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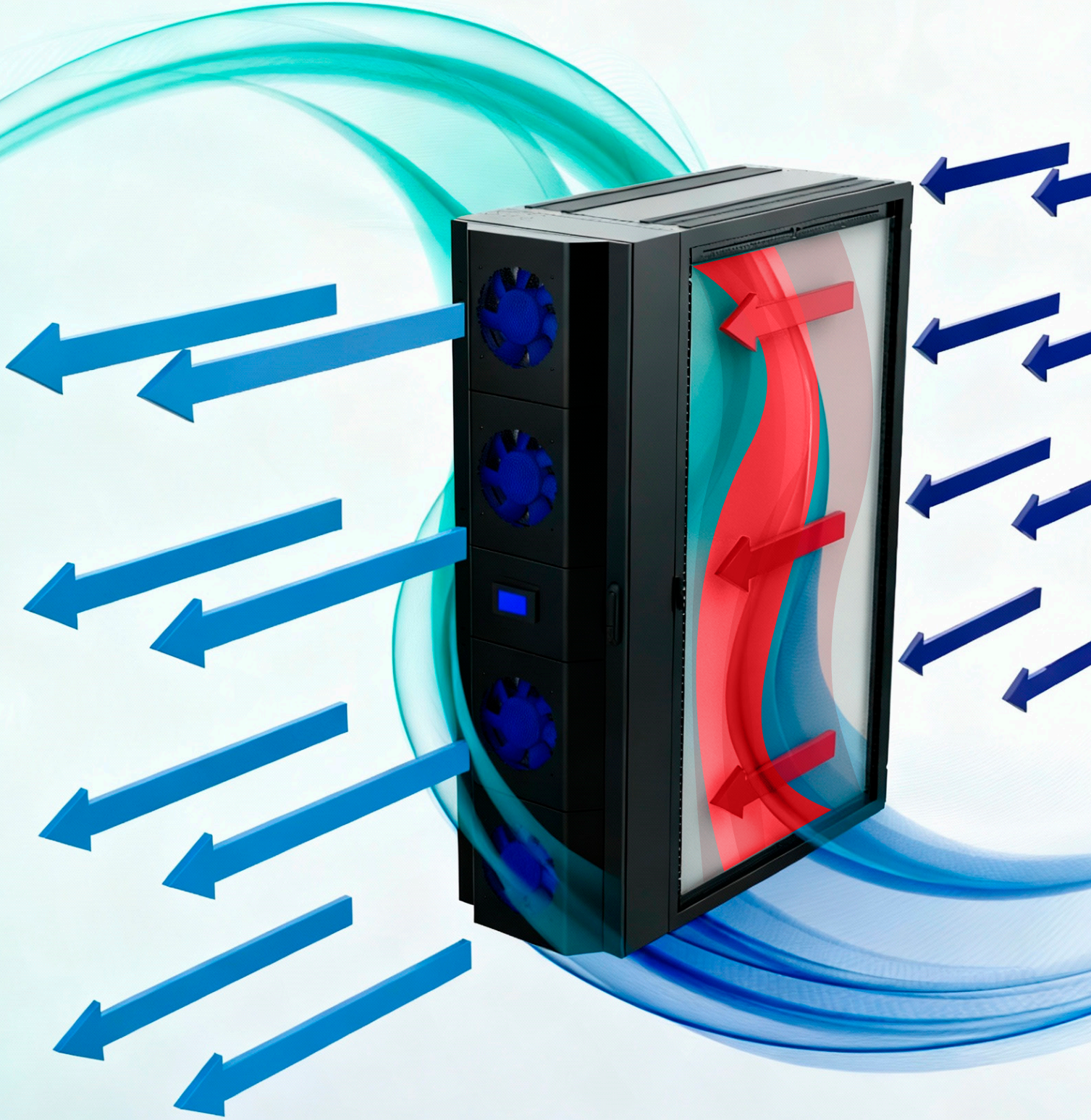
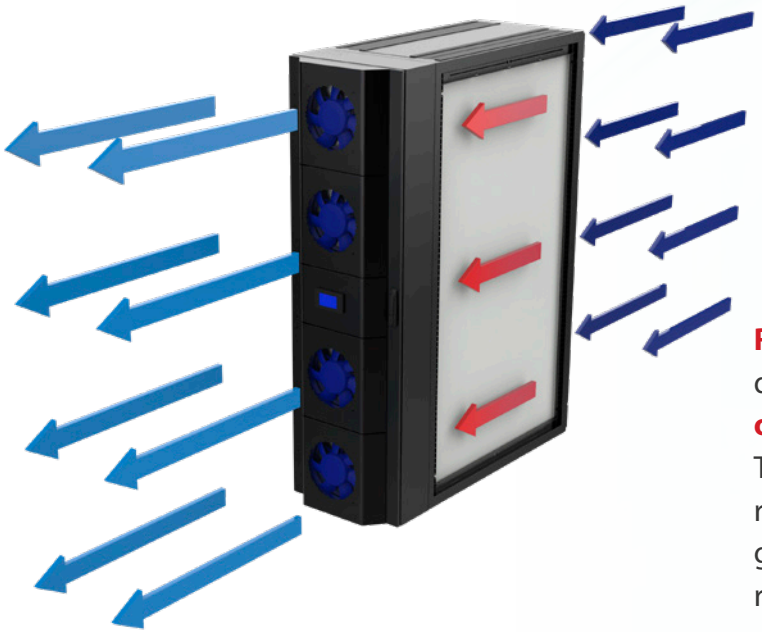
Liquid cooling:
Rear Door solutions





Multiprotocol communication interface

Corrosion-resistant material

Pressure-independent control valve (PICV)

Precision control

1

Rear Door solutions are cooling systems designed to **reduce the temperature of the hot air expelled by servers**. They are installed at the rear of the racks, precisely where the heat generated by the equipment reaches its highest intensity.

There are two types of solutions:

- **ACTIVE:** incorporate fans to increase air flow and improve heat dissipation.
- **PASSIVE:** take advantage of the natural air flow in the data centre, without additional mechanical components.

REAR DOOR cooling for high-density hyperscale data centres: **26,3 – 67,10 kW***

Main features

- Lightweight, efficient **"light design" battery**.
- Cooling capacity up to 50 kW.*

This parameter will vary depending on the design conditions, exchange fluid temperature, and air temperature/humidity. The water and thermo-hygrometric conditions in the air must allow it to remain above the dew point in a sustained manner.

- **ACTIVE mode** *(with fans)*: greater dissipation capacity.
- **PASSIVE mode** *(without fans)*: no noise; no additional energy consumption; low maintenance.
- **Conexión de agua:** flexible *(top or bottom)*.
- **Intelligent management:** integrated microprocessor and remote monitoring.
- **Compact design dimensions.**

*Cooling capacity will depend on design conditions.

There is the possibility of integrating...

Chilled water distribution system:

2

CDU, an essential component of a liquid cooling system, which enables efficient distribution and circulation of the coolant to effectively dissipate heat from components and maintain correct operating temperatures.

It is designed to regulate and control the flow of coolant to different points within the system, ensuring efficient cooling and correct temperature management.

Use in combination with cold doors **(Rear Door)** allows for efficient temperature management in cases where production is not designed for this solution.

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REAR DOOR | WIDTH	600 mm	800 mm
Nominal air flow rate	REAR	11.000 m3/h
Water flow rate	2.000 l/h	4.000 l/h
Fan power consumption	0,7 kW	1,6 kW
Dimensions (W x H x D)	600 x 2.000 x 350 mm	800 x 2.000 x400 mm
Power supply	230 V | 1 ph | 50-60 Hz	230 V | 1 ph | 50-60 Hz

WIDTH	Water INLET temperature	Server air OUTLET temperature	Cooling capacity	SHR	EER	ROOM temperature
600 mm	15°C	35°C 30%	26,3 kW	1	26,3	24,9°C
		40°C 25%	32,8 kW		46,9	27,2°C
		45°C 20%	39,2 kW		56,0	29,3°C
800 mm	15°C	35°C 30%	45,2 kW	1	28,3	22,5°C
		40°C 25%	56,1 kW		35,1	24,1°C
		45°C 20%	67,1 kW		41,9	25,6°C

3

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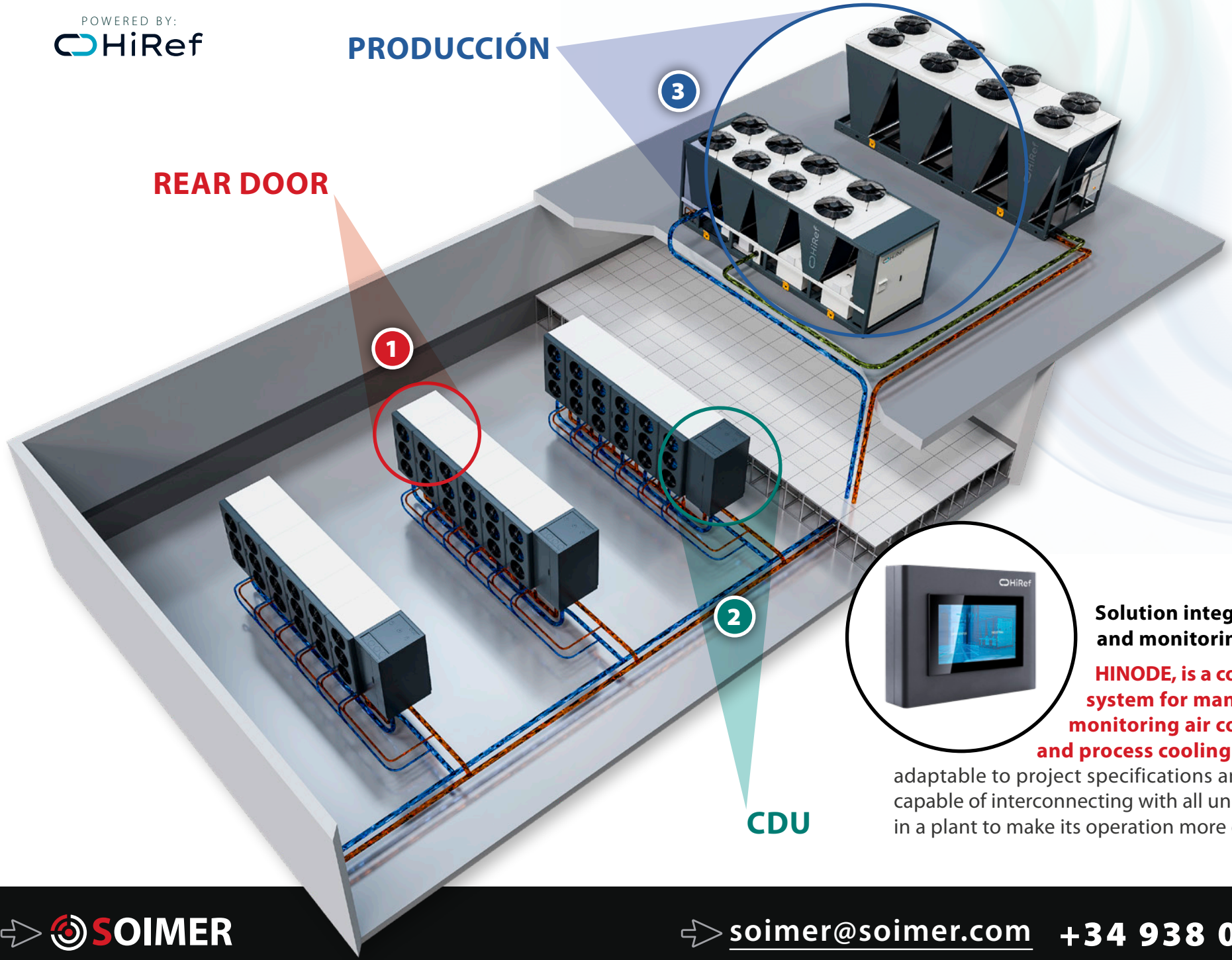
PRODUCCIÓN

REAR DOOR



Solution integration and monitoring system:

HINODE, is a comprehensive system for managing and monitoring air conditioning and process cooling installations, adaptable to project specifications and operations; capable of interconnecting with all units and devices in a plant to make its operation more efficient.

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