



## DRYCOOLERS



Compact design  
Acoustic comfort  
40% smaller footprint

## 09VE

From 100 to 1870 kW

Drycoolers in this range are mainly designed for cooling water or glycol/water mix for:

- Condensers for water chillers,
- Free cooling.

These devices are designed to be installed outdoors.

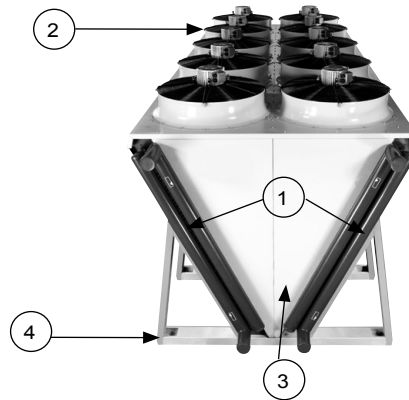


CARRIER participates in the ECP programme for HE  
Check ongoing validity of certificate:  
[www.eurovent-certification.com](http://www.eurovent-certification.com)

## DESCRIPTION

### Excellent resistance to corrosion

Casing with corrosiveness resistance category as per ISO 12944-2.



① **2 Coils**

Copper tubes and high-performance aluminium fins, resistant to fouling.  
Manifolds and piping: unpainted copper except for diameter 125 which are RAL 7024 graphite grey painted steel.

② **Fan motor assemblies**

Profiled collars in galvanised steel with RAL7035 polyester powder paint or RAL7035 composite depending on the motor reference.  
Aluminium + polypropylene propeller.  
Class F motors - IP54 - TRI400V +/-10% 50Hz +/-2% - Standard connection to motor terminal boxes  
Black protective grille compliant with standard NF ISO 12499.  
Partitioning in pairs.

③ **Casing**

Galvanised steel with polyester powder paint in RAL7035 light grey.

④ **Feet**

Galvanised steel with polyester powder paint in RAL7035 light grey

Each device is tested:

- The coil sealing is subjected to an underwater airtightness test.
- For devices with the terminal strip or electrical cabinet option: rotation tests, dielectric tests, current measurement.

The entire range complies with the following European directives:

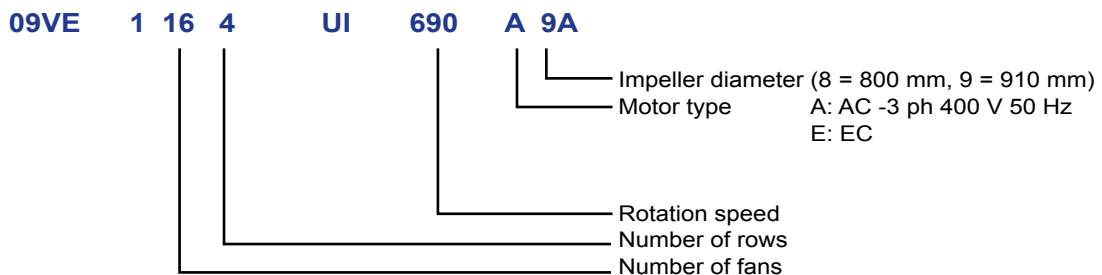
- Machinery directive 2006/42/EC,
- EMC directive 2014/30/EU,
- Pressure Equipment Directive (PED) 2014/68 EU.

## RANGE

- A range of sizes, from 6 to 20 fans.
- 2 impeller diameters, 800 or 910 mm.
- Adaptation of the rotation speed (EC motor).

Various combinations of these elements, as well as the choice of a number of options, allow us to provide devices that are adapted to a range of applications and environments.

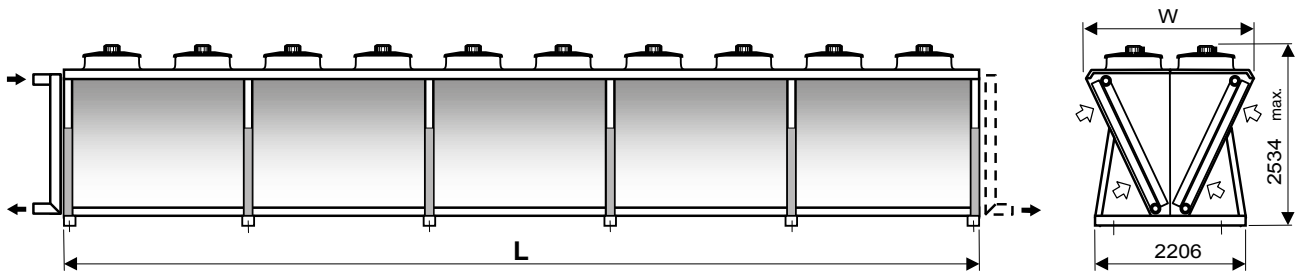
## DESCRIPTION



## OPTIONS FOR EACH APPLICATION

|   | Options  | Description/advantages   |
|---|--|--|
| <b>Protection adapted for the environment</b> | Pre-coated aluminium fins  | Improves the resistance of the fins to corrosion. For applications in coastal areas, industrial areas or highly populated areas.                     |
|   | High-efficiency coating on fins: ALUCOAT®507/HERESITE (on request) | Improves the resistance of the fins to corrosion. For relatively corrosive environments.   |
|   | Stainless steel tubing bundle                                      | For corrosive fluids.  |
|   | Corrosiveness resistance category C5M                              | Casing and fan motor assemblies for corrosive environments.  |
| <b>Quick, simple installation</b>             | Terminal box   | Connection to the terminals of each motor on the front panel of the device.  |
|   | Protection cabinet   | Protected by a thermal-magnetic circuit breaker on each motor.   |
|   | Control cabinet  | Motor and control protection, either by electronic board, depending on the temperature, or by the chiller if compatible.                             |
|   | Flanges  | ISO PN16 02A type rotating flanges as per DIN 2642 in 304L stainless steel up to DN100 and steel flange NFEN 1092-1 for DN125                        |
|   | Counter-flanges  | In 304L stainless steel up to DN100 and steel for DN125, with gaskets and bolts.   |
|   | Blade protective screen  | Impact protection  |
| <b>Application for water without glycol</b>   | Drainable coil   | Device located on a slope to prevent frost - drainage by gravity   |
| <b>Free cooling application</b>               | Free cooling valve kit   | Valves with motors controlled by the control cabinet. Controlled according to the operation of the drycooler or water chiller.                       |
| <b>Adiabatic cooling application</b>          | ADIABATIC COOLER (water misting into the air flow)                 | Size of the unit reduced by cooling of the ambient air. Operates completely safely due to the antibacterial treatment applied to the water (Option). |

## DIMENSIONS



|        | 1060                                | 1080 | 1100 | 1120 | 1140 | 1160 | 1180  | 1200  |
|--------|-------------------------------------|------|------|------|------|------|-------|-------|
|        |                                     |      |      |      |      |      |       |       |
| L (mm) | 3550                                | 4700 | 5850 | 7000 | 8150 | 9300 | 10450 | 11660 |
| w (mm) | 2305 to 2420 depending on the model |      |      |      |      |      |       |       |

Up to size 1180, these units can be transported by container.  
Dimensions without options

## INSTALLATION RECOMMENDATIONS

- These units are designed to operate outside. When starting up, frost and snow could adversely impair its operation.

As a general measure, all steps should be taken to avoid the risk of air recycling. This is especially important when the installation comprises several units.

It is not recommended to install units near the hot air extraction duct outlet or close to deciduous plants (this could cause clogging).
- Allow a clearance of 1.5 m around the device. Where the use of anti-vibration mounts is required, use a rigid frame which locks the feet together.
- The use of **variable speed drives** should be avoided, the EC motor solution should be preferred.
- **Commissioning and maintenance:** refer to the instruction manual.
- These units **comply with the European directives**. The installer is responsible for ensuring the compliance of the installation. The installer must ensure safety and protective devices (emergency stop, shut-off valves, lightning protection, etc.) are put in place and are accessible.