HEATCRAFT™ Worldwide Refrigeration

Axial fan dry cooler

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

E Solutions Efficiency • Environment

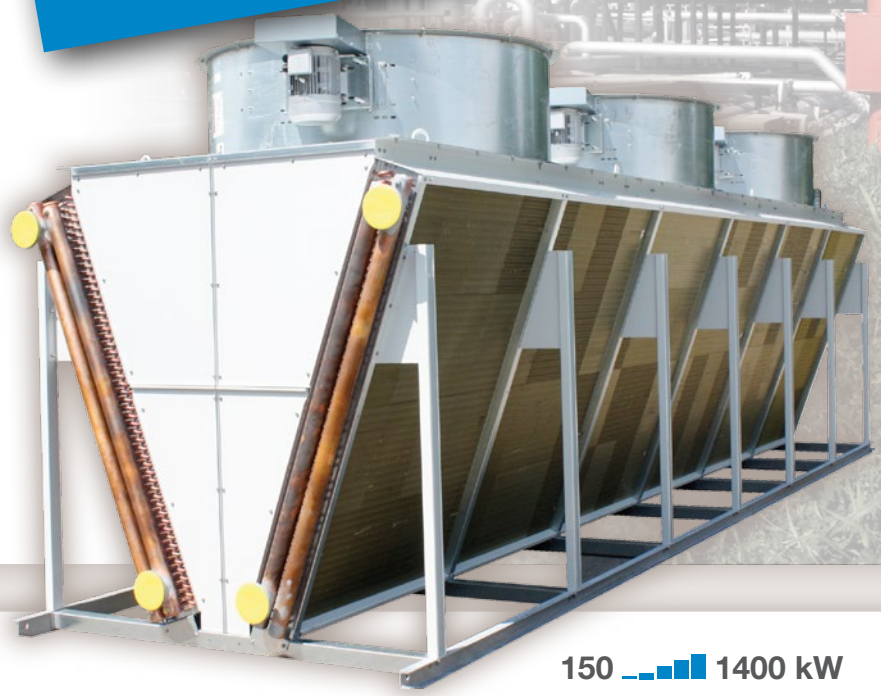
AEV range

Main applications:

co-generation, power plants, process, industry, air conditioning, free cooling ... and cooling all kinds of fluids compatible with copper.

- Low space requirements, reduced footprint.
- High capacity of up to 1,400 kW.
- Low power consumption, 1 to 3 fans only.
- Motors capable of operating at high outdoor temperatures of up to 60°C.
- Extremely low noise level, reduced rotation speeds.

Adapted to high-temperature reheated air



Low noise level
Natural refrigerants

150 _ 1400 kW

FRIGA-BOHN

HK® REFRIGERATION

AEV - Axial fan dry cooler

Description

Casing

• Hot dip galvanized steel frame, casing in galvanized sheet steel RAL 9002.

Ventilation

• The fan assemblies are equipped with Ø1840mm fans with a special blade design, offering a high efficiency and extremely low noise level.
• The blades in synthetic material are highly corrosion and wear resistant.
• The air outlet temperature may be high, the motors being out of the air flux due to the pulleys and belts transmission.
• Asynchronous motors, long life lubricated, three phase, 400V/50Hz, classF, conform to the CEI34-1 norm.
• Fan guards are compliant with safety standards.

Coil

• The dry coolers are equipped with coils with the following characteristics :
- Copper tubes in a staggered arrangement and corrugated aluminium fins for optimum heat transfer.
- Headers with air vents and drain plugs.
- Connections : steel pipe up to DN50, flanges for larger sizes.

Freezing risk

• A standard dry cooler cannot be fully drained simply by opening the drain fitting orifices.
• Always run the piping leak tests using the selected fluid.
• For an application with plain water, and when the ambient temperature may drop below 0°C, a special coil design is required. Please consult us.

Certifications

Advantages

Selection

As the performance of a dry cooler varies a lot with each working condition, it is not possible to present a selection method in this document.
Only the selection software, at your disposal on simple request, will allow you to select the dry cooler which suits the best your needs.
In case of emergency, do not hesitate to consult us in specifying: capacity, maximum day/night noise level, type of fluid, ambient temperature, fluid inlet temperature, fluid outlet temperature (or flow), maximum allowed pressure drop, other external constraints.

Installation

Simple and cheap installation (steel pipes)

Limited floor space.

Recommendations:
According to the professional regulations concerning :
- Vents and drains
- Surge tanks (**VEX** option)
- Flexible connexions
- Vibration protection
- Correct percentage of glycol
- Fan motor protection

Water treatment

The freezing point of the fluid must be at least 5K below the minimum winter ambient temperature of the site of installation.

Servicing / Maintenance

Reduced maintenance.

Low maintenance costs.

Dry coolers advantages

Replace advantageously cooling towers :
- no air and water bacteria contamination
- no water consumption
- no steam production
- flexible use in winter time
- easy control of fluid temperature in winter time

An optimised solution (noise level, energy consumption, size, type of temperature control...) due to multiple selection possibilities.

Kit	Factory	Options
		Coil
	VEX	Surge tank.
	VID	Total-draining special circuits.
	BAE	Vinyl protection of fins.
	BXT	Blygold Polual XT protection of fins.
		Protection and control enclosure
	CMP	Motor protection cabinet.
	RT3	CMP + condensation pressure control with speed variation (frequency).
		Other options
		Please contact us for details.