



# BAC Control Package BCP 3 D - for evaporative cooling systems



Model shown: BCP 3 D

With the Water Treatment Control package BCP, BAC offers a range of solutions that incorporate all the features that are needed for standard cooling water applications in compact pre-designed package format, which are easily selected and connected.

**Anti-scale and anti-corrosion products** are dosed proportionally to the water usage or system load. A **primary oxidising biocide** can be dosed based on residual concentration in the system following a Redox measurement. A **secondary biocide** is dosed to the cooling water, on a periodic basis. **State of the art controller technology** guarantees that minimum product dosage is achieved for optimum treatment efficiency.

The BAC BCP 3 D Control Package offers an **accurate, high quality, chemical based water treatment control programme** for evaporative cooling systems. The BCP 3 D incorporates state of the art electronic control equipment in a **user friendly, easy to commission and maintain format**.



Typical BCP 3 D installation

## BENEFITS FOR YOU, YOUR EQUIPMENT AND THE ENVIRONMENT

### Increase safety

- ✓ Maximum hygiene by maintaining bacteriological and Legionella control in accordance with national regulation
- ✓ Reduce the risk of human injury when handling and dosing chemicals

### Simplify operation

- ✓ Efficient: designed for best water treatment practice
- ✓ Flexible: suitable for all open, closed or hybrid cooling systems
- ✓ Compatible: handles a variety of water treatment programs; liquid or solid
- ✓ Simple: all components are pre-designed, pre-mounted and user-friendly

### Save money

- ✓ Reduce water usage with optimum bleed
- ✓ Reduce chemical consumption with optimum dosage control
- ✓ Reduce energy consumption with clean heat transfer surfaces
- ✓ Increase equipment life with corrosion control

## ADVANTAGES of the BCP 3 D

- ✓ **Simplicity:** - one controller for all the functionalities and information readings  
 - pre-designed, pre-mounted and pre-wired, easy to connect
- ✓ **Easy to maintain:** - isolation and sampling valves allow for easy inspection, cleaning and analysis  
 - integrated chemical injection point directly in the circulating water through piping manifold
- ✓ **Performance:** bleed lock out function allows enough contact time for biocide action
- ✓ **Reliability:** motorised bleed valve eliminates failures
- ✓ **Savings:** flow controller guarantees chemicals are only injected when the water circulates, preventing chemical overfeeds
- ✓ **Flexibility:** suitable for all cooling systems
- ✓ **Compatibility:** works with a variety of chemical products and water treatment strategy
- ✓ **Online measurement and traceability** of oxidising biocide level

**BCP 3 D**  
 Automatic Bleed Control &  
 Dosing of 1 inhibitor  
 and 2 biocides

The kit is delivered complete with the following components:

### Standard execution

1 pre-assembled controller with sample manifold on a backboard for wall mounting including:

- ✓ BACT 600 Baltimore Aircoil cooling tower controller including
  - \* Graphite conductivity measuring sensor
  - \* ORP (Redox) sensor
  - \* Flow detector
  - \* Large display / Touchscreen
  - \* Multi-language
  - \* Pre-programmed for cooling tower application
  - \* Output alarm relay
  - \* Optional 4-20 mA output (conductivity)
  - \* Pre-bleed and bleed lockout functions
  - \* Make-up water meter data display
- ✓ 1 impulse water meter shipped separately for mounting on make-up line (by others)
- ✓ Motorized blow down ball valve with rotary actuator
- ✓ 3 electromagnetic high pressure diaphragm dosing pumps pre-mounted with dosing lines and fitting
- ✓ Sample point with sampling valve
- ✓ Cable ways and dosing lines tubing
- ✓ Pre-wired single 110 V or 230 V centralized input power
- ✓ 3 chemical injection points / non return valve
- ✓ Inlet / outlet fittings PVC with insulating valves for measuring / injection loop and bleed line connection
- ✓ 3 empty drums with retention for chemicals (minimum 60 l)



When ordered together with a new closed cooling tower or evaporative condenser, BAC can foresee the connection points for the water treatment package on the BAC unit to allow easy site piping.

Depending on the site and unit, the supply of a booster pump (by others) is recommended.  
 If recommended, unrestricted flooded suction is required.

Technical data:
✓ Length x Height x Depth (panel): 950 x 780 x 150 mm
✓ Floor space with tanks and bunds: 1400 x 460 mm (with 60 l drums)
✓ Service pressure: 6 bar max
✓ Supply input: 100 - 240 V / 50 or 60 Hz - 6 Amps max
✓ Protection: IP 55
✓ Ambient temperature: -20°C to 55°C