# **Construction details**

Refrigerant condensers

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# 1. Material options

- Heavy-gauge hot-dip galvanized steel is used for external unit steel panels and structural elements featuring <u>Baltiplus Corrosion</u> <u>Protection</u>.
- The unique <u>Baltibond<sup>®</sup> hybrid coating</u> is an optional extra. A hybrid polymer coating for longer service life, applied pre-assembly to all hotdip galvanized steel components of the unit.
- Optional stainless steel panels and structural elements of type 304L or 316L for extreme applications.
- Or the economical alternative: a water-contact stainless steel cold water basin. Its key components and the basin itself are stainless steel. The rest is protected with the Baltibond<sup>®</sup> hybrid coating.

# 2. Heat transfer media

Unique and patented heat transfer system: **featuring combined flow** via heat exchange coils and fill pack.

#### Prime surface coil

- The prime surface coil is constructed of prime surface steel, hot-dip galvanized after fabrication.
- Designed for maximum 23 bar operating pressure according to PED. Pneumatically tested at 34 bar.
- All hot dip galvanized and stainless steel coils are delivered with BAC's **Internal Coil Corrosion Protection**, to ensure an optimal internal corrosion protection and guaranteed quality.

Try our HXC coil options:

• Multiple circuit coils (split coils) for your halocarbon refrigerants,





maintaining individual compressor systems. Or use it for compressor jacket water or glycol cooling.

- Stainless steel coils are in type 304L or 316L.
- **High pressure coils** are designed for 28 bar operating pressure and pneumatically tested for 40 bar. Hot-dip galvanized after fabrication.

All coils are designed for low pressure drop with sloping tubes for free drainage of fluid.

#### Finned coil

- The 6-row **dry finned coil** is constructed of stainless steel 304L in a staggered triangle tube arrangement and with pre-coated aluminium high density fins.
- Designed for maximum 23 bar operating pressure according to PED.

#### Fill\_

- The patented and factory-tested <u>BACross<sup>®</sup> fill</u> with integrated drift eliminators certifified by Eurovent. Optional <u>BACross<sup>®</sup> fill bundles</u> with handles for quick and easy removal and cleaning of the fill. The bundle includes individual sheets which are easy to dismantle for inspection and cleaning, eliminating the need for frequent fill replacement.
- In self-extinguishing **plastic**, which will not rot, decay or decompose.
- For operation above 50°C, try our **optional high temperature fill**, usable with spray water up to 55°C.

### 3. Air movement system

- HXC fan system features two corrosion resistant sheaves, belt and motor. Together with the heavy duty fan shaft bearings and the BAC Impervix motor, this guarantees optimal and year-round operational efficiency.
- Low kW and noise axial fan(s) in corrosion resistant aluminum, encased in fan cylinder.
- **Modulating air inlet dampers** are constructed in galvanised steel with air-tight, opposed blade design and proportional modulation through beams.
- Air flow control package includes a pressure transmitter (ships loose for on-site installation), damper actuators and intelligent damper controllers.
- Our drift eliminators in the coil section come in UV-resistant plastic, which will not rot, decay or decompose and their performance is tested and certified by Eurovent. They are assembled in easily handled and removable sections, for optimal coil access.
- Easy removable UV-resistant plastic **combined inlet shields** at air inlet. Sunlight block to prevent biological growth in tower, air filter and water splash-out stop.

#### 4. Water distribution system

These consist of:

- **Spray branches** with wide non-clog, plastic, 360° distribution nozzles secured in grommets. Overlapping spray pattern for complete coil wetting.
- A sloped cold water basin with large hinged and inward swinging access door and internal walkway.
- Anti-vortexing **strainers** and **make up** both easily accessible from air inlet side.
- Close coupled, bronze fitted centrifugal **spray pump** with totally enclosed fan cooled (TEFC) motor. Bleed line with metering valve installed from pump discharge to overflow.

Need more information? Contact your local BAC representative.





