

# MODEL E ENGINEERING SPECIFICATIONS



AIR-TO-AIR HEAT EXCHANGERS

**HEATEX**

## 1. SPECIFICATIONS

- Corrugated aluminum matrix air-to-air rotary heat exchanger.
- Exchanger seals shall be of brush type.
- Brush seals shall be included to separate fresh air from exhaust air across the entire surface of the air entering side, the air leaving side, and around the outer perimeter of the rotor wheel.
- Casing shall be fabricated of heavy duty, free rolled Aluzink steel, with a sheet metal thickness ranging from 1,5 mm to 3 mm
- For maximum compactness, the casing width & height shall not be larger than: Rotor diameter ( $\varnothing$ ) + 50 mm.
- Rotor shall be supported by internally mounted sealed ball bearings.
- Drive system shall have IP 55 protection class or higher and consist of either:  
AC gear-less stepping motor with MODBUS interface and 0-10 volt input signal, driving a self-adjusting round or multi-link belt.  
Or  
AC gear motor, driving a self-adjusting round or multi-link belt.
- Exchanger to rotate below 25 rpm.
- Energy efficiency of the RHE must meet or exceed the demands stated in Ecodesign Lot 6.
- The RHE must be Eurovent certified and comply with EN13779 (standard for comfort ventilation).
- Control units shall be approved by and comply with either: EN 60034, UL 508C or CSA C22.2 No. 14.
- Drive units shall be approved by and comply with either EN 60034, UL 1004-1, UL 1004-3 or CSA C22.2 No 100.

## 2. MEDIA OPTIONS

- Aluminum: Aluminum matrix for sensible energy recovery in non-corrosive environments.
- Epoxy: Self-sealing epoxy coated aluminum matrix for sensible energy recovery in corrosive environments.
- Hybrid Hygroscopic: Aluminum and silica gel coated aluminum matrix for sensible and latent energy recovery.
- Molecular Sieve: 3-4Å molecular sieve desiccant coated aluminum matrix for sensible and latent energy recovery.
- Adsorption: Silica gel coated aluminum matrix for sensible and latent energy recovery.

## 3. OPTIONS

- Purge sectors shall be available and have a maximum angle of 3,5° per air flow, with a maximum EATR-value of 0%.
- Variable Frequency Drive for economizer and frost prevention.
- Multi-Link type drive belt must be available on all wheel diameter sizes.
- Condensing tray, to gather and transfer condensed water out of AHU.
- Inspection hatches, for easy access to the different rotor parts.
- Covered casing (4 sides) and insulated casing (6 sides), shall be available as an option.