

# Coolblade

In Row cooler  
for IT applications

## General

The high value of the cooling power developed compared with the minimum floor area occupied makes these units especially suited to temperature control in data room and in contained server areas where high thermal load density IT equipment are gathered.

## Quick facts

- ▶ Available in chilled water & direct expansion version
- ▶ High heat removal on small footprint
- ▶ Axial and radial fan configuration
- ▶ Very high efficiency (increased in axial fan configuration)
- ▶ High installation flexibility
- ▶ Full redundancy option for **Tier IV** data-center (DW version)



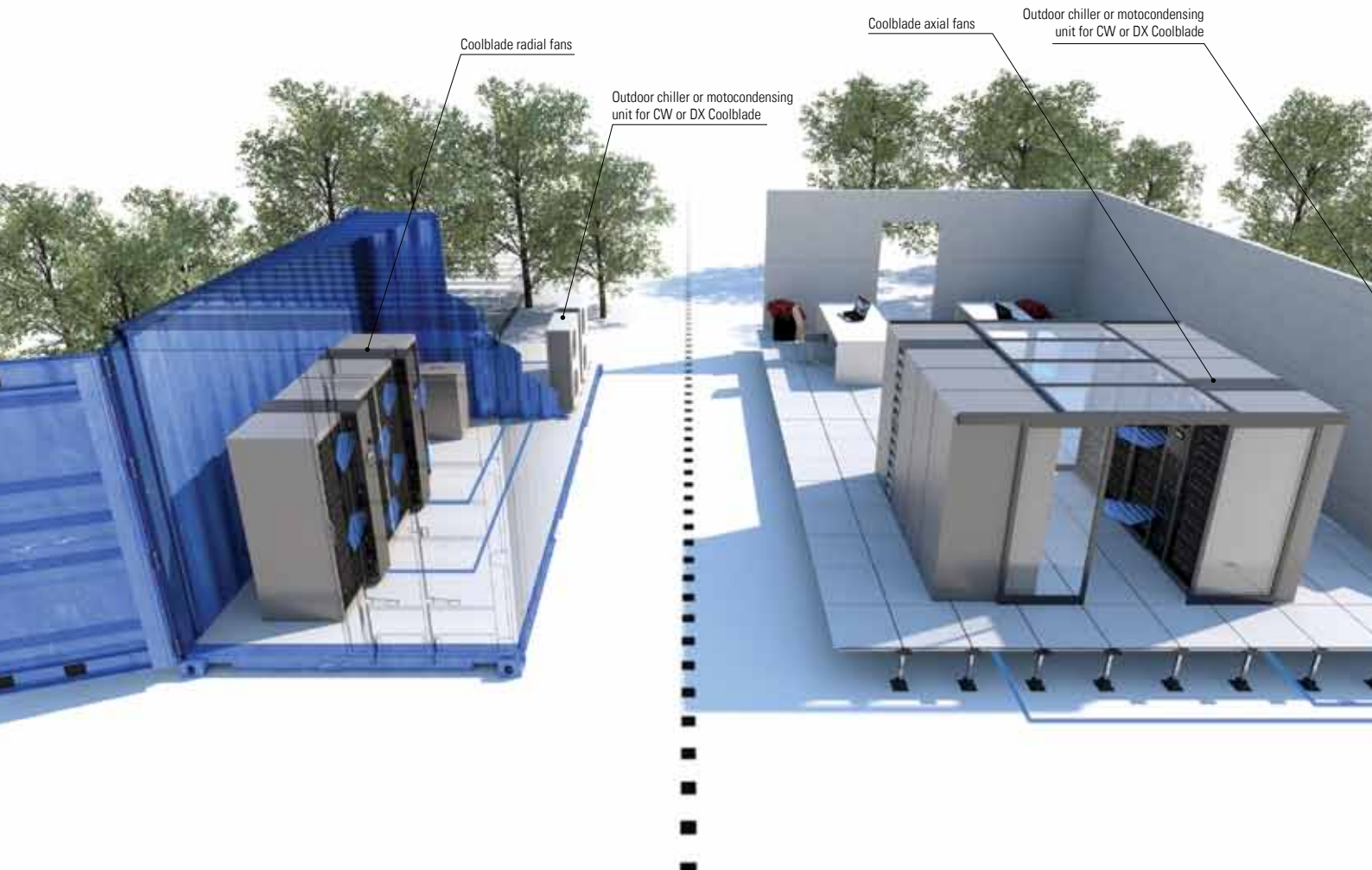
12÷27 kW



# IN ROW COOLING

**Coolblade** units are In Row coolers, specifically designed to be placed between the racks in a typical hot aisle/cold aisle layout.

**Coolblade** units take hot air exhausted by the racks, and deliver it, cooled down, into the cold aisle



## REDUNDANCY

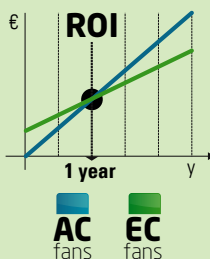
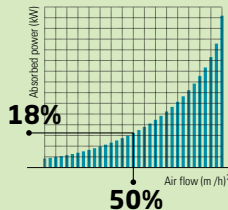
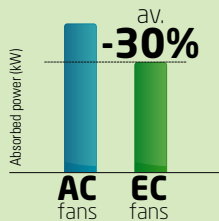
Coolblade CW units can be provided with full redundant layout: double heat exchanger with double 2-way valve and double power supply with automatic changeover in order to comply with the demanding arrangement of modern **Tier IV** datacenters.

**TIER·IV**  
**READY**

## EC FANS

Electronically commutated brushless motor

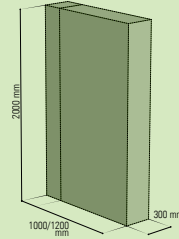
EC fans are "state of the art" with regard to ventilation within the Data Center. EC - Electronically commuted, in addition to the latest technology of three-dimensional shaping of fan blades in composite material, in radial fans, mean reduced energy consumption and noise, self-adaptation to changes in heat load, air volume or static pressure.



## COMPACTNESS

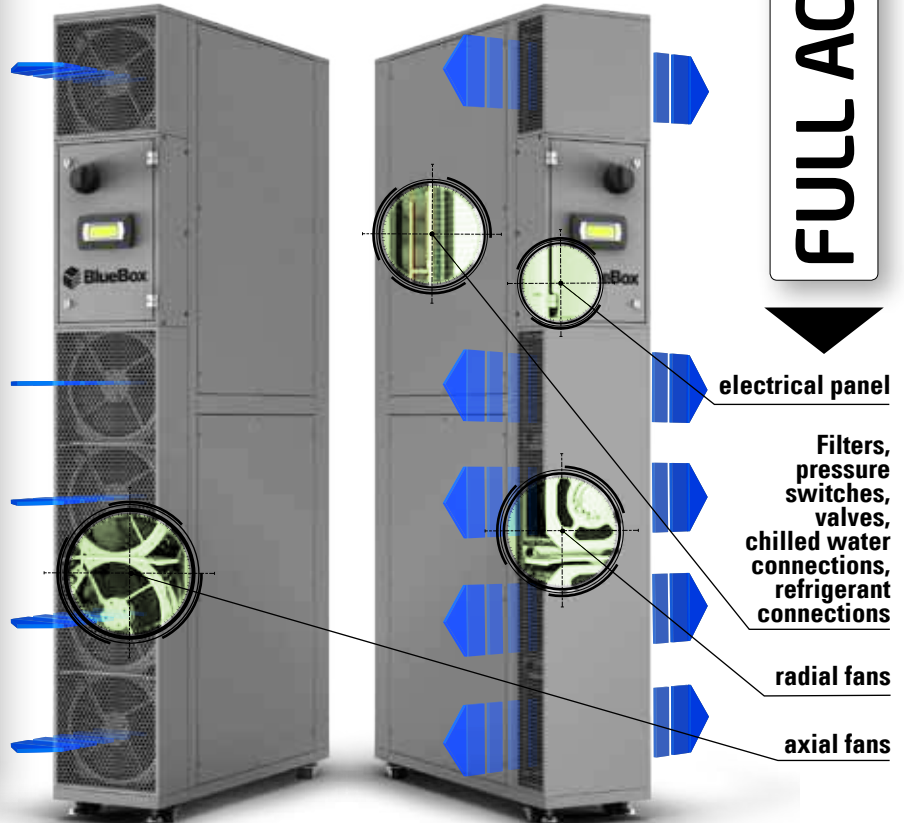
0,3 sqm per unit

**90** kW/sqm



## AXIAL FANS

## RADIAL FANS



# INTAKE & DELIVERY TEMPERATURE CONTROL

Coolblade units can provide air temperature control both on intake and on delivery (for DX version control on delivery is available only if combined with inverter driven outdoor unit).

Fan speed control is always operated according to the intake air temperature (or, alternatively it can be kept constant).



## EFFICIENCY

Power consumption is still very low when it comes to Coolblade, however the use of axial fans allows to bring it down to values not possible with any other type of equipment. For DX version, combination with inverter controlled external condensing unit (Epsilon Echos +) guarantees maximum adaption to heat load and minimum energy consumption.

## FLEXIBILITY

The unit has been developed to provide maximum flexibility both during the dataroom design stage and during on site installation.



- Electrical connections, as well as refrigerant and water connections, are available either from above or below.
- Radial and axial fans available on the same structure.
- Different air flow delivery directions can be selected.
- With or without thermostatic valve (DX version).
- With or without valves for CW and DW version.

### Coolblade /DX

Unit size _Grandezza unità			/DX 12/12L	/DX 19/19L	/DX 25/25L
<b>Cooling</b>					
Cooling capacity	(1)	kW	12,5	19,1	24,4
Air flow		m³/h	3300	4200	4900
<b>Dimensions and weight of basic unit</b>					
Length		mm	300	300	300
Depth		mm	1000/1200	1000/1200	1000/1200
Height		mm	2003	2003	2003

### Coolblade /CW /DW

Unit size _Grandezza unità			/CW 16/16L	/CW 27/27L	/DW 22/22L
<b>Cooling</b>					
Cooling capacity	(2)	kW	16.5	27.2	21.8
Air flow		m³/h	3200	4800	4800
<b>Dimensions and weight of basic unit</b>					
Length		mm	300	300	300
Depth		mm	1000/1200	1000/1200	1000/1200
Height		mm	2003	2003	2003

(1) Air inlet 35°C/30%RH; Ambient temperature 35°C with Blue Box condensing unit.

(2) Air inlet 35°C/30%rh, water temperature 13/18°C

This datasheet contains datas referred to the basic and standard version of the products; they could be modified by the Constructor in any moment. For details please refer to the specific documentation.

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## Datatech + > 7÷100 kW

Precision direct expansion air-conditioners, air cooled or water cooled for technological environments. Features all brushless DC inverter driven components.



## Datatech

### /ED > 6÷104 kW

Precision direct expansion air-conditioners, air cooled or water cooled for technological environments. Available also as DC/FC (Dual Cooling/Free Cooling) version.

### /CW > 6÷220 kW

Precision chilled water air-conditioners for technological environments. Available also as DW (Dual Water) version.



## Datatech /PFW > 70÷260 kW

Precision high capacity chilled water air-conditioners for technological environments with plenum fan.



## Coolblade

### /CW > 16÷27 kW

Chilled water In Row air conditioners for IT applications. Available also as DW (Dual Water) version.

### /DX > 12÷25 kW

In Row direct expansion cooler for IT applications



## Coolblade /CW & Coolmate > 16÷27 kW

Chilled water In Row air conditioners & pumping set for IT applications.



## Coolblade /DX & Epsilon Echos + /LE > 12÷25 kW

In Row direct expansion cooler for IT applications + external motocondensing unit inverter driven compressor



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