


# COOLBLADE BTD IN RACK

Cooling Solution for
In Rack/In Row Applications
**8÷30** kW

BlueBox
by Swegon

# FLEXIBLE COOLING

Coolblade In Rack units have been specifically designed to **sit inside different rack frames** and match both Open or Closed Loop Application.

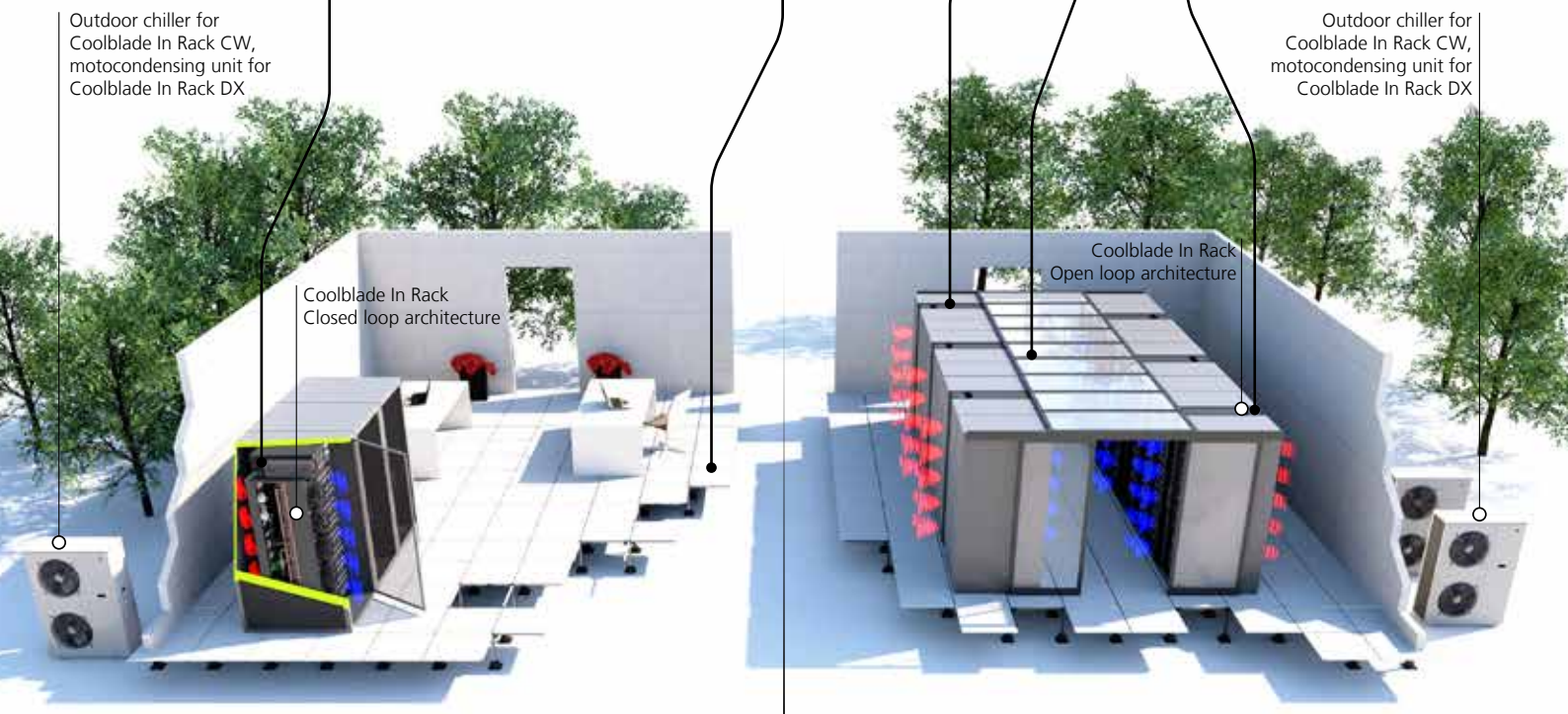
**Extremely compact design to fit inside any different 42U rack design** (or bigger)

**Flexibility in terms of application** (Chilled Water, Direct Expansion versions; Open, Closed Loop Solutions; etc)

**Flexibility in terms of installations** (Top & Bottom Connections; Top & Lateral unithandling)

**Efficient Design with minimum airside pressure drop**

**Designed for easy maintenance** (Hot Swappable EC Fans; Quick Electrical Connectors for all cables and signals; etc)




**CLOSED** LOOP

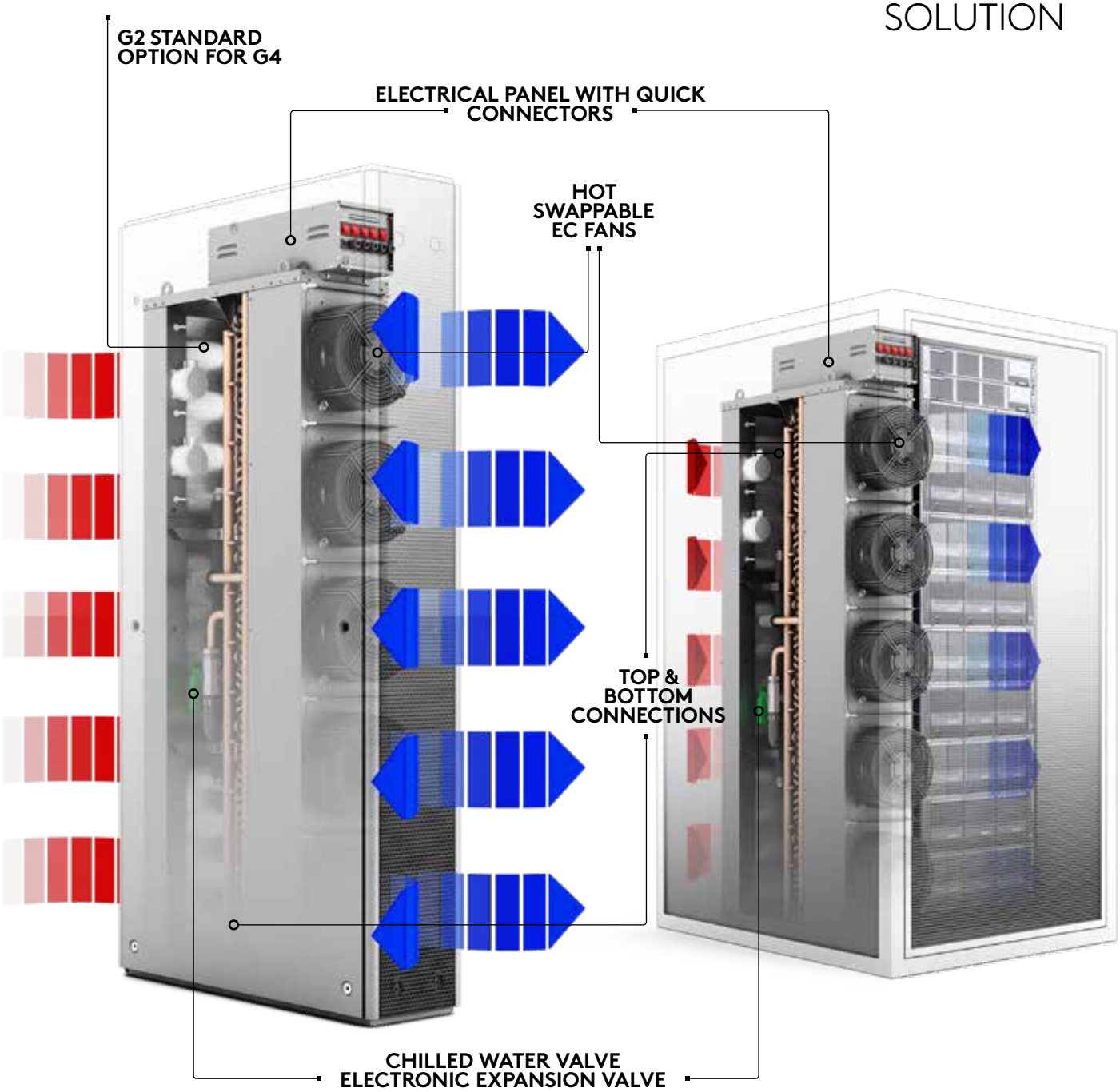
**OPEN** LOOP

# IN ROW

MOST FLEXIBLE
SOLUTION

# IN RACK

COOLING
SOLUTION



# EFFICIENCY

MAXIMIZED
**HEAT TRANSFER**

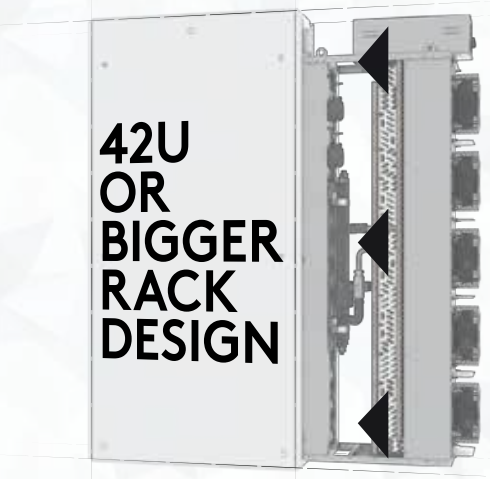
**COOLING UP TO**
**6 W/m³/h**

OPTIMIZED
**AIR STREAM**

**FAN CONSUMPTION LESS THAN**
**0.15 W/m³/h**

# FLEXIBILITY

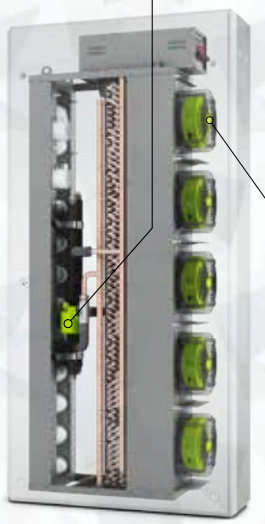
READY
TO FIT INTO
**DIFFERENT**
**RACK SKINS**



**42U**
**OR**
**BIGGER**
**RACK**
**DESIGN**

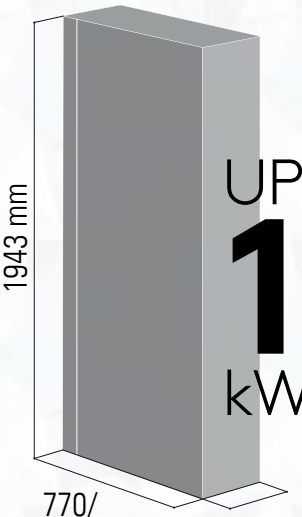
**CONTROL**
SOLUTION
TAKING **CARE**
OF THE
**AIR**
TO THE
**SERVER**

**READY**
FOR
THE
**IT**



**CONTROL**
SOLUTION
**MODULATIN(**
THE **FANS**
FOLLOWING
THE
**SERVERS**
**NEEDS**

# COMPACTNESS




UP TO
**135**
kW/sqm

# TECHNICAL DATA

**Coolblade In Rack DX**

| Unit size | | | 9 | 14 | 20 | 24 |
|---|---|---|---|---|---|---|
| **Cooling** | | | | | | |
| Cooling Capacity OL | (1) | kW | 8,7 | 14,0 | 18,9 | 21,5 |
| Airflow OL | (1) | m³/h | 2300 | 3200 | 3900 | 4200 |
| Cooling Capacity CL | (2) | kW | 9,9 | 15,8 | 21,2 | 23,6 |
| Airflow CL | (2) | m³/h | 2400 | 3350 | 4100 | 4200 |

**Coolblade In Rack CW**

| Unit size | | | 14 | 18 | 23 |
|---|---|---|---|---|---|
| **Cooling** | | | | | |
| Cooling Capacity OL | (1) | kW | 13,1 | 17,4 | 20,8 |
| Airflow OL | (1) | m³/h | 3180 | 3850 | 4200 |
| Cooling Capacity CL | (2) | kW | 17,1 | 22,8 | 26,2 |
| Airflow CL | (2) | m³/h | 3300 | 4050 | 4200 |

(1) Open Loop version. Air inlet 35°C/30%RH; DX Version 12°C Evaporating, 45°C Condensing; CW Version 13/18°C water temperatures
(2) Closed Loop version. Air inlet 40°C/20%RH; DX Version 15°C Evaporating, 45°C Condensing; CW Version 13/18°C water temperatures
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.

## The control platform for IT cooling applications, based on webserver.

**Simple & Immediate Human Machine Interface**

**More than 20 years Experience within Data Cooling Requirements**


**Unique Software Features**

**A Control Continuously Evolving following the Latest Industry Requirements**

SERVER LEVEL

ROOM LEVEL

AUTOMATIC AIR FLOW MODULATION BASED ON:

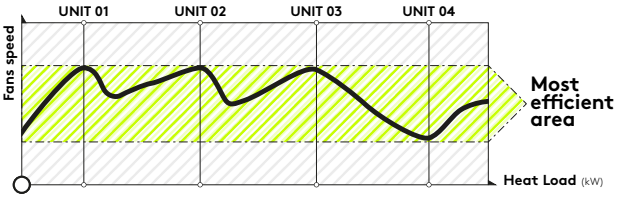
### REMOTE TEMPERATURE
push the freash air where is needed & control it with smooth and continuous adjustment

### REMOTE DELTA PRESSURE
avoid any risk of hot spot optimizing the fan energy consumption

### DELTA TEMPERATURE
treat, move and cool only the server's needed amount of air without any waste

SYSTEM LEVEL

## CONTINUOUS DYNAMIC OPTIMIZATION




WORK ALWAYS WITH THE
**RIGHT NUMBER OF NEEDED UNITS**
IN THEIR
**MOST EFFICIENCY WORKING POINT**

## CHILLED WATER SYSTEM
**ONE TO ONE MULTISYSTEM**
- direct high level communication
- scalable solution (**TIER III / TIER IV** design)
- variable water flow

## INDIRECT FC SYSTEM
**FLOATING WATER SET POINT**
minimize the overall system consumtion

## DIRECT EXPANSION SYSTEM
internal unit drive countinuously condenser based on application requirements
- homogeneous control
- easier site operations
- adapt to site noise requirements

Feel good **inside**

Swegon

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