

## SOLUTIONS FOR ENERGY OPTIMISATION

For drycoolers & air-cooled condensers

## CONTROL UNIT WITH AEROCONNECT<sup>™</sup> ELECTRONIC BOARD



*Optimised <i>energy* management Information in multilingual clear text **AEROCONNECT™** is used to control the temperature or pressure, check the operating parameters, communicate with CIAT water chillers and diagnose and memorise faults.

- Control of AC motor stages, or management of EC motor speed by 0/10 V signal, based on the temperature or pressure.
- 2 setpoints: for example for summer/winter or daytime/night-time use. Used to reduce the operating speed and to improve the seasonal energy efficiency coefficient.
- Stage runtime balancing (AC motors).
- EC motor speed limitation.
- Management of misting.
- Management of free cooling.
- Communication:
- Open ModBus-JBUS RS 485 protocol,
- ModBus-ETHERNET TC/IP protocol,
- LONWORKS/BACNET Protocol (option).

## CONTROL CABINET CONTROLLED BY THE CHILLER

For drycoolers or air-cooled condensers linked to one of the following water chillers:

- DYNACIAT™ LG
- DYNACIAT™ LGN
- HYDROCIAT™ LW
- AQUACIAT™ LD
- AQUACIATPOWER ™ LD
- DYNACIATPOWER ™ LG
- POWERCIAT™ LX

The drycooler or condenser can be equipped, as an option, with a managed control cabinet, to be linked to the water chiller. The unit will be controlled by the water chiller and the electricity consumption of the assembly will be optimised by shifting the condensing temperature according to the outdoor temperature.



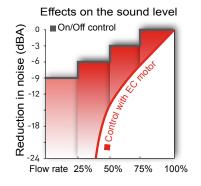


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### EC MOTOR

- Integrated electronic switching,
- Speed variation from 0 to 100% by 0/10V signal, as required,
- Operation in 50 Hz and 60 Hz,
- Excellent efficiency,
- Integrated monitoring and protection device,
- Easy to wire up,
- Maintenance-free operation.



#### **F**REE COOLING

Free cooling can be used to significantly reduce annual consumption of electricity.

The CIAT System offer comprises a water chiller, a drycooler and their associated control boards.

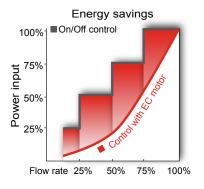
As a drycooler consumes much less electricity than a water chiller, it is beneficial to make best use of the cool air in winter and mid-season to directly cool the process fluid using the drycooler instead of the water chiller.

This system will therefore considerably reduce your annual electricity consumption.

This new generation of motor offers High Energy Efficiency solutions.

Advantages of speed management by the control cabinet:

- A considerable reduction in annual electricity consumption,
- Optimisation of the sound level.



In summer, the drycooler is stopped.

In mid-season, it pre-cools the process fluid. In winter, the water chiller is stopped; the drycooler directly cools the process fluid.

