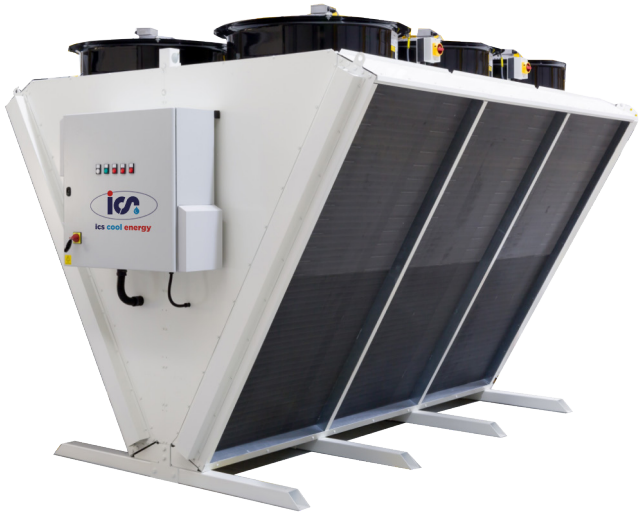


## ABOUT THE LIBERUM FREE COOLER

The Liberum Free Cooler system uses a dry air cooler with a 3-way valve to divert and cool the process fluid in a conventional chiller system.

As soon as the outside air temperature drops 1°C below the returning process fluid, the 3-way valve diverts the process fluid across the Free Coolers efficient heat exchanger and fans to remove some or all of the heat in the process fluid.

Therefore, the chiller is only required to remove the remaining heat – reducing the required energy consumption and extending the chiller lifespan.

When external temperatures are even cooler, the chiller will no longer be required to operate, and efficient EC fans will reduce in speed to maintain the required supply temperature, further reducing the operational costs.

## ENERGY & PROCESS EFFICIENCY:

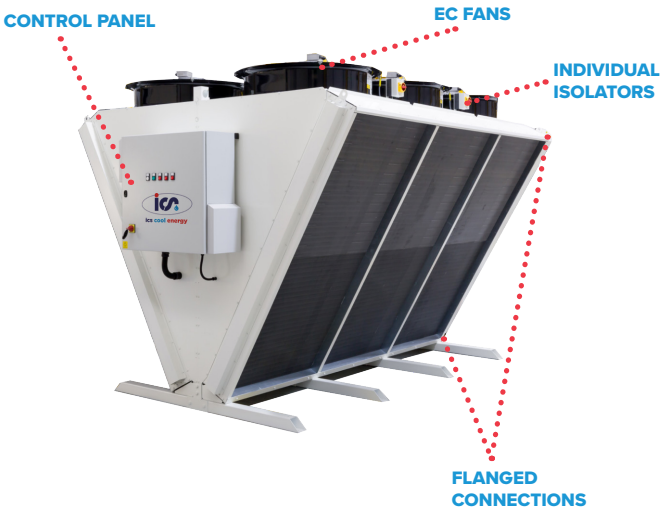
- High efficiency aluminium finned and copper tube heat exchanger
- Optimised air flow paths
- Energy efficient variable speed electrically commutated (EC) Fans
- Non-Ferrous process fluid circuit

## RELIABILITY:

- Galvanised and painted casing and legs
- IP65 electrical control panel

## EASE OF OPERATION & MAINTENANCE:

- Digital input for remote on/off
- Local fan isolation
- Lamps
- Volt free contact for remote general alarm
- Mains isolator




Reduced energy consumption

Funding available

Reduced maintenance costs

Fully packaged

Short payback period

| | | LFC340 | LFC430 |
|---|---|---|---|
| Cooling capacity (1) | kW | 341 | 430 |
| Total absorbed power (1) | kW | 15.06 | 15.97 |
| EER (1) | - | 22.64 | 26.93 |
| Flow rate (1) | kW | 16.32 | 20.57 |
| Supply temperature | °C | 15 | |
| Return temperature | °C | 20 | |
| Ambient below which full freecooling capacity occurs | °C | 8.25 | 8.7 |
| Full load current | A | 26.40 | 24.56 |
| Sound power | LwA | 96 | 98 |
| Sound pressure @10m | LpA | 63.7 | 65.5 |
| Inlet connection size | - | 2 x PN16 DN65 | 2 x PN16 DN80 |
| Outlet connection size | | 2 x PN16 DN65 | 2 x PN16 DN80 |
| Glycol | % | 0 | |
| Power supply | V/Ph/Hz | 400/3/50 | |
| Coil volume | l | 250 | 372 |
| Length | mm | 3,590 | 3,890 |
| Width | mm | 2,457 | 2,658 |
| Height | mm | 2,285 | 2,550 |
| Weight | kg | 1,779 | 2,206 |

(1) Standard unit configuration operating with plain water & outlet / inlet temperatures +15°C / +20°C
(2) Operating weight of the unit excluding control panel & 3-way diverting valve arrangement