

DATECH BTD PFW



## DATECH BTD PFW

Computer Room Air Conditioners with single or dual extended chilled water coil and separated fan section

**5÷220 kW**

**WESTERN**<sup>TM</sup>  
AIRCONDITIONING  
WARMTEPOMPEN

**BlueBox**   
by Swegon

# Datatech BTDPFW

## Plenumfan

The **EC radial fans** installed in a structure located under the raised floor allows to **minimize the pressure losses, optimize the airflow** and consequently **reduce the power consumption and noise emission**

High sensible cooling per square meter of footprint

Exceptionally high efficiency of EC motor driven plastic impeller radial fans

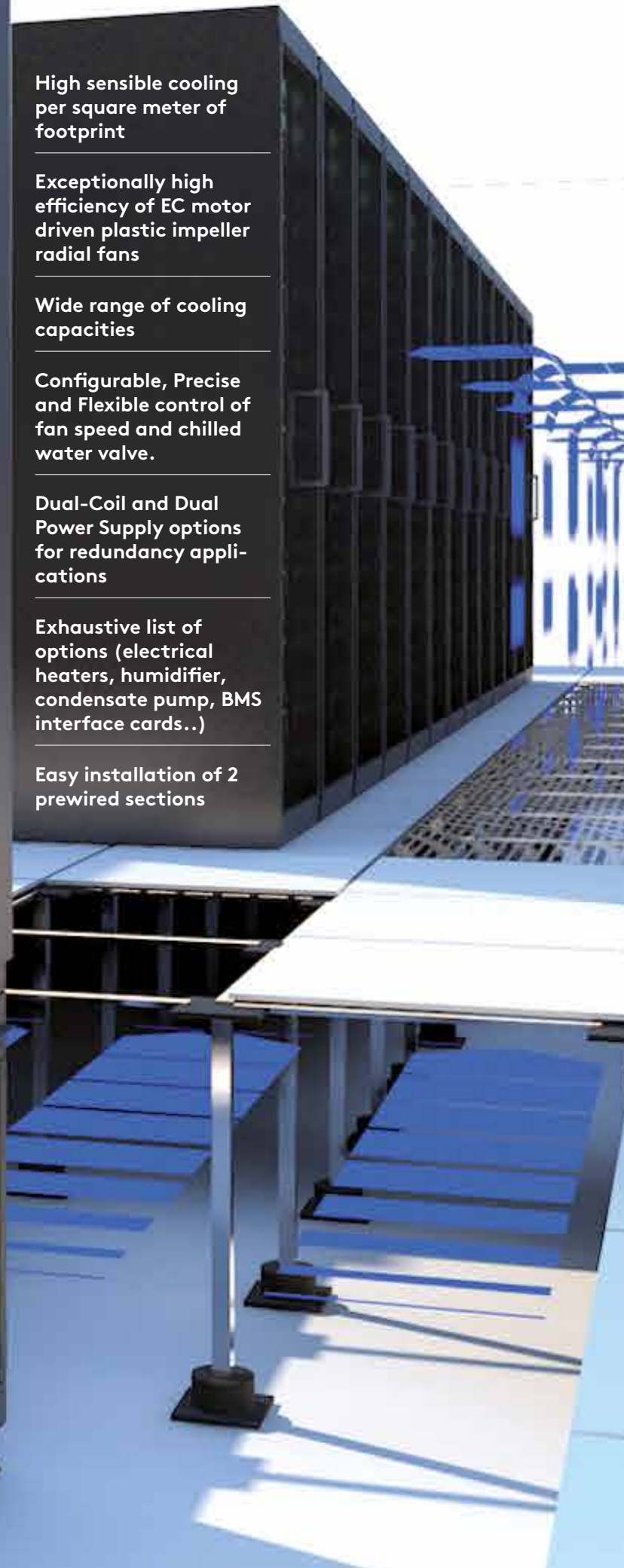
Wide range of cooling capacities

Configurable, Precise and Flexible control of fan speed and chilled water valve.

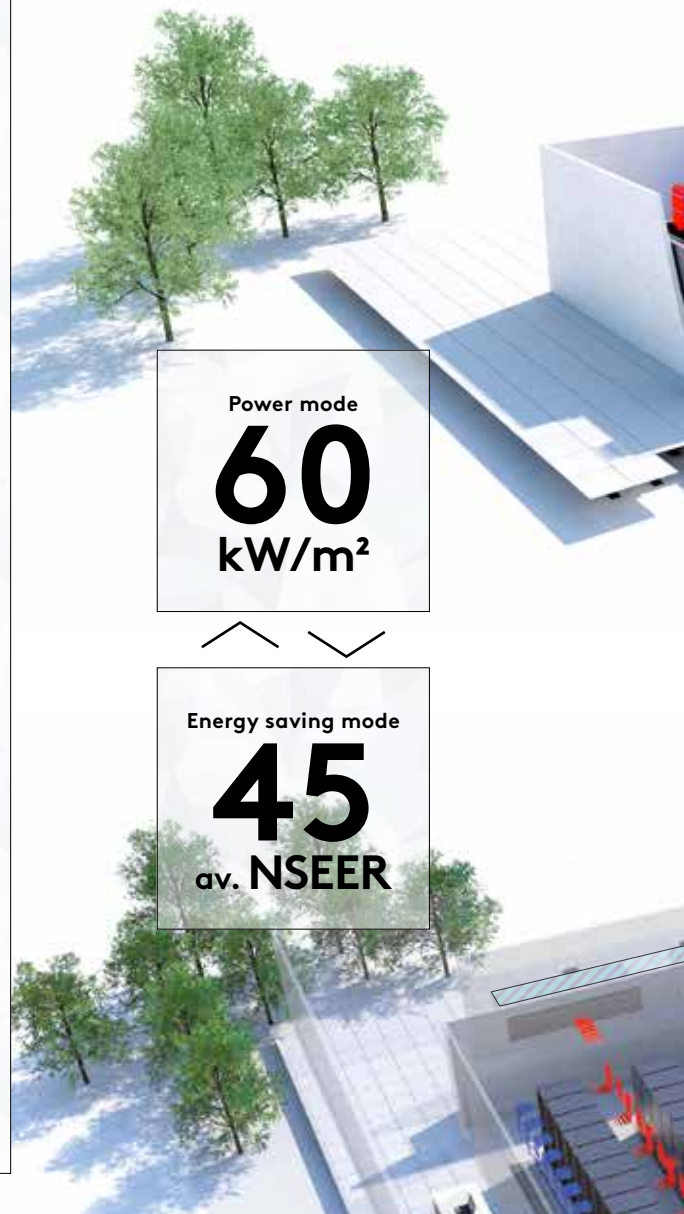
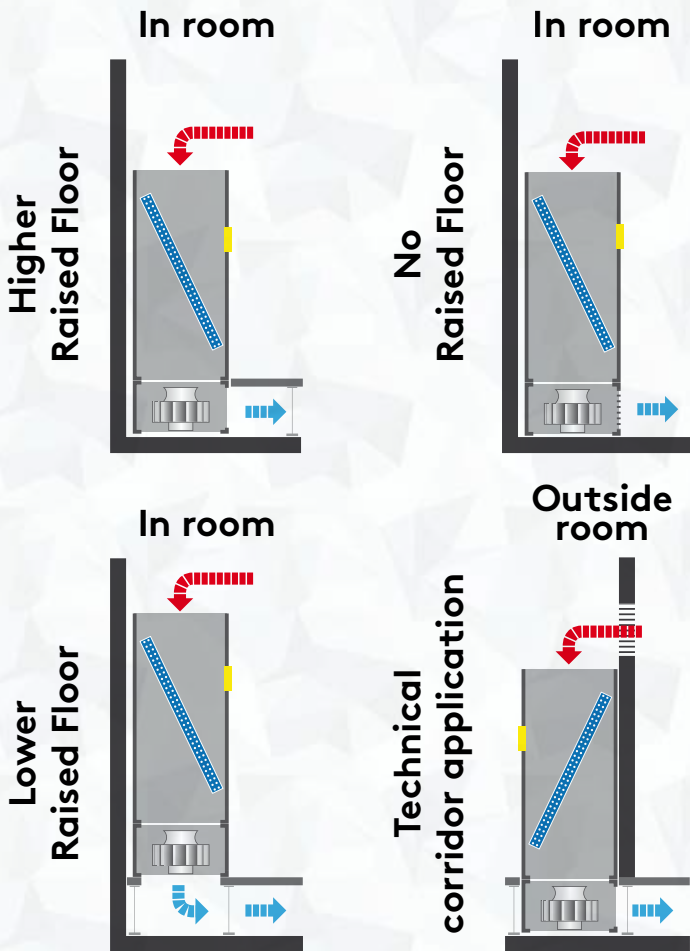
Dual-Coil and Dual Power Supply options for redundancy applications

Exhaustive list of options (electrical heaters, humidifier, condensate pump, BMS interface cards..)

Easy installation of 2 prewired sections



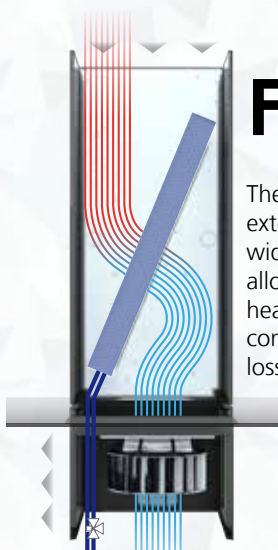
# DESIGNED TO SUIT ALL DATACENTER LAYOUTS



Power mode  
**60**  
kW/m<sup>2</sup>

Energy saving mode  
**45**  
av. NSEER

## CONDENSING COIL LAYOUTS

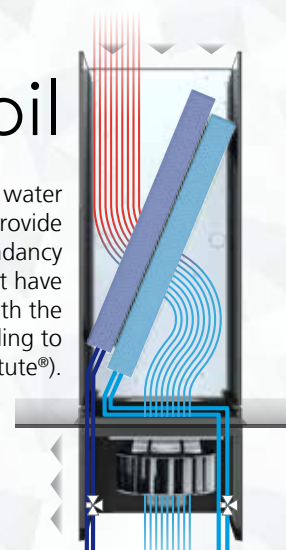


### Fullcoil

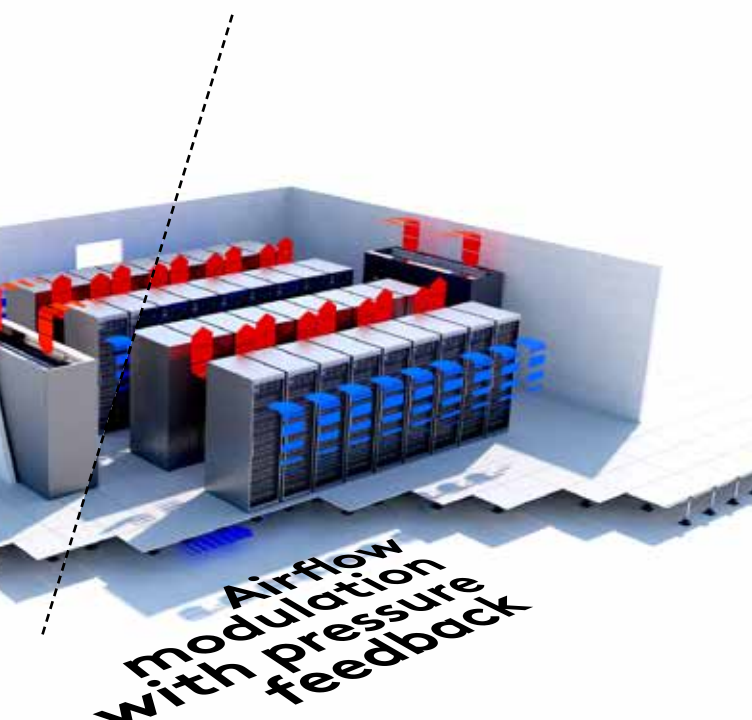
The chilled water coil that extends across the whole width of the cabinet allows to maximize the heat exchange, and to contain the pressure losses aerualic.

### Dualcoil

The version with dual chilled water coil and double valve can provide the high levels of redundancy required by data centers that have to operate in accordance with the higher Tier levels (according to Uptime Institute®).







**Airflow modulation with pressure feedback**

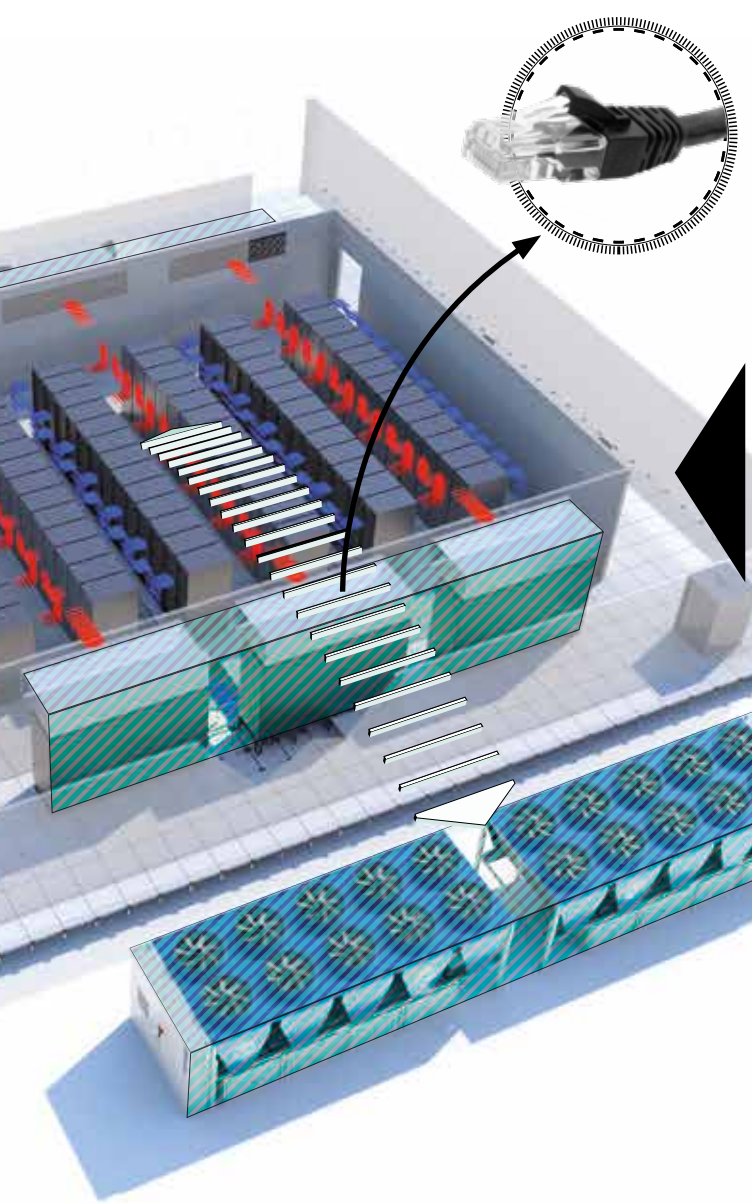
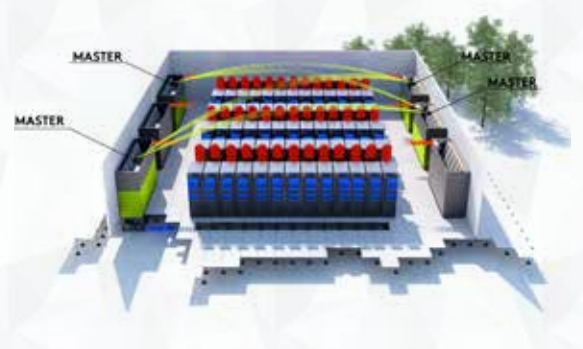
# CONTROL OF AIR-FLOW OR FLOOR PRESSURE



Different solutions for different needs. Both ensuring efficiency improvements at part load, system optimization and reaction to the unpredictable.

## DATALINK

The local network allows to manage redundancy, to balance the operation, to avoid conflicts and to monitor the operation of all units from a remote display.



## CWDS

(Chilled Water Dynamic set)

This solution allows to adapt the chilled water temperature supplied to Datatech BTM PFW air conditioners to the actual thermal and hygrometric room load.



# INSTALLATION & MAINTENANCE

A series of measures/solutions such as base module shipped preinstalled in the unit, damper embedded on small plenum with fully frontal accessibility, separate compressor sections simplify operations and reduce installation time.

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



AUTOMATIC AIR FLOW MODULATION BASED ON:



**REMOTE TEMPERATURE**

push the fresh 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

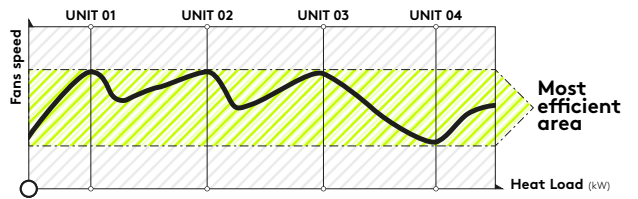


**DELTA TEMPERATURE**

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



**CONTINUOUS  
DYNAMIC  
OPTIMIZATION**



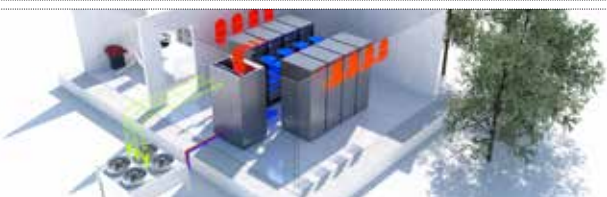
WORK ALWAYS WITH THE  
RIGHT NUMBER OF NEEDED UNITS  
IN THEIR  
MOST EFFICIENCY WORKING POINT



**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 consumption

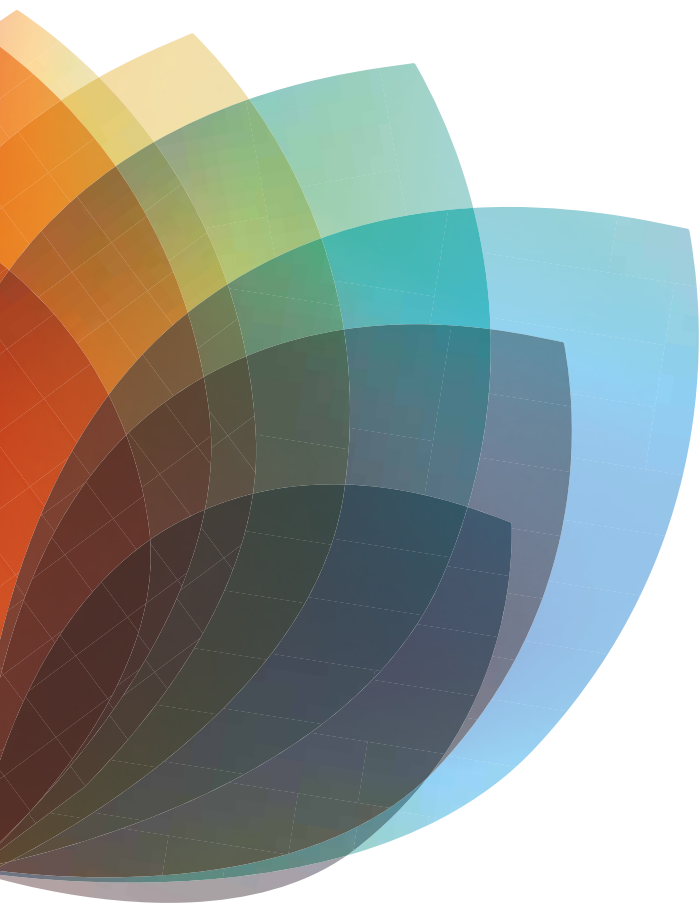


**DIRECT EXPANSION SYSTEM**

internal unit drive continuously condenser based on application requirements

- homogeneous control
- easier site operations
- adapt to site noise requirements

Feel good **inside**



**WESTERN**<sup>TM</sup>  
AIRCONDITIONING  
WARMTEPOMPEN