Construction details

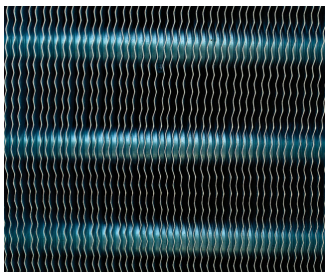
Previous generation products

Construction details

1. Material options

- All steel panels and structural members of the **dry cooler section** shall be constructed from heavy gauge steel, coated on both sides by zinc-aluminium-magnesium ally coating applied by means of a continuous hot dip galvanizing process.
- All steel panels and structural members of the **pre-cooler section** shall be constructed from heavy gauge steel, coated on both sides by zinc-aluminium-magnesium ally coating applied by means of a continuous hot dip galvanizing process.

2. Heat transfer media



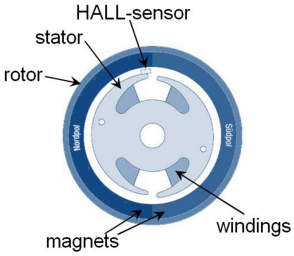
- The V-shaped finned coil is constructed of **staggered and seamless copper tubes** (15,9 or 12,7 diameter) with aluminium, rippled and corrugated fins.
- **2,5 mm fin spacing** for optimal air turbulence
- Thick and seamless copper headers and threaded steel connections
- Pressure tested at 15 bar
- **Try our option for aggressive environments**: special pre-coated anti-corrosion aluminium fins.

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3. Air movement system



- **Axial fan** with exceptionally **compact direct drive** short integrated motor and fan guard.
- The **low profile fan** with fan guard features an **impeller and motor** and is balanced as a complete unit using dynamic single plane balancing. Balance grade is G6.3.
- Fan and motor totally **maintenance free**, and allow frequent starting.
- **Bearings seals and motor encapsulation** for long service life.
- The adiabatic units fitted with **EC motors** (EC in model number) provide an immense **reduction in power consumption**. The fans are piloted over an RS485 bus system by the controller supplied together with the electrical panel.
  Principle of operation: the magnetic field of the permanent magnets in the outside rotor is used by the consecutively powered windings in the inside stator to let the fan run. The Hall-sensor detects where the magnetic field is strongest, which determines which set of windings will be activated.



4. Adiabatic pre-cooler



- Evaporative cooling pad of **impregnated cellulose** with different flute angles encased in bolted heavy gauge **stainless steel**.
- **Distribution pad on top** for complete pad wetting.
- **Once-through** water distribution system, no need for pumps, water drained to sewage.

5. Electrical panel and adiabatic controls



- Fully equipped **factory-installed electrical panel** with integrated motor controls and adiabatic controls as well as all the required circuit breakers and other auxiliary components.
- Units with regular AC have an electrical panel which additionally contains a **variable frequency drive**.

Like to know more about the DFCV-AD TrilliumSeries cooler construction details? Contact your local BAC representative.

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