

## DRYCOOLERS



Compact design  
Acoustic comfort  
40% smaller footprint

COOLING

## 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.

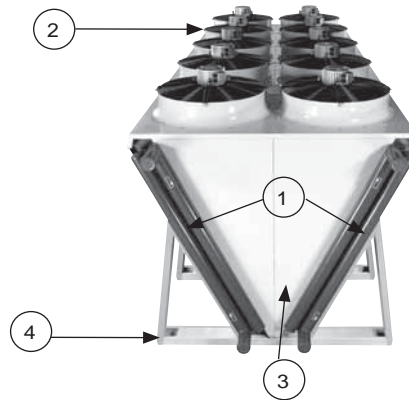


CARRIER participates in the ECP programme for HE  
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## DESCRIPTION

### Excellent resistance to corrosion

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



- a **2 Coils**  
Copper tubes and high-performance aluminium fins, resistant to fouling.  
Manifolds and piping: RAL 7024 graphite grey painted steel.
- b **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 BS ISO 12499.  
The motors are also available in a 60 Hz version or in other voltages.  
Partitioning in pairs.
- c **Casing**  
Galvanised steel with polyester powder paint in RAL7035 light grey.
- d **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:

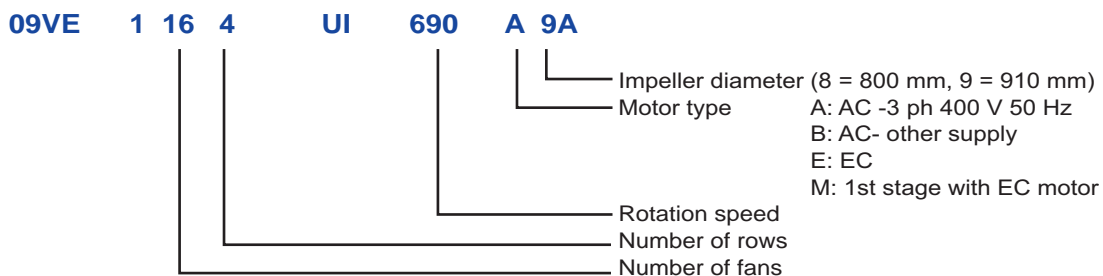
- Machinery directive 2006/42/EC,
- EMC directive 2014/30/EU,
- Pressure Equipment Directive (PED) 2014/68 EU.

## RANGE

- A range of sizes, from 6 to 20 fans.
- 2 impeller diameters, 800 or 910 mm.
- Several rotation speeds, from 340 to 1270 rpm (AC 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.

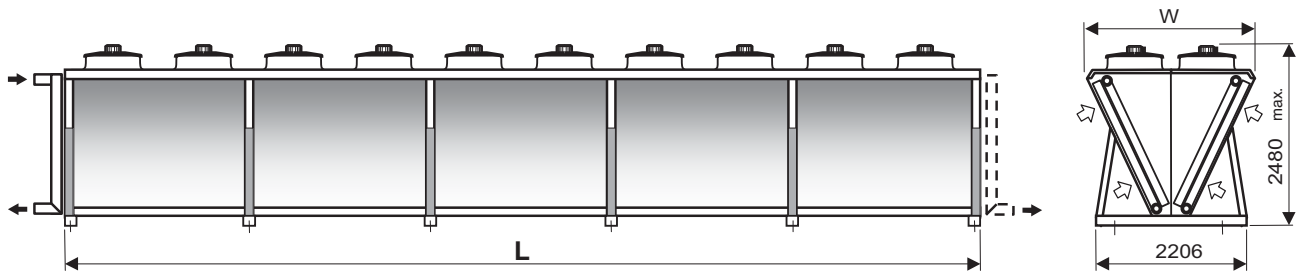
## DESCRIPTION











## 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 low corrosion environments.
	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.
	ATEX II 2G/3G	For explosive atmospheres
<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	NFE 1092-1 type 01A PN16 steel
	Counter-flanges	In steel, with gaskets and bolts.
	Blade protective screen	Impact protection
<b>Optimisation of electrical consumption and noise</b>	EC (electrically commutated) motor	Variable speed control from 0 to 100% using a 0/10V signal.
<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
								
<b>L (mm)</b>	3550	4700	5850	7000	8150	9300	10450	11660
<b>w (mm)</b>	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.
- If **speed regulators** other than those recommended by the manufacturer are used, check that these are compatible with the electric motors.
- **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.