# FrigoDynamics<sup>®</sup> **HB HPK-Fin™ 270** Hybrid Heat Exchanger for CoB LEDs ≤ 195W <sup>3</sup>

The HB HPK-Fin<sup>™</sup> solution is a Hybrid heat exchanger allowing high levels of power dissipation with zero power consumption. The unit has a unique, patented design utilizing the chimney effect thus maximizing performance. Ideal for installations with high ceilings, typically found in warehouses, factories, large retail stores and athletic facilities.

- Passive, no CO2 emissions
- Light weight
- Compact
- Zero noise levels
- No lifetime issues
- No operating cost
- Works in any orientation
- Easy installation



Please Note: Registered German Utility Model DBGM protected PCT Patent Application

### Specifications

|                         | Value                     | Conditions                                          |
|-------------------------|---------------------------|-----------------------------------------------------|
| Thermal Resistance (Tc) | 0.35 °C/W <sup>1, 2</sup> | Measured between LED Tc/Ts - ambient                |
| Thermal Resistance (Hs) | 0.25 °C/W 1               | Measured between LED mounting base and ambient      |
| Design power            | 195W <sup>3</sup>         | Electrical Load (assuming 72% Pth)                  |
| Storage Temperature     | -40°C to 100°C            | Air temperature surrounding the unit                |
| Surface finish          | Black                     | Anodized                                            |
| Weight                  | 1120g (~2.47 lbs)         | Complete unit                                       |
| Regulatory Compliance   | RoHS                      | No further compliance necessary for passive devices |

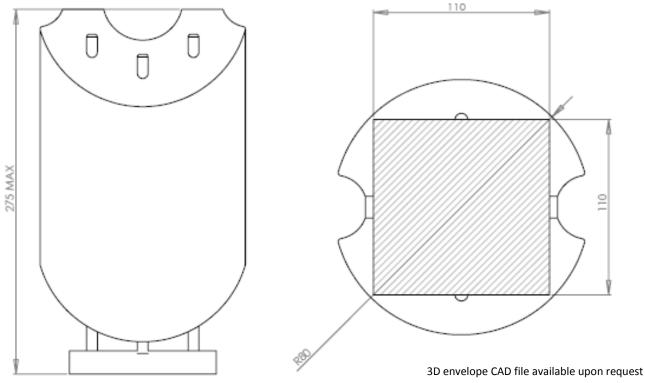
<sup>1</sup> Thermal resistance is measured in free air without airflow obstructions and in a horizontal orientation.

<sup>2</sup> This value is impacted by the thermal interface material used, especially with smaller heat sources.

<sup>3</sup> Design power is based on 50 °C temperature difference between maximum Tc (Ts) on LED module and ambient temperature.



#### Dimensions (~ mm)



and endorsement of FrigoDynamics NDA

## **Product Guide**

| Part Number        | Description                            | Specifics                                             |
|--------------------|----------------------------------------|-------------------------------------------------------|
| HB0900-HPK03-270AN | Blank Surface                          |                                                       |
| HB0916-HPK03-270AN | LED pattern, wire through holes        | Bridgelux VERO <sup>™</sup> 29, Citizen CLL052, CLU54 |
| HB0919-HPK03-270AN | LED pattern, wire through holes        | Tridonic STARK FLE                                    |
| HB0920-HPK03-270AN | LED pattern, wire through holes        | Bridgelux VERO™ 18/29                                 |
| HB0925-HPK03-270AN | LED pattern, wire through holes        | Citizen CLL042/CLL052/CLU54                           |
| HB0926-HPK03-270AN | LED pattern , wire, Corners 4x M3/ 8-8 | Citizen CLL052/CLU54, Ledil Stella                    |
| HB0930-HPK03-270AN | LED pattern , wire, Corners 4x M3/ 8-8 | Bridgelux VERO™ 29, Ledil Stella                      |

Please <u>contact</u> us, should you have specific requirements not covered in this data sheet.

#### Disclaimer

Information given by FrigoDynamics<sup>®</sup> is believed to be accurate and reliable. However, since every potential application and the environment our solutions operate in cannot be anticipated, FrigoDynamics<sup>®</sup> does not guarantee suitability in all circumstances. Thermal performance may vary depending on the enclosure, the operating orientation and natural airflow. FrigoDynamics<sup>®</sup> shall not be liable for incidental or consequential damages of any kind.



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