

# Air cooled condensers

## Drycoolers

Capacity (air cooled condenser) : 15 to  
120 kW (R 407c)

**NEW**



**Silent operation**  
**New generation of fans**  
**Compact and pleasant design**

## USE

Developed to be associated to water chillers, this range exists in 2 versions :

- Air-cooled condensers (refrigerant condensation)
- Drycoolers (cooling of the condenser water circuit)

## DESCRIPTION

Very easy to integrate, **AIRIAL** meets the EUROPA 2 range of objectives : minimized installation expenses, insurance of a lasting operation with minimum maintenance, and above all the faculty of operating with no bother to the user and neighbours.

In the standard version, the steel sheet metal is galvanized and coated with a RAL 7024 graphite grey and RAL 7035 pale grey protection lacquer. The nuts and bolts are "Dacromet" coated.

The fan motor units are equipped with a new generation profiled propeller with polypropylene blades.

The coil is made of copper tubes with high performance aluminium fins.

A full range of options has been considered in order to adapt to most common requirements.

## OPTIONS

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| <ul style="list-style-type: none"> <li>■ Pre-enamalled aluminium or copper fins</li> <li>■ Blygold or equivalent anti-corrosion treatment of fins</li> <li>■ Paint on 1 or 2 sides, choice of RAL</li> <li>■ Threaded connectors or tubing flanges (drycoolers)</li> <li>■ Wired maintenance switches</li> <li>■ Emergency stop (mounted, not connected)</li> <li>■ Frequency or voltage speed converter</li> <li>■ Wiring of motors on terminal box</li> </ul> | <ul style="list-style-type: none"> <li>■ Protection or control panel</li> <li>■ Panel for variator</li> <li>■ 2 speeds panel</li> <li>■ Electrical ON / OFF control panel</li> <li>■ Condensing pressure control panel (condensers)</li> <li>■ Short feet for mounting on customer's mark</li> <li>■ Tropicalized motor</li> </ul> |
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### CHARACTERISTICS

 Rotation speed (rpm)	Sound power levels* (Sound pressure levels**) dB(A)			Electrical characteristics per motor (1)		
				Power W	Intensity A	Starting intensity A
<b>900</b>	86 (53)	89 (56)	91 (58)	1200	2,5	10
<b>720</b>	80 (47)	83 (50)	85 (52)	800	1,4	2,8
<b>680</b>	78 (45)	81 (48)	83 (50)	700	1,6	4,5
<b>550</b>	73 (40)	76 (43)	78 (45)	470	0,9	1,5
<b>440</b>	67 (34)	70 (37)	72 (39)	260	0,6	1,5
<b>320</b>	58 (25)	61 (28)	63 (30)	180	0,4	0,5

(\*) Only the sound power level is characteristic of the unit. The difference between the power level and the acoustic pressure level is function of the site. These values are obtained in conformity with the ISO 3744 norm.

(\*\*) Values measured at 10m for horizontal units in free field, directivity 2, in the bundle. Tolerance  $\pm 3$ dB.

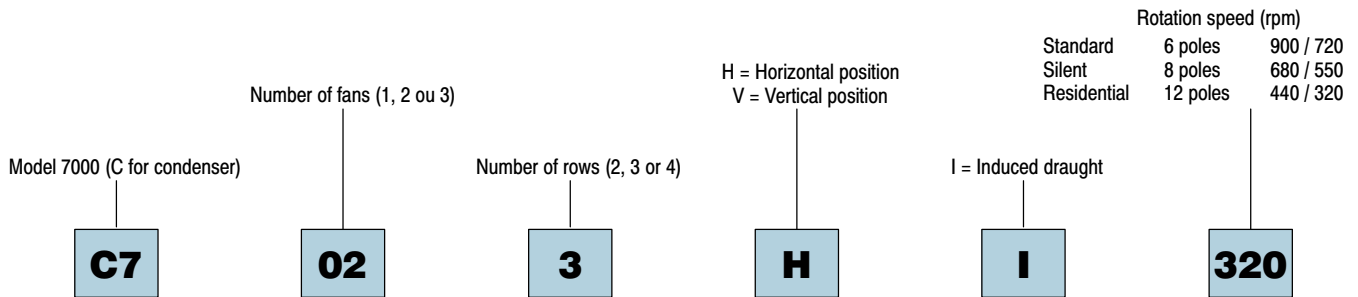
Re-calculate the sound pressure level of the installation from the sound power level of the unit and the site characteristics (the advice of a sound technician might be required).

The units do not have a uniform sound emission in all directions; for a point at 10m in the fans axis, 4 dB must be added to the re-calculated pressure value.

For 3 ph. 400 V - 50 Hz.

### DESCRIPTION (EXAMPLE)

#### AIRIAL C7023 HI 320 RESIDENTIAL



### NOTES

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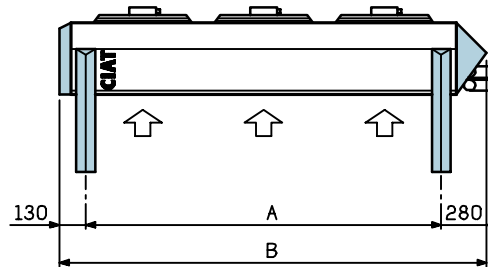
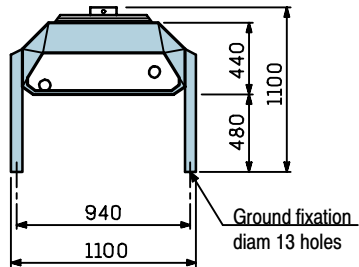
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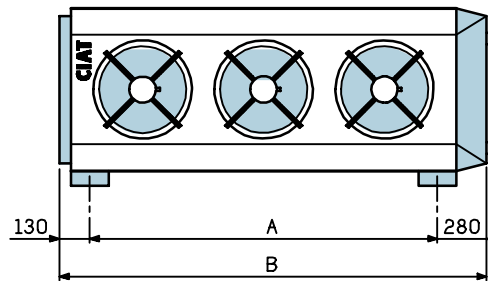
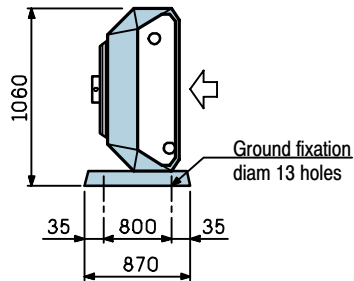
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## DIMENSIONS

### Horizontal units



### Vertical units



Airial									
	7012	7013	7014	7022	7023	7024	7032	7033	7034
Max. contents (dm <sup>3</sup> )	12	16	20	19	30	38	27	41	52
Empty mass (kg)	105	115	125	170	190	210	240	275	300
<b>A</b> (mm)	1075			2280			3485		
<b>B</b> (mm)	1485			2690			3895		

## RECOMMENDATIONS FOR ASSEMBLY

These units are designed for outside operation. When starting, frost and snow can be harmful for the correct operation of horizontal units.

It is not advisable to install the units at a warm air extraction duct outlet or close to deciduous vegetation (take the fouling problems into account).

**An horizontal unit** will be positioned with a free space of 1.5 all around.

In the case where the use of antivibratil mounts is required, use a rigid chassis keeping the feet interdependant.

**A vertical unit** will be positioned preferably parallel to the prevailing wind direction. Its use is not recommended for low fan rotation speeds. In general, all precautions should be taken for avoiding air recycling risks. Namely when the installation includes several units.

If using speed converter others than the ones recommended by CIAT, their compatibility with the electrical motors must be checked.

Consult the installation, operation and maintenance guide.