# FrigoDynamics<sup>®</sup> **TC HPK-Fin™ 160** Hybrid Heat Exchanger for CoB LEDs ≤ 65W <sup>3</sup>

The TC HPK-Fin<sup>™</sup> solution is a 2-phase heat exchanger allowing high levels of power dissipation with zero power consumption. This design trades the low profile of the OC version for a shorter length. Ideal for recessed downlights with constrained space in horizontal direction.

- Passive, no CO<sub>2</sub> emissions
- Light weight
- Compact
- Zero noise levels
- No operating cost
- No lifetime issues
- Easy installation

# Specifications

|                         | Value                     | Conditions  |  |
|-------------------------|---------------------------|---|--|
| Thermal Resistance (Tc) | 0.95 °C/W <sup>1, 2</sup> | Measured between LED Tc - ambient                   |  |
| Thermal Resistance (Hs) | 0.85 °C/W 1               | Measured between LED mounting base and ambient      |  |
| Design power            | 65W <sup>3</sup>          | Electrical Load                                     |  |
| Storage Temperature     | -40°C to 100°C            | Air temperature surrounding the unit                |  |
| Surface finish          | Black                     | Anodized  |  |
| Weight                  | 350g & 340g               | Complete unit: variation 1 & variation 2            |  |
| 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 (ΔT) between maximum Tc point on LED module to ambient temperature.



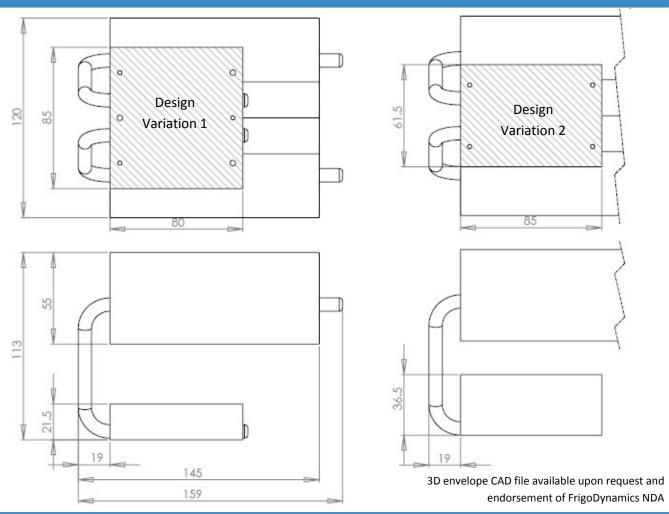
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<u>Please Note:</u> Registered German Utility Model DBGM protected PCT Patent Application



### Dimensions (~ mm)



# Product Guide

| Part Number         | Description                                    | Specifics  |
|---------------------|--|--|
| TC 0800 HPK01-160AN | Blank Surface                                  | Variation 1  |
| TC 0500 HPK01-160AN | Blank Surface                                  | Variation 2  |
| TC 0801 HPK01-160AN | Philips/Tridonic <sup>®</sup> mounting pattern | Variation 1 for Fortimo DLM/ STARK DLE                 |
| TC 0502 HPK01-160AN | Xicato mounting pattern                        | Variation 2 for XLM <sup>™</sup>                       |
| TC 0503 HPK01-160AN | Bridgelux <sup>®</sup> mounting pattern        | Variation 2 for all BXRA, VERO <sup>™</sup> 13, 18, 29 |
| TC 0505 HPK01-160AN | Philips/VS/Osram/Tridonic pattern              | Variation 2 for Soleriq/SLM/SLE/WU-M                   |
| TC 0506 HPK01-160AN | Xicato <sup>®</sup> mounting pattern           | Variation 2 for XSM™                                   |
| TC 0508 HPK01-160AN | Citizen <sup>®</sup> mounting pattern          | Variation 2 for CLL032, CLL042, CLL052                 |

Please contact us, should you have specific requirements not covered in the data sheets.

#### Disclaimer

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



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