

ZYRCO

Adiabatic cooler

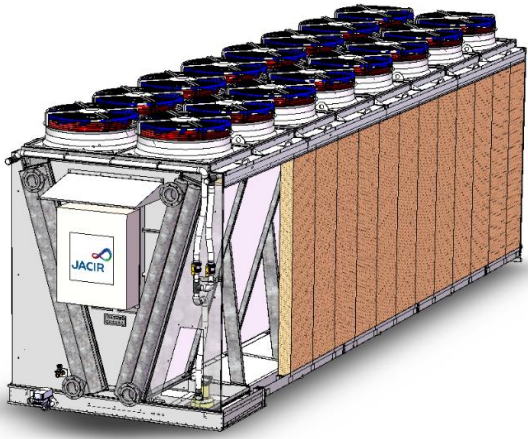
Certified coils performance



- *No water dispersion in the airflow*
- *No water treatment required*
- *Optimized water consumption at evaporation*
- *Energy-efficient EC motors*
- *Compliant with hygienic standards*
- *Ecodesign ErP 202x compliant*

Commercial Documentation

Adiabatic cooler: ZYRCO



The ZYRCO series is robust in its design and choice of materials, developed particularly for both urban and industrial environments.

Heat exchange coil

As standard, the coils are made of copper tubes/aluminium fins with Epoxy coating. The tubes are expanded through the fins, guaranteeing **excellent mechanical resistance**, and **optimised thermal conduction**. The coils have been tested and certified for thermal performance: sealing and pressure in accordance with the DESP.

Motor-fan sets



Motor-fan units draw air through the Media, then through the coils. EC (Electronically Commutated) technology motors **especially developed to minimize energy consumption with optimized noise levels**, have a higher efficiency than IE5.

Directly coupled to their axial fan with low rotational speed and low noise level, the whole set provides **energy efficiency and optimized acoustics**. The motor-fan coupling is direct, **without transmission maintenance**.

The choice of this technology is compliant with Ecodesign Regulation (EU) 327/2011 on the application of Directive 2009/125/EC (ErP) for minimum yield thresholds after 202x.

Evaporative pre-cooling



The evaporation surface is used for the pre-cooling of the inlet air: the humidifier Medias cover the entire two air inlet surfaces of the device.

The water supply is located at the top of the device and outside the air flow.

The water is then "returned" to a fully covered SILVER STEEL tank, in which a recirculation pump is installed.

The maintenance of the pump and strainer is carried out directly through a maintenance hatch without necessary stopping of the ventilation.

Air pre-cooling is activated when the cold-water temperature is above the set point. This tipping point is usually above 23°C ambient for a continental climate, with a cold-water temperature of 27°C.

The water recirculation system carries **no risk of bacteriological development and reduces water consumption in adiabatic mode by up to 70% compared to a lost or pulverized water system**.

Control panel Automaton

Equipped with its programmable logic controller, the ZYRCO series is **completely "Plug and Play"**: the Schneider PLC equipped with an HMI (Human Machine Interface) makes it possible to control the operation of the EC motors and manage the pre-cooling function safely.

Options

Mode ventilation backup, master-slave regulation for serial installations, POP SCREEN filter for installation protection, coils selection optimized for high flow rates, Ethernet communication protocols, Modbus, BACnet and web gateways or LonWorks, etc.