PART 1 General

1.1 SYSTEM DESCRIPTION

1.1.1 Provide Jaga CLIMA-CANAL or QUATRO-CANAL units where perimeter heating is shown.

1. 1.1.2 CLIMA-CANAL hydronic heating and cooling device floor or sill mounted device shall be quiet, robust and efficient in design and provide suitable heating for any public, commercial, or residential space.

1.1.3 The water source heating and cooling equipment shall be certified for outputs based on EN442 and EN16430 standards.

1.2 QUALITY ASSURANCE

1.2.1 Each Units shall be fully tested at the factory.

1. 1.2.2 Insulation and adhesives shall meet NFPA-90A requirements for flame spread and smoke generation

1.2.3 All aluminum components shall be certified to meet ASTM G53 UV-resistance

1.2.4 Surface temperature remains safe at all times based on DHSS DN 4 1992 regulation and subsequent revision.

1.2.5 All units shall be individually packaged and labeled for eased on site locating and installation

PART 2 Mechanical Parts

2.1 Canal

1. 2.1.1 The Canal shall be fabricated with 18 gauge sendzimir galvanized steel and will be coated with 70% gloss anthracite grey epoxy polyester RAL 7024 baked at 392°F.
2. 2.1.2 The Canal shall be fabricated with 3 perforated holes through which piping and electrical conduit may be accommodated. Concrete proof plugs shall occupy the holes until required. Condensate pan and drain located at the base and side of the canal.
3. 2.1.3 The Top grille shall provide, Top return air and supply and access to facilitate normal unit maintenance and service.
4. 2.1.4 The Canal shall contain the ultra-low temperature, six-pass heat exchanger, support clips, tangential activator and electrical connections.

2.1.5 All connections shall be made inside of the canal

2.1.6 The Canal shall have K-values of 45.4 BTU/ft2F and R-Values of 0.022ft2/BTU

1. 2.1.7 The unit shall include telescopic leveling legs and contractor shall ensure unit canal is plumb. The appliance is equipped with a height adjustment from 0 to 45 mm and a fine height adjustment up to + 8 mm to perfectly align the appliance with the finished floor.
2. 2.1.8 The Canal shall be factory Parts Warranted for 10 Years

2.1.9 The Canal shall ship with a Covering Plate of fiber board for installation

2.1.10 OPTIONAL Pedestal leveling legs for installations in raised Access-Floors

2.1.111 OPTIONAL Corners pieces and empty canals with grilles shall be fabricated to match on site measurements

2.2 Heat Exchanger

2.2.1 The Heat exchanger shall be of copper and aluminum construction. Shall be composed of round, seamless circulation tubes pure red copper, and two brass collectors.

2.2.2 The Fins shall be connected to the heat exchanger by expansion method only.

2.2.3 The Heat exchanger shall be factory pressure tested to 290 PSI.

2.2.4 The Heat exchanger shall be easily removable from the casing if required.

2.2.5 The Heat exchanger shall be coated with dirt repellent and dust proof lacquer.

2.2.6 The Heat exchanger shall have ASTM G53 certification.

2.2.7 Each individual heat exchanger shall have EN442 and EN16430 certification. Output Correction factors will not be considered equivalent to establish output capacities.

2.2.8 Each Heat exchanger shall be of ultra-low thermal inertia in design.

2.2.9 The Heat Exchanger fins shall be corrugated by design.

1. 2.2.10 The Heat Exchanger shall be factory Parts Warranted for 10 Years.
2. 2.2.11 The Heat Exchanger shall have ½” NPT hydronic connections. No BSP to NPT adapters accepted.

2.3 FRAMES (GRILLE HOLDER)

2.3.1 The Frame shall be of stainless-steel construction.

2.3.2 The Frame shall be factory mounted on the canal.

1. 2.3.7 The Frame shall be factory Parts Warranted for 10 Years

2.4 GRILLES

2.4.1 The Grilles shall be of Aluminum or Wooden material.

2.4.2 The aluminum grille ties, positioned crossways shall be connected with two 16.5mm wide EPDM rubber holders. Free flow air arrest value not below 62.5%. Profile of the AISI 304 aluminum ties is 6 x 14mm, with a mutual distance of 9mm between ties.

2.4.3 Roll up wooden grilles shall be fabricated with a galvanized steel spring covered in natural aluminum coverings. Free flow air arrest value not below 52%. Profile of the wooden slats is 12 X15mm, with a mutual distance of 13mm between ties.

2.4.4 OPTIONAL mutual distance spacing can be reduced to 6mm.

2.4.5 The Grilles shall be factory Parts Warranted for 10 Years

PART 2B – ELECTRICAL PARTS

2.5.1 The fan motor shall be Electronically Commutated, Brushless DC with ball bearings and provide 100% variable operation

2.5.2 The fan motors shall be 24VDC, low voltage. OPTIONAL 24VAC fan connection.

2.5.3 The fan system shall maintain sound noise pressure levels below 36 dBA at all times.

2.5.4 ECM fans warranted for standard 2 years.

2.5.5 ECM fans include 0-10V analog controls. Optional water temperature sensor controls.

2.5.6 Fans are provided with Sendzimir galvanized steel plate cover and integrated stainless steel air filter, electrostatically powder coated black, glossiness 70%.

PART 3 - EXECUTION

* 1. INSTALLATION
     1. Maintain factory installed pipe caps until water connections are made.
     2. Install units in accordance with manufacturer’s instructions and install all accessories specified herein.
     3. Locate units according to the drawings and ensure that mounting position allows full access to the service panels, filters, etc.
     4. In order to totally block off the cold draughts from the window it shall be preferable that the fin tube element covers the full length of the window.
     5. Distance between window and Clima-Canal should allow extra space for window coverings. Which under no circumstance should window coverings hang over the Clima-Canal.

END OF SECTION