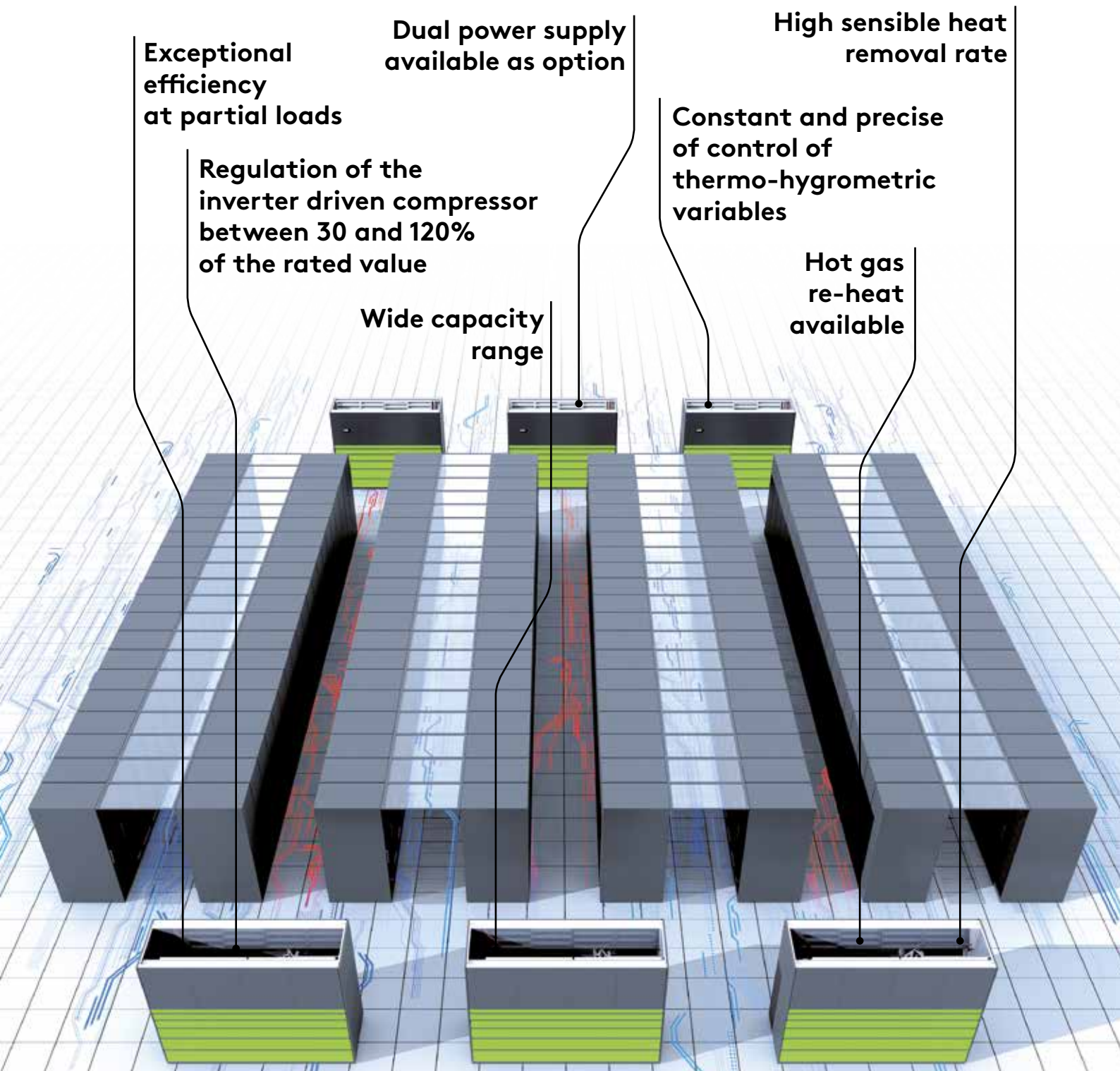
DATATECH BTD +

Precision air conditioners with inverter driven brushless DC compressor

7÷100 kW

BlueBox by Swegon

DATATECH BTD +



WITH INVERTER

Redundancy means more efficiency

The higher efficiency of the refrigerant circuit at part load conditions grants the maximum benefit in (n+1) redundancy applications

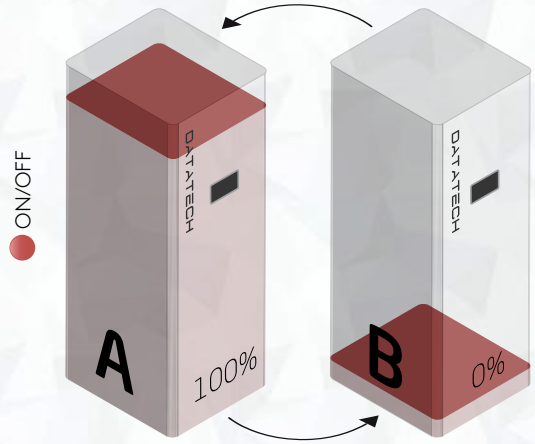
REDUNDANCY

The higher efficiency of the refrigerant circuit at part load conditions grants the maximum benefit in (n+1) redundancy applications: instead of keeping one or more units in standby as a backup, all of them will work together each one at lower capacity, obtaining in this way a lower initial investment and a lower operating cost.

RUNNING - STAND BY

primary with secondary unit used only as a backup

EER: 3*

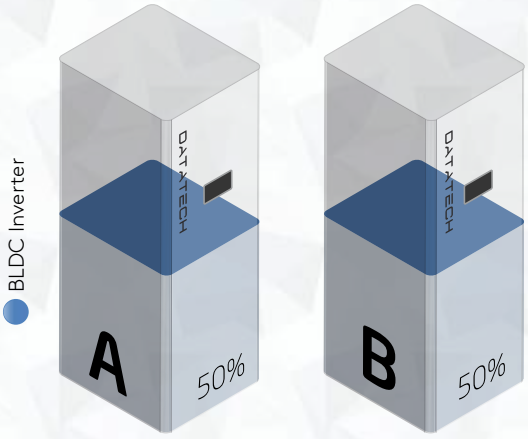


A: main unit **B:** backup unit

SMART DUET

both units used at partial load

EER: 4*

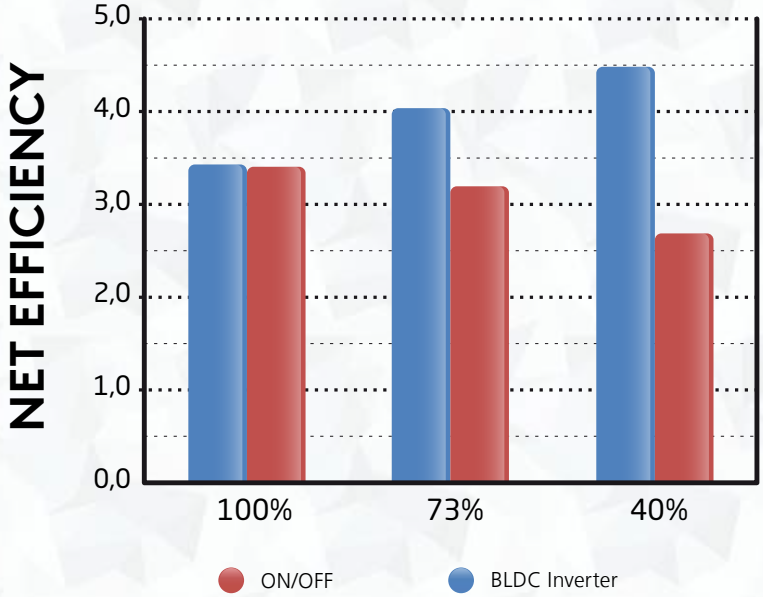


A: main unit **B:** main unit

*thermal load 23 kW at 24°C/50% rh internal conditions and 35° outdoor conditions

BRUSHLESS DC

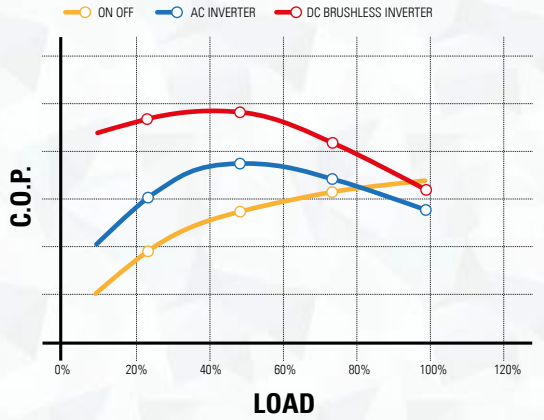
The brushless DC motor is inherently more efficient than an AC motor and is designed to be speed modulated.



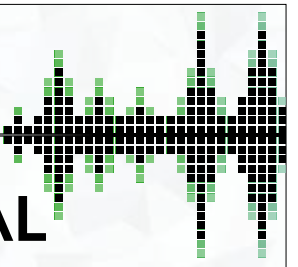
ACCURACY +/- 0,5°C

THE COMPRESSOR CAN MODULATE BETWEEN **30%** AND **120%** OF ITS NOMINAL SPEED

BLDC compressor is intrinsically more efficient of Digital Scroll® at reduced load.



LOW NOISE EMISSION AT PARTIAL LOAD



At reduced load, compressor and fan operate at lower speed, ensuring lower sound emission120 rps. Extra capacity is available for temporary peaks.

PEAK LOAD MANAGEMENT

Inverter units are designed at 90 rps when maximum is 120 rps. Extra capacity is available for temporary peaks.

EFFICIENCY

DC INVERTER SCROLL COMPRESSOR

- Higher efficiency at part load
- Continuous modulation according to the load
- Accurate temperature control and stability
- Minimum water volume

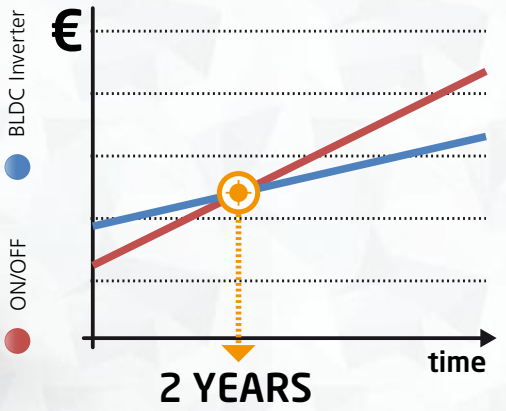
energy saving

up to

12% per year

(compared with standard scroll compressor)

RETURN OF INVESTMENT



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

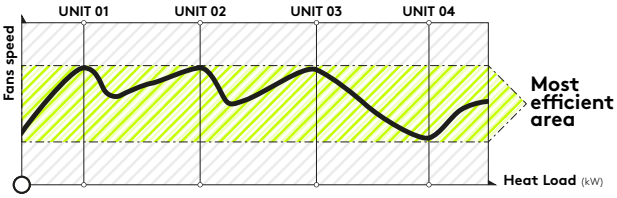
AUTOMATIC AIR FLOW MODULATION BASED ON:

REMOTE TEMPERATURE
push the 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

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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