Unit description

DUAL FLUID FULL INVERTER direct expansion Air Conditioners for IT Cooling designed to be coupled with a remote condenser. The units provide redundancy in cooling capacity also in emergency situations; to be connected to an external chiller for primary chilled water circuit, and to a remote condenser for the secondary or back up direct expansion circuit. The machines are suitable for indoor installation in modern IT infrastructures with high density racks / blade servers and in Data Center with hot spots, dissipating an high thermal load with small footprint. The installation foresees the direct insertion within the rows of racks to cool the localized heat sources (hot spot). The unit easily adapts to the real thermal load of the server; it is an easy to install solution for modular cooling systems and fast upgrade of the data center capacity. BLDC hermetic inverter compressor installed in the unit for optimizing the performances and increasing the overall efficiency of the system in any condition; new plug fans with EC electric motors and impeller in composite material, which guarantees a reduction of power consumption. The units is available with horizontal air flow for IN ROW cooling system application. Air intake from the back side and frontal air delivery through honeycomb type grilles.

Versions

- **BF** Frontal air supply, back return air
- BT Side supply air, back return air

Features

- EFFICIENCY
- The unit combines the efficiency of use of last EC fans generation and a direct expansion system with inverter compressor fitted in the unit allowing a great EER value. Thanks to the adoption of inverter DC brushless compressors, these units can reduce by 50% consumptions at part load, if compared to a traditional ON/OFF compressor. This is made possible also thanks to the advantages of variable air flow enabled by EC fans.
- FLEXIBILITY
- The units are predisposed for refrigerant connections and power supply passage from both above and below, so as to allow a quick and easy installation in any condition, whether or not foreseen the presence of a raised floor.
- MODULARITY
- The units, with their characteristics of dimensional standardization based on the rack, are ideal for all those datacentres where SCALABILITY of the system is a strategic factor.

- COMPARTIZATION
- Perfect integration with systems that minimize the mixing hot and cold air between the aisles and that emphasize the efficiency of such systems.