mm	620 mm
<b>A</b>	270 mm	500 mm
<b>B</b>	200	
<b>C</b>	75	110

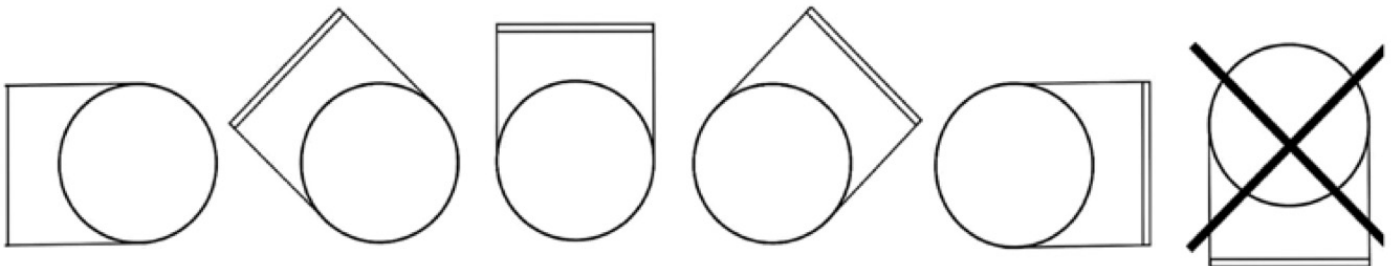
## Installation

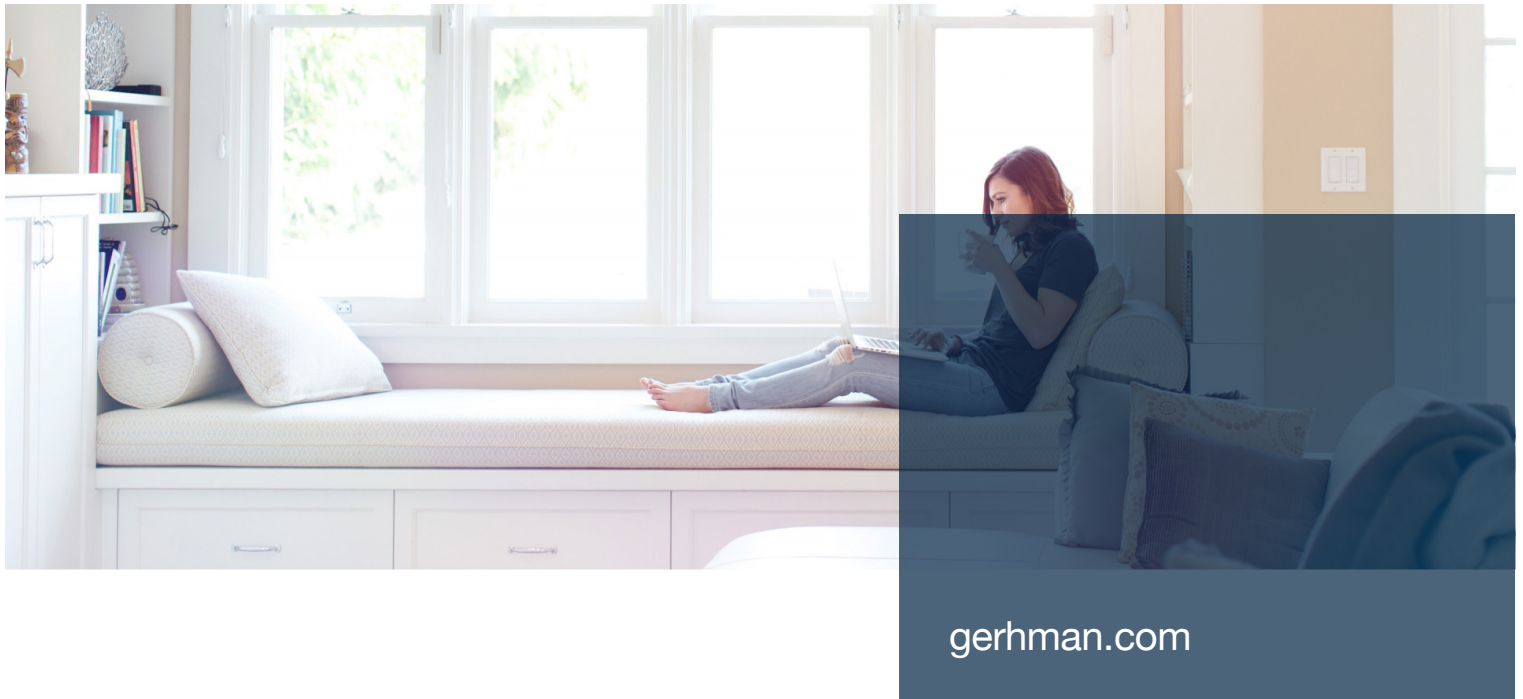


Dimension (mm.), 500-15000 W  
 \*Dimensions (mm), 18000-24000 W



### LED indications





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