

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

- ▶ 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** datacenter (DW version)
- ▶ Available in chilled water (CW-DW), direct expansion version with (ED+) & without (DX) compressor

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

Coolblade radial fans

Outdoor chiller for Coolblade CW-DW,
motocondensing unit for Coolblade DX,
air cooled condenser for Coolblade ED+

Outdoor chiller for Coolblade CW-DW,
motocondensing unit for Coolblade DX,
air cooled condenser for Coolblade ED+

Coolblade axial fans



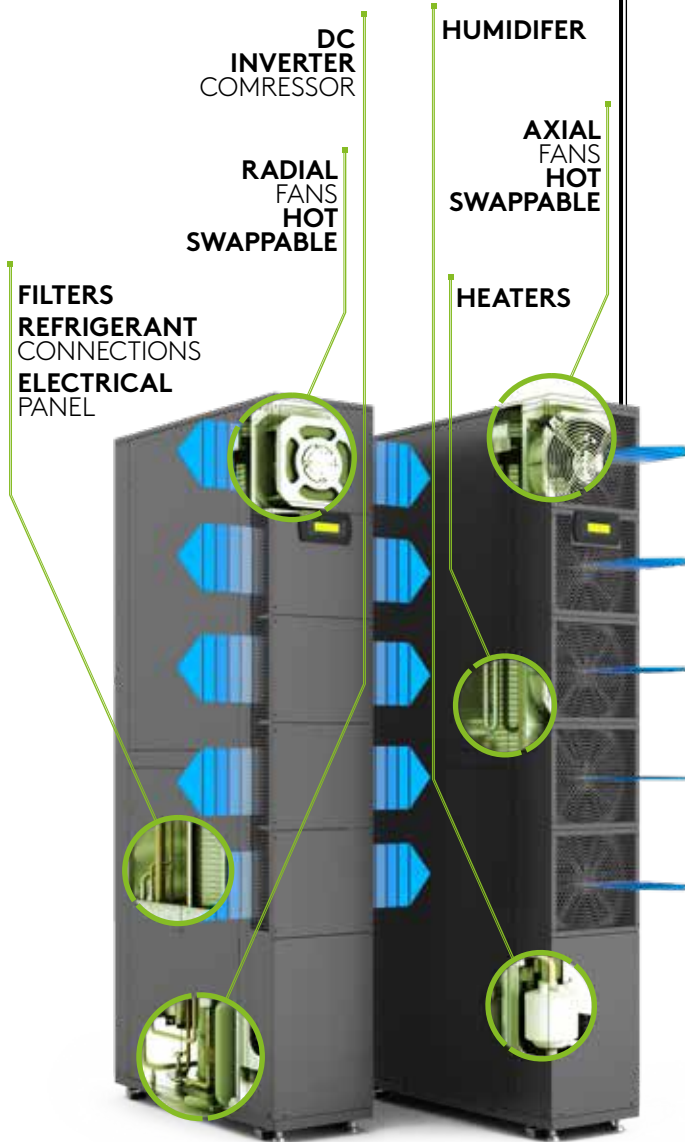
RADIAL



AXIAL

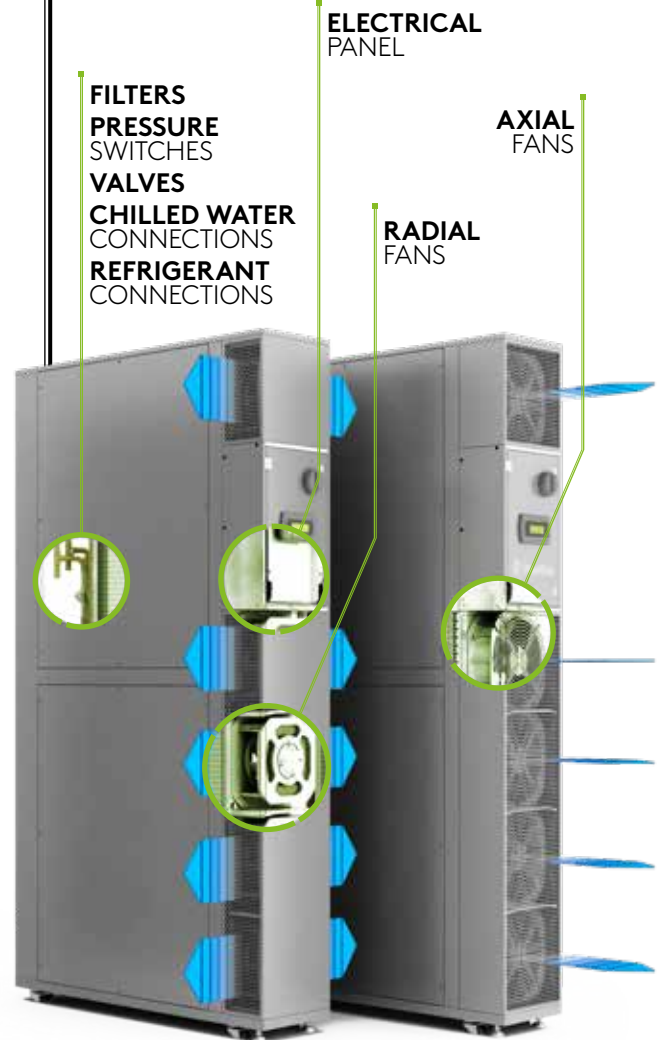
COOLBLADE ED+
DIRECT EXPANSION VERSION
(with compressor)

FULL CONFIGURABILITY



COOLBLADE DX/CW
CHILLED WATER &
DIRECT EXPANSION VERSION
(without compressor)

FULL ACCESSIBILITY



REDUNDANCY

ELECTRICAL

Dual Power Supply with Automatic changeover

COOLING SOURCE

Double heat exchanger with double modulating valve totally independent (DW version)

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 can be operated according to the intake air temperature to follow the heat load requirements. For ED+ unit with radial fans alternatively they can be managed to keep the right delta pressure within the aisles.



EFFICIENCY

NSEER $\left\{ \begin{array}{l} \text{ED} \\ \text{DX} \end{array} \right\}$ **3.3 TO 4.2** ⁽¹⁾
net sensible cooling capacity
unit fan power + compressor power

NSEER $\left\{ \begin{array}{l} \text{CW} \\ \text{DW} \end{array} \right\}$ **50 TO 125** ⁽²⁾
net sensible cooling capacity
unit fan power

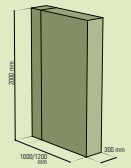
FLEXIBILITY

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.
- Available with heaters and humidifier (ED+ version).

COMPACTNESS

0,3 **90**
 sqm per unit **kW/sqm**



Coolblade /DX

| Unit size | | /DX 12/12L | /DX 19/19L | /DX 25/25L |
|------------------|-------------------|------------|------------|------------|
| Cooling | | | | |
| Cooling capacity | (1) (4) kW | 12,5 | 19,1 | 24,4 |
| Air flow | m ³ /h | 3300 | 4200 | 4900 |

Coolblade /CW /DW

| Unit size | | /CW 16/16L | /CW 27/27L | /DW 22/22L |
|------------------|-------------------|------------|------------|------------|
| Cooling | | | | |
| Cooling capacity | (2) (4) kW | 16.5 | 27.2 | 21.8 |
| Air flow | m ³ /h | 3200 | 4800 | 4800 |

Coolblade /ED+

| Unit size | | 13 | 21 |
|------------------|-------------------|------|------|
| Cooling | | | |
| Cooling capacity | (3) (4) kW | 13.1 | 19.8 |
| Air flow | m ³ /h | 4000 | 4000 |

(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

(3) Air inlet 35°C/30%RH; Ambiente temperature 35°C with Blue Box air cooled condenser.

(4) Data with Axial fans, Radial fans allow a capacity booster

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.

DIRECTION RÉGIONALE DE LA POLICE JUDICIAIRE
Paris- France
Kappa V Evo, Datatech CW, Coolblade CW
Supply - 640 kW



IT cooling product range



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 /DX & Epsilon Echos + /LE > 12÷25 kW

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



Coolblade /ED+ & RC Green > 12÷24 kW

In Row direct expansion cooler for IT applications + external remote aircooled condenser



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