



# Air-cooled condensers Drycoolers

*Quiet operation*  
*New generation fans*  
*Compact and attractive design*



AIRIAL

Capacity (air-cooled condenser) :  
**15 to 120 kW (R407C)**

## 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).  
**These units are designed for outdoor installation.**

## DESCRIPTION

Very easy to integrate, AIRIAL meets the EUROPA 2 range of objectives : minimised 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 galvanised and coated with a RAL 7024 graphite grey and RAL 7035 tight grey protection lacquer. Bolting protection: LENTHANE 315.

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

- Pre-enamalled aluminium fins
- ALTENA or equivalent anti-corrosion treatment of fins
- Paint, choice of RAL
- Threaded connectors or tubing flanges (drycoolers)
- Wired maintenance switches
- Emergency stop (mounted, not connected)
- Wiring of motors on terminal box
- Protection panel
- Short feet for mounting on customer's frame

## 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).

- **A horizontal unit** will be positioned with a free space of 1.5 m all around.

In the case where the use of anti-vibration mounts is required, use a rigid chassis keeping the feet interdependent.

- **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 converters other than the ones recommended by CIAT, their compatibility with the electrical motors must be checked.




Consult the installation, operation and maintenance guide.



# Air-cooled condensers Drycoolers

# AIRIAL

## CHARACTERISTICS

AIRIAL Rotation speed (rpm)	Sound power levels* (Sound pressure levels**) dB(A)		
			
900	82 (49)	85 (52)	87 (54)
720	75 (42)	78 (45)	80 (47)
680	75 (42)	78 (45)	80 (47)
550	66 (33)	69 (36)	71 (38)
440	61 (28)	64 (31)	66 (33)
320	54 (21)	57 (24)	59 (26)

\* Only the sound power level is characteristic of the unit. These values are obtained in conformity with the ISO 3744 standard.

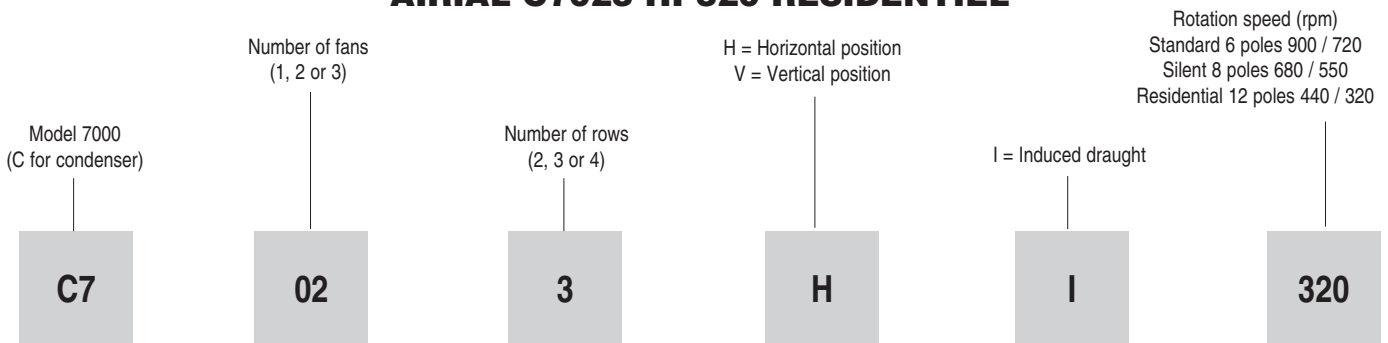
\*\* Values measured at 10m for horizontal units in free field, directivity 2, in the bundle axis. Tolerance  $\pm 3$ dB.

The difference between the sound power level and the sound pressure level depends on the site. To know the sound pressure level of the installation, recalculate it from the sound power level of the unit and the site characteristics (the advice of a sound technician might be necessary)

The sound emission of the unit not being uniform in all directions, for a point at 10 m from the fans axis, the recalculation pressure value must be increased by approximately 4 dB.

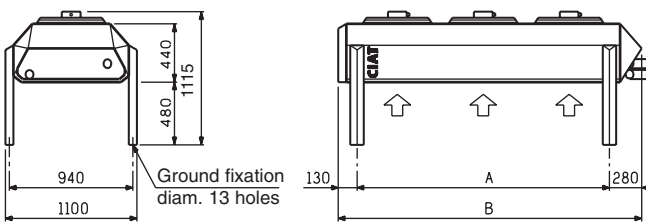
## DESCRIPTION (EXAMPLE)

### AIRIAL C7023 HI 320 RESIDENTIEL

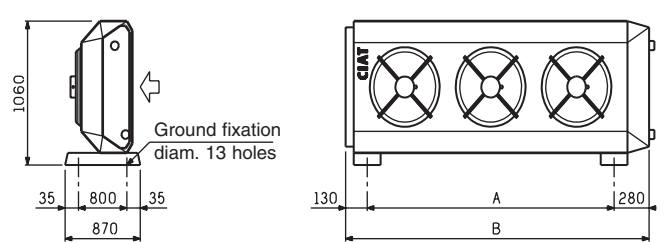



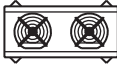

## DIMENSIONS

### 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
A (mm)	1075			2280			3485		
B (mm)	1485			2690			3895		

This document is non-contractual. As part of its policy of continual product improvement, CIAT reserves the right to make any technical modification it feels appropriate without prior notification.

### Head office

Avenue Jean Falconnier - B.P. 14  
01350 - Culoz - France  
Tel.: +33 (0)4 79 42 42 42  
Fax: +33 (0)4 79 42 42 10  
info@ciat.fr - www.ciat.com



### CIAT Service

Tel. : 08 11 65 98 98 (0,15 € / mn)  
Fax : 08 26 10 13 63 (0,15 € / mn)

ISO9001 • ISO14001  
OHSAS 18001

