

# **DTCF**

# Closed Circuit Cooling tower



### 1200kW module

- Extremely quiet
- Highest energy efficiency
- Innovation boosting maintenance



## Cooling tower: DTCF series

### Operating principle

Innovative cooling tower compliant with latest European hygiene standard. Extremely quiet "Plug fans" centrifugal fans suck in air to cool the water optimally distributed over the exchange surface. Entirely designed to optimize its ease of maintenance thanks to its integrated technical room, the DTCF is a concentrate of energy efficiency, even in case of space constraints with the possibility of installation in a corner.



# Hygienic design: compliant with European hygienic standard

Optimized accessibility: the technical room integrated into the tower offers total and immediate access to all the internal parts of the tower: drip eliminators, exchange bodies, water distribution ramps, basin with its accessories, motors, and fans.

Maintenance is simplified, even while DTCF operating.

Casing: self-supporting panels casing have been twice or 4 times folded over the 4 sides (JACIR design) allowing additional sound attenuation casing if required. Thanks to this technology, we offer cooling towers with an extremely low sound level. Towers are assembled with waterproof stainless-steel rivets (uniform, high-capacity locking). There is no welding on assembled panels for the parts in contact with water. DTCF range cooling towers are designed for an optimized transport and final assembly of its 2 modules.





Non-freezing plate heat exchanger room: Especially designed for an easy access and maintenance, the stainless-steel plate heat exchanger is totally protected from weather conditions thanks to its self-supporting stiff panels made of 15/10e galvanized steel (X-STEEL stainless-steel option), and equipped with lockers access door (2100 x 600mm). Customer connections is directly fixed outside the room to facilitate connections with primary circuit.

<u>Basin</u>: the bottom of the basin is inclined for complete draining and fully accessible through the integrated technical room with dedicated access door. It includes an easily adjustable float valve, an overflow, an anti-freeze resistance as well as an anti-cavitation stainless-steel + HDPE strainer.

#### **Ultra-silence**



- ∞ 64dBA at 3m for 1,2MW
- ∞ Equivalent to a centrifugal forced draft cooling tower equipped with sound attenuations.
- ∞ Improved competitiveness and power consumption

## "Plug fans" motor fan set



- ∞ First cooling towers equipped with single sided air inlet centrifugal jet fans,
- Efficiency of electronically commutated motors superior to IE5.



- ∞ Direct transmission: no mechanical maintenance,
- ∞ "Plug and Play": integrated wiring, connection, and speed variation.
- ∞ High pressure drops available on the ai (for ducts and silencers).

Compliant with ecoconception (UE) 327/2011 concerning Directive 2009/125/CE application (ErP) for minimum efficiency thresholds after 2015.

#### Water distribution

PVC water distribution pipes feed the polypropylene nozzles (easily removable stainless-steel screws) equipped with internal turbulators for an optimal water distribution.





### Infill: EFFI-PACK

Consisting of thermoformed and welded polypropylene sheets, the exchange surface is impact resistant and offers a maximum exchange surface with a large free surface area.



Resistant up to 75°C as standard, its excellent thermal efficiency promotes energy saving



