



# TVFC Cooler

Dry and adiabatic cooling

## Key benefits

- Largest adiabatic capacity
- Highest degree of redundancy
- Unrivalled reliability



### TVFC cooler characteristics

Counter flow, adiabatic pre-cooling, axial fan, induced draft

### Capacity range

250 - 2000 kW

### Maximum entering fluid temperature

60°C

### Typical applications

- Small to medium HVAC and industrial applications
- Locations with limited water and space availability
- High temperature industrial applications



## Largest adiabatic capacity

- TVFC TrilliumSeries coolers offer **maximum thermal performance per m<sup>2</sup> footprint**, with an optimal air distribution over V-shaped coils with maximum heat transfer surface.
- TVFC TrilliumSeries coolers can be designed with a coil freeze-up safeguard that allows for operation with **pure water as process fluid**, providing on average **8% higher performance** than comparable systems with glycol solutions.
- Lowest system pump motor kW due to low hydraulic coil pressure drops for an **optimal system efficiency**.
- Synchronous EC motors with IE4+ efficiency; variable speed control for **maximum system efficiency**.

## Highest degree of redundancy

- TVFC TrilliumSeries coolers have a larger amount of fans that provide an **unmatched degree of backup capacity**.
- Optional internal partitioning panels create individual air intake ducts for each fan, which **eliminates thermal performance loss** due to the air bypassing the coil through an idle fan.
- The optional pre-cooler pump recirculation system with **adiabatic back up guarantee** (patent pending) in case of pump failure.
- Optimal controls guarantee **full performance** even with loss of controller or communication.

## Unrivalled reliability

- BAC's TVFC TrilliumSeries coolers come with all structural elements protected with **Baltiplus 800™ protection**. We also offer **Baltibond hybrid coating\***, designed for severe conditions it offers the same **reliable life expectancy** as stainless steel 304L.
- All critical components are located outside, providing **easy access at all times**.
  - Fan motors can be replaced in all **safety for both the intervening technician as well as for the unit**. Any risk of damage to critical components such as the heat exchangers and bottom panels is removed.
  - Pump maintenance is possible **during adiabatic operation**.
- Small motors and fans, increasing the **ease** with which they can be handled during replacement.
- Special anti-abrasive protection on the pads, to **ensure their durability** under harsh conditions.
- Epoxy coating (optional) on the coil fins **increases the resistance** against a humid environment, high chlorides and other corrosive agents.

## Saving water

- TrilliumSeries coolers **achieve annual water savings exceeding 90%** water compared to normal cooling towers by limited adiabatic operation.

## Top hygiene control



- No aerosol formation: TrilliumSeries coolers **minimize the Legionella risk**.
- TrilliumSeries coolers cool incoming air **without transferring water to the dry coil**.
- No continuously wet parts: all parts that come into contact with water are **fully drainable**, no water is stored in the unit during dry operation.

### Plug and Play with factory set custom controls

- **Proven controls** running for more than a decade.
- All site specific **parameters are factory set and tested** before the unit is shipped.
- 8 control strategies allowing you to **optimise the cooler to your specific needs**.

\* option

**Interested in the TVFC TrilliumSeries cooler to cool your process fluid?**

Contact your local [BAC representative](#) for more information.

### Downloads

- [TVFC Cooler](#)
- [Operating & Maintenance TVFC](#)
- [Rigging & Installation TVFC](#)
- [TVFC Dry and adiabatic cooling](#)