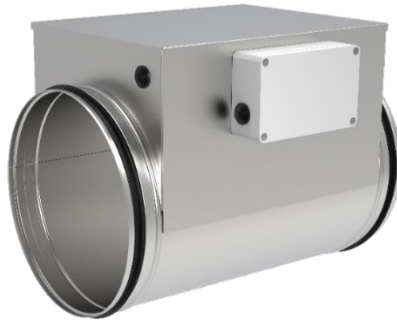




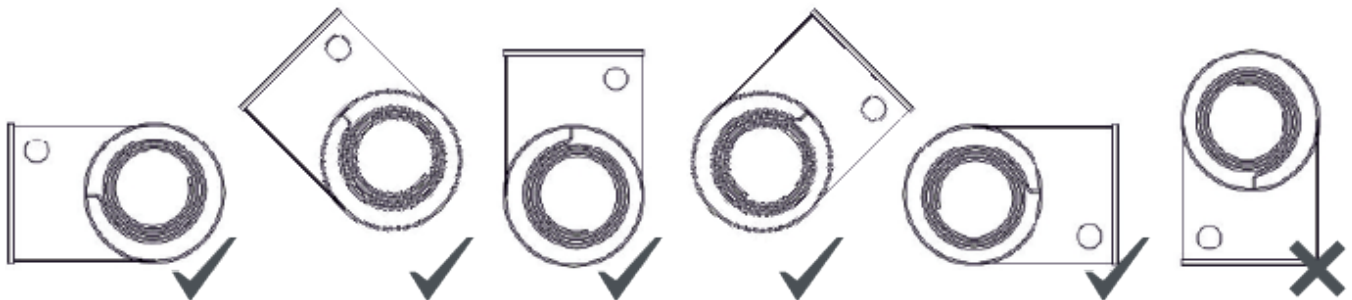
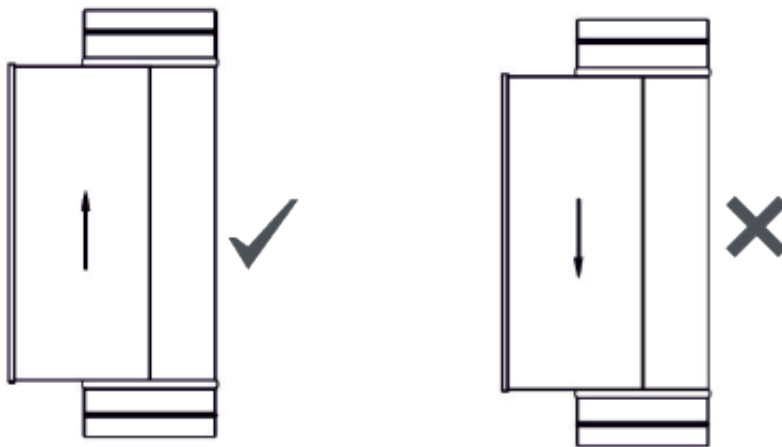
The external preheating surfaces are used in colder climates, where the traditional preheating surface mounted inside the ventilation unit cannot deliver enough energy to preheat the intake air to prevent the unit (the heat recovery unit) from freezing.

In addition, the preheating surfaces can be used in rooms where reducing the AM unit's exhaust airflow is needed while maintaining the supply airflow. This could, for example, be physics laboratories with local exhaust ventilation or rooms equipped with cooker hoods.

The external preheating surfaces are mounted in the intake ductwork, which is fastened to the ventilation unit's intake duct connection.

Mounting

If the heater is mounted vertically, the airstream must be upwards through the heater, never downwards. When mounted horizontally the part with the electrical installation must not be pointed downwards. The mounting positions are shown below:



Electrical connection

The external preheating surfaces require an external power supply, which is not included in the Airmaster delivery. Please refer to the electrical wiring diagrams (document number 16590, 16591 or 16592) for installing the preheater.

- Diagram 16590 must be used in cold surroundings to prevent the heat exchanger from freezing.
- Diagram 16591 must be used for units with AQC-L when you want to reduce the extraction airflow while maintaining the supply airflow.
- Diagram 16592 must be used for units with AQC-P when you want to reduce the extraction airflow while maintaining the supply airflow.

When having a situation using wiring diagramme 16591 or 16592 you should contact Airmaster before ordering as the unit needs special settings.

IMPORTANT:

The installation to the mains power supply may only be carried out by a qualified electrician. The power supply cable must be selected according to the power rating of the heater. When installing these heaters, all local standards and regulations must be followed.

An electrical isolation automatic circuit breaker (not supplied by Airmaster) must be included in the installation to allow the installer to disconnect all power supply lines. The circuit breaker must be selected based on the power and nominal current (see the electrical rating plate on the heater cover) and should have a type B characteristic.

Connect the heater to the main power supply and ensure that the voltage, frequency, power, and current match those indicated on the electrical rating plate. The heater must be properly earthed.

Material and finish

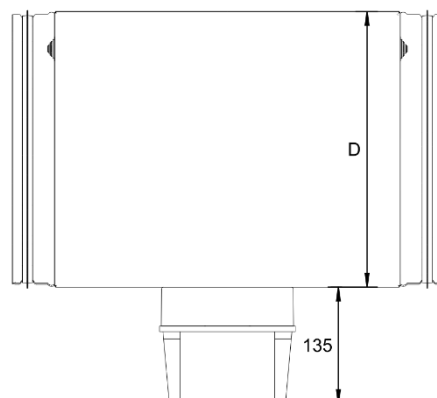
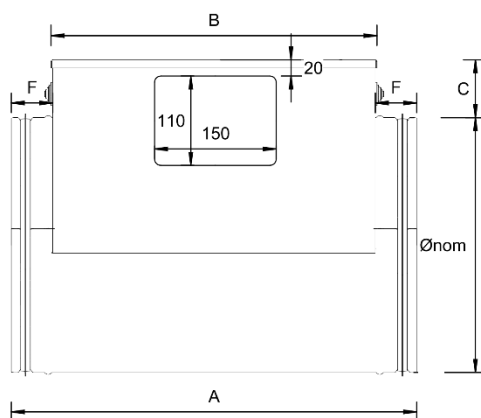
Casing: Aluzinc.

Heating element: Bright annealing stainless steel, AISI 316L.

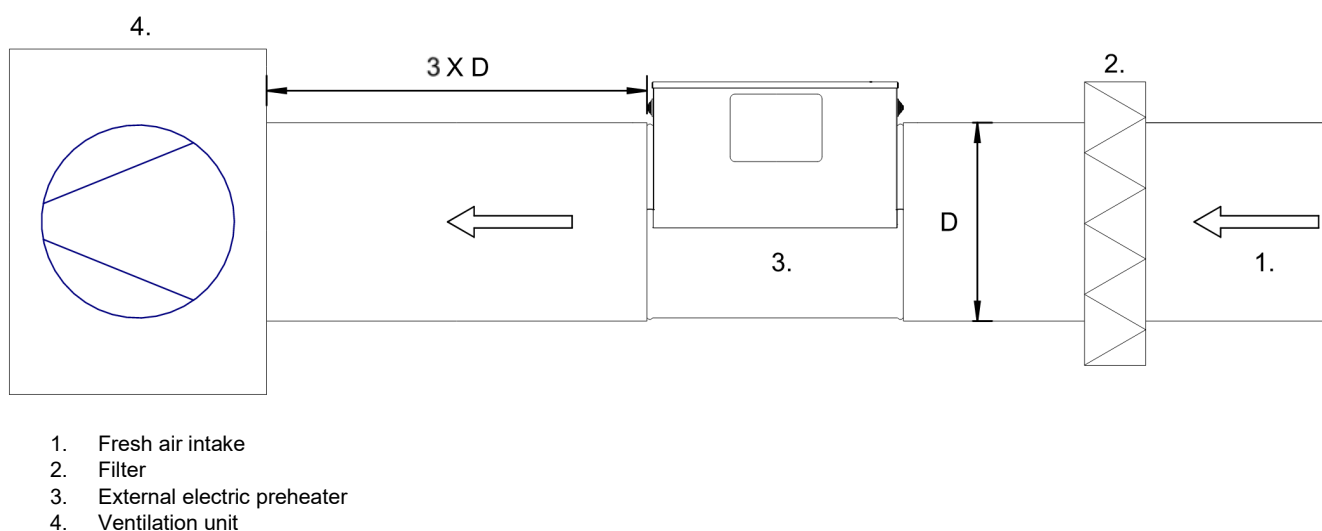
Maintenance

The external parts should be wiped with a damp cloth. The heater must be inspected and cleaned regularly. Objects and dust on the heater surface must be removed to ensure the heater's efficiency.

Technical data



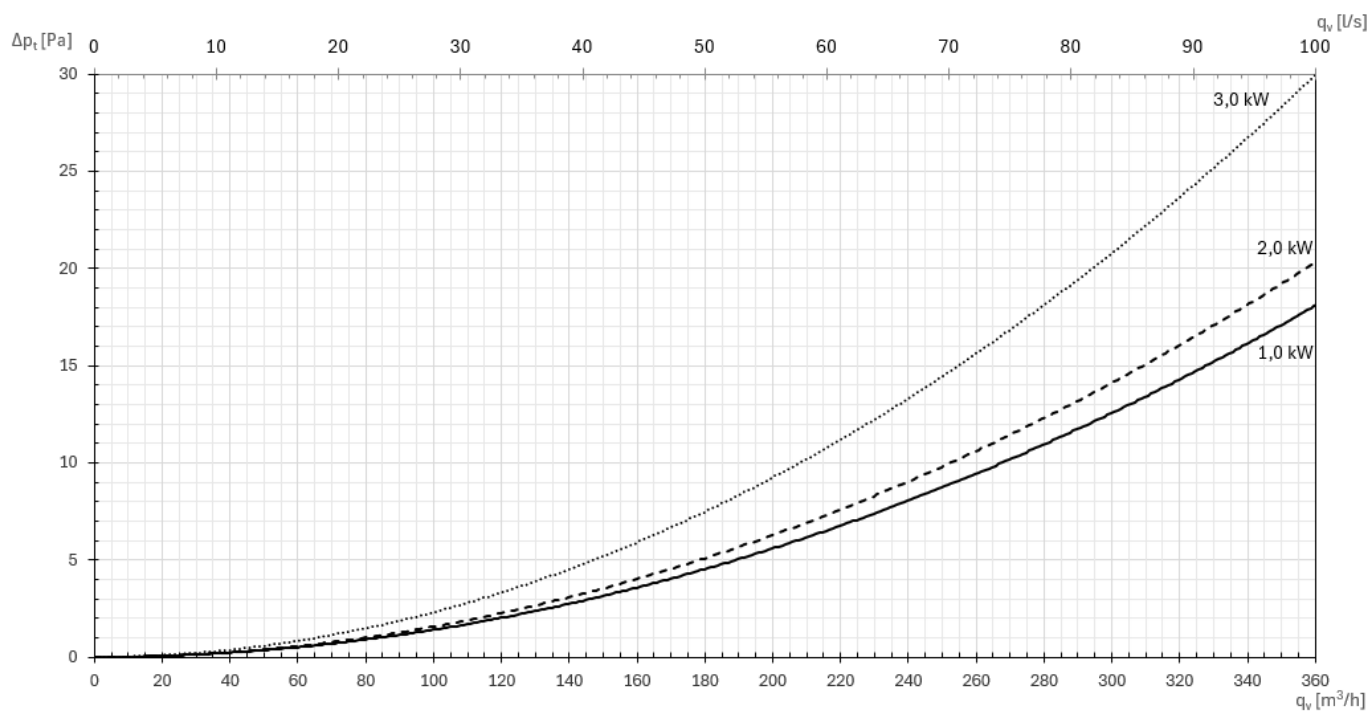
External electric preheater offered for	Capacity	Dimensions						Electrical connection
	kW	Ø _{nom}	A	B	C	D	F	
AM 150	1.0	160	370 mm	276 mm	71 mm	160 mm	~50 mm	1 phase / 230 V
AM 150, AM 300	2.0	160	370 mm	276 mm	71 mm	160 mm	~50 mm	1 phase / 230 V
AM 300	3.0	160	370 mm	276 mm	71 mm	160 mm	~50 mm	2 phases / 400 V
AM 500	2.0	250	370 mm	276 mm	71 mm	250 mm	~50 mm	1 phase / 230 V
AM 500	3.0	250	370 mm	276 mm	71 mm	250 mm	~50 mm	2 phases / 400 V
AM 500	4.0	250	370 mm	276 mm	71 mm	250 mm	~50 mm	2 phases / 400 V
AM 500	5.0	250	370 mm	276 mm	71 mm	250 mm	~50 mm	2 phases / 400 V
AM 500	6.0	250	370 mm	276 mm	71 mm	250 mm	~50 mm	3 phases / 400 V
AM 500	7.5	250	370 mm	276 mm	71 mm	250 mm	~50 mm	3 phases / 400 V
AM 800	3.0	315	373 mm	276 mm	71 mm	315 mm	~50 mm	2 phases / 400 V
AM 800, AM 900, AM 1000	4.0	315	373 mm	276 mm	71 mm	315 mm	~50 mm	2 phases / 400 V
AM 800, AM 900, AM 1000	5.0	315	373 mm	276 mm	71 mm	315 mm	~50 mm	2 phases / 400 V
AM 800, AM 900, AM 1000	6.0	315	373 mm	276 mm	71 mm	315 mm	~50 mm	3 phases / 400 V
AM 800, AM 900, AM 1000	7.5	315	373 mm	276 mm	71 mm	315 mm	~50 mm	3 phases / 400 V
AM 800, AM 900, AM 1000	9.0	315	373 mm	276 mm	71 mm	315 mm	~50 mm	3 phases / 400 V
AM 900, AM 1000	10.5	315	373 mm	276 mm	71 mm	315 mm	~50 mm	3 phases / 400 V
AM 1000	12.0	315	500 mm	402 mm	71 mm	315 mm	~50 mm	3 phases / 400 V



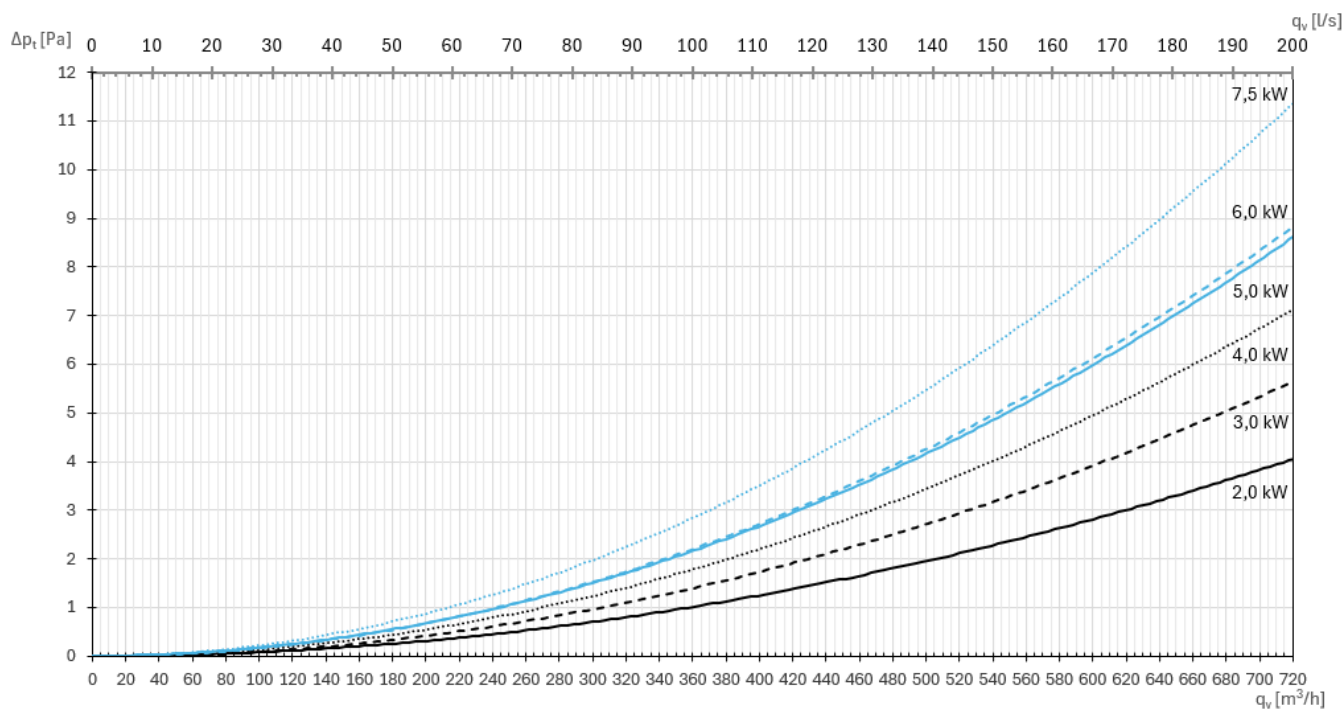
For protection of the heater, it is recommended that a filter is installed upstream from the heater. A straight duct with a length of distance of 3 times the diameter of the duct must be installed between the heater and the ventilation unit.

Pressure loss

Preheater Ø160



Preheater Ø250



Preheater Ø315

