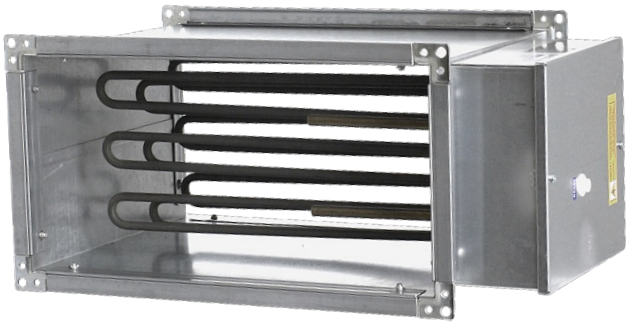

Air Conditioning

X-Heat.SR Electric Heater for Rectangular Ducting

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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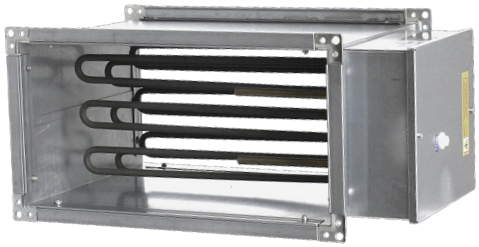


Air Conditioning

X-Heat.SR

Electric Heater for Rectangular Ducting

X-Heat.SR electric duct heater for rectangular ducting 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.SR

Low surface temperature high-grade stainless 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.

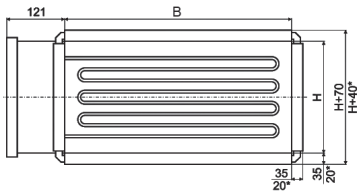
	Standard	Optional
Casing	Galvanised	AISI 304, AISI 316
Heating Elements	AISI 304	AISI 316
Temp. Control	Integrated temp control, automatic cut-out	
Safety Trip	Yes	
Duct Sensor		Optional
Air Flow Monitor		Optional
Control	Standard Connection Box	Automation
Casing Leakage	Class C (EN1751)	

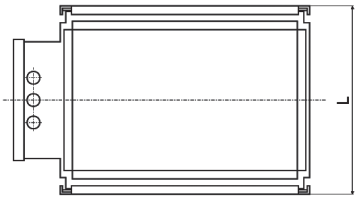
- Electric resistance heaters comprise of plain sheathed stainless steel mineral insulated type elements mounted in standard ISO duct sizes.
- Casing is 0.9mm galvanised steel with an airtight seam.
- The terminal box has knockouts for power input & signal inputs.
- A mains isolator will be required 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).

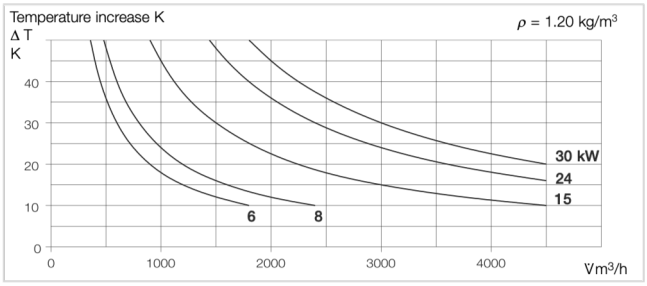
Selection and operations

X-Heat.SR

The heater batteries generate an additional resistance that must be considered when designing the system. The temperature increase depends on air flow volume and heat output (see diagrams above). In order to prevent an unwanted thermal cut out, the air flow volume must be higher than the minimum figure shown in the chart.







Warning !

Air speed must be at least 1,5 m/s over the heating elements.

Otherwise heater will be damaged due to overheating

Dimension [mm]	Capacity [kW]																			
	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	60	66
400 x 200	▪	▪	▪	▪	▪	▪	▪													
500 x 250	▪	▪	▪	▪	▪	▪	▪	▪	▪	X	X	▪	X	X	▪					
500 x 300		▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪				
600 x 300		▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪				
600 x 350		▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪				

Dimension [mm] B x H	L (installed length in mm)						
400 x 200	t/m 12 kW: 370	15 t/m 18 kW: 420	21 kW: 520				
500 x 250	t/m 12 kW: 370	15 t/m 18 kW: 420	21 kW: 520	24 kW: 600	27 kW: 670	36 kW: 820	45 kW: 970
500 x 300	t/m 24 kW: 370	27 t/m 33 kW: 440	36 t/m 42 kW: 520	45 t/m 48 kW: 600	-	-	-
600 x 300	t/m 24 kW: 370	27 t/m 33 kW: 440	36 t/m 42 kW: 520	45 t/m 48 kW: 600	-	-	-
600 x 350	t/m 30 kW: 370	33 t/m 39 kW: 420	42 en 48 kW: 520				
700 x 400	t/m 48 kW: 370	51 en 54 kW: 420	57 t/m 66 kW: 440				
800 x 500	t/m 48 kW: 370	51 en 54 kW: 420	57 t/m 66 kW: 440				
1000 x 500	t/m 48 kW: 370	51 en 54 kW: 420	57 t/m 66 kW: 440				

The required capacity can be calculated by using the below formula:

P = 0,335 * Qv * Δ T

P: required heater capacity (watt)
Qv: air volume [m3/h]
Δ T: difference in air temp. (LTA-ETA) [K]

LTA: leaving air temperature
ETA: Entering air temperature

Capacity (Kw)	Electric Supply (V)
0,5 - 3,0	230 Volt
3,1 - 6,0	400 Volt 2
6,1 -	400 Volt 3

Installation

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Installation and electrical connection

Installation and electrical connection Electrical duct heaters can be installed horizontally in any position except with the electrical connection box downward. Vertically only if the air flow direction is upwards

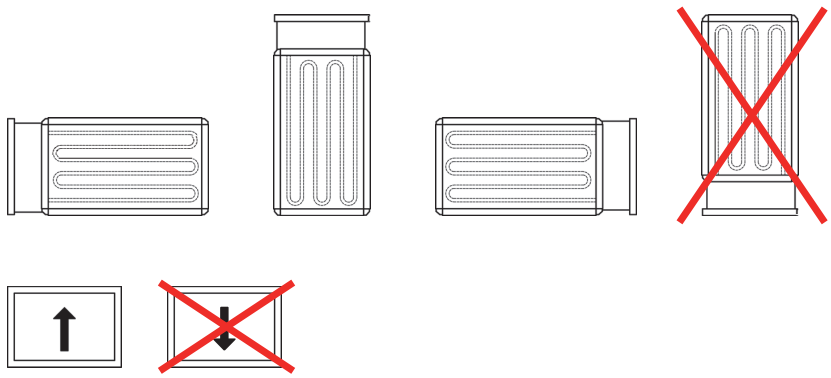
Heaters installation positions

Heaters can't be installed in explosive and aggressive substances environment. Heaters can be used only for clean air heating or preheating. Heaters intended
only for indoor installation. If the heater is installed in such way that accidental contact with the heating elements is possible a protective cover must be installed. The air velocity in the duct must be minimal 1,5 m/s.

Important

The installation to the main power supply may only
be wired by a competent electrician. The power supply cable must be selected in the ratio with the power of the heater. When installing these heaters, the standards and regulations in your country must be strictly followed. When installing this product ensure the power source is adequately protected by means of a suitably-rated fuse or automatic circuit breaker (not included), to enable the installer to cut all power.

Automatic circuit breaker must be selected in compliance with the power and nominal current (see the electrical rating label on the heater casing) of the heater and should have characteristic B. Connect the heater to the main power supply, check that the voltage, frequency, power and current are the same as those indicated on the electrical rating label. The heater must have earth connection.



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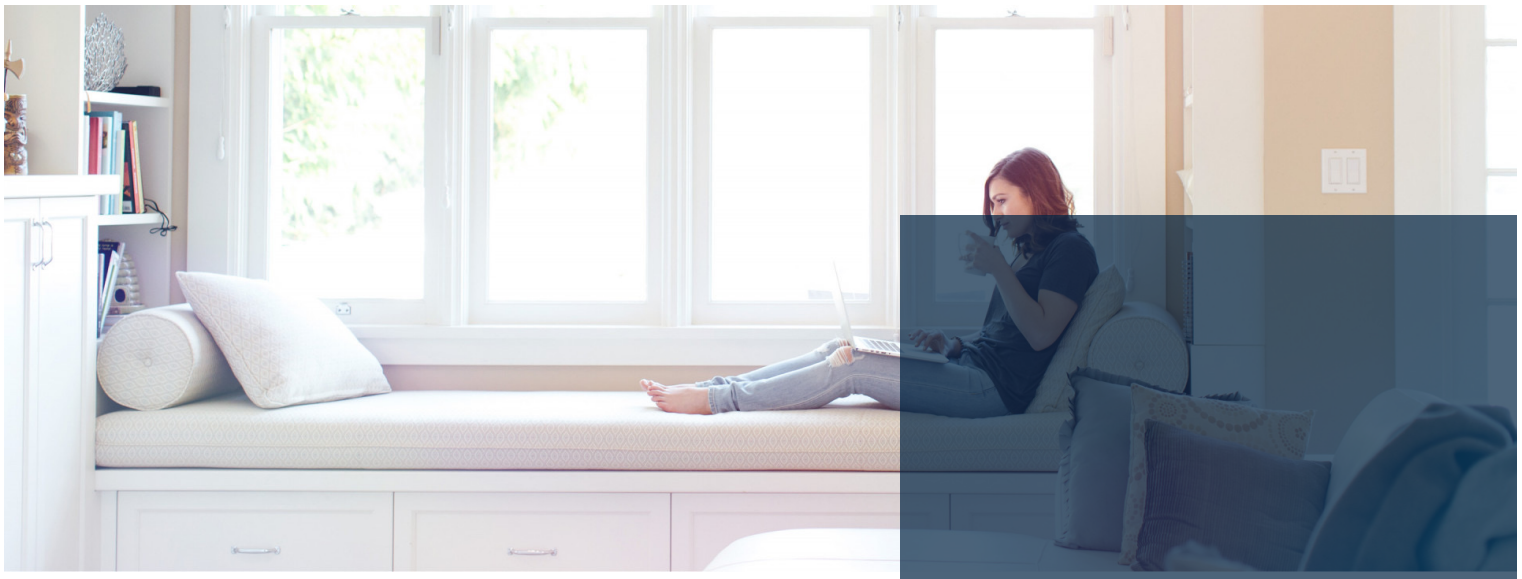

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