# **Construction details**

Refrigerant condensers

## **Construction details**

### 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>. For casing panels we use UV resistant fiberglass reinforced polyester.
- 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.
- <u>Optional stainless steel</u> 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 <u>combined flow</u> via heat exchange coil and fill pack.

#### Coil

- The 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 CXV-D coil options:

- Multiple circuit coils (split coils) for your halo carbon 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.

#### Fill

- Patented <u>BACross<sup>®</sup> II fill</u> with integrated drift eliminators. Its thermal performance is proven during comprehensive <u>lab thermal</u> <u>performance tests</u>, and it offers you unrivalled system efficiency. The fill pack includes individual sheets and a telescopic fill support. Sheets are easy to inspect and clean inside the unit without dismantling, 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

- CXV-D 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 with removable fan guard. To reduce noise even further, choose for a <u>Whisper Quiet fan</u> with minimal impact on thermal performance.
- 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
  - anti-vortexing **strainers** and **make up** both easily accessible from inside the unit.
- 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.



