

# The Passive Revolution!

FrigoDynamics® Passive 2-Phase HX Solutions  
for Philips Fortimo/Lexel™ Light Engines



zero noise level

no lifetime issues

no CO<sub>2</sub> emission

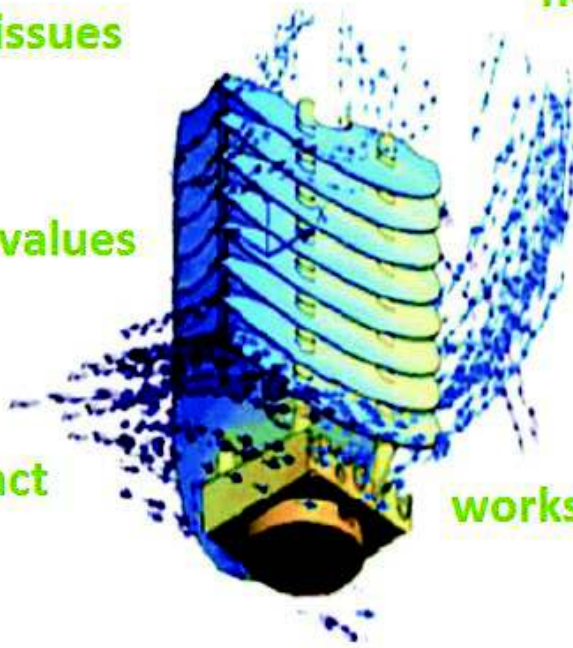
cools all lumen values

lighter than  
other solutions

compact

works in all orientations

passive, natural airflow



**PHILIPS**

 **FrigoDynamics®**  
thermal solutions

FrigoDynamics GmbH  
Bahnhofstr. 16  
D-85570 Markt Schwaben  
[www.frigodynamics.com](http://www.frigodynamics.com)

# FrigoDynamics® Passive 2-Phase HX Solutions for Philips Fortimo/Lexel™ Light Engines



## Der SC 2-Phasen Wärmetauscher

besteht durch ein besonderes, patentiertes Design, nützt den Kamineffekt aus und maximiert dadurch die Kühlleistung. Die kompakte, ringförmige Auslegung ist ideal für Track/Spot Light Applikationen. Die Lösung arbeitet in alle Richtungen.

## The SC 2-Phase HX

has a unique, patented design utilizing the chimney effect, thus maximizing cooling performance. The compact circular shape allows it to fit in typical cylindrical track/spot light type applications. Works in any direction.

## Échangeur de chaleur pour le 2-phase SC

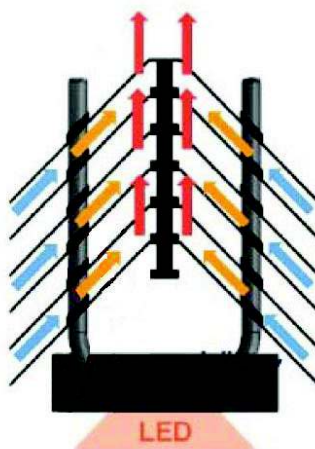
une conception spéciale, brevetée, bénéficieront de l'effet de cheminée et cela maximise la performance de refroidissement. Le design compact, en forme d'anneau est idéal pour les applications légères de piste/spot. La solution fonctionne dans toutes les directions.

## El SC Intercambiador de calor por cambio de fase

tiene un diseño único y patentado utilizando el efecto chimenea, lo que maximiza la refrigeración de rendimiento. La forma circular compacta permite encajar en pista/spot cilíndrica en aplicaciones típicas de luminarias. Funciona en cualquier dirección.

## Lo scambiatore di calore SC 2 fasi

un design speciale, brevettato, potranno beneficiare l'effetto camino e questo massimizza le prestazioni di raffreddamento. Il design compatto a forma di anello è ideale per applicazioni leggera traccia/spot. La soluzione funziona in tutte le direzioni.



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The only solution that really works much longer than the product it cools

2-Phasen HX	SC HPK-Fin™ 150			SC HPK-Fin™ 180			SC HPK-Fin™ 230		
Dimensions (mm)	Ø100 H~150			Ø100 H~180			Ø100 H~230		
Tc 65°C - T ambient	25°C	35°C	40°C	25°C	35°C	40°C	25°C	35°C	40°C
Lexel SLM 1000 TW-22W	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lexel SLM 1000 RGB-25W	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fortimo SLM 1500 – 20W	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fortimo SLM 2000 – 32W	✓	✓		✓	✓	✓	✓	✓	✓
Fortimo SLM 3000 – 43W	✓			✓	✓		✓	✓	✓

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Produkt entspricht den Vorschriften gemäß EU-Richtlinie 2002/95/EG

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## Der OC/LC 2-Phase Wärmetauscher

überzeugt durch sein flaches, patentiertes Design und eignet sich dadurch besonders für den Einsatz in abgehängten Decken, wenn der Einbauraum in der Vertikalen limitiert ist.

## The OC/LC 2-Phase HX

the patented design gives it a low profile ideal for fitting in spaces that have limited height available. The shape allows it to fit in typical recess downlight type applications.

## L'échangeur de chaleur de la phase 2 OC/LC

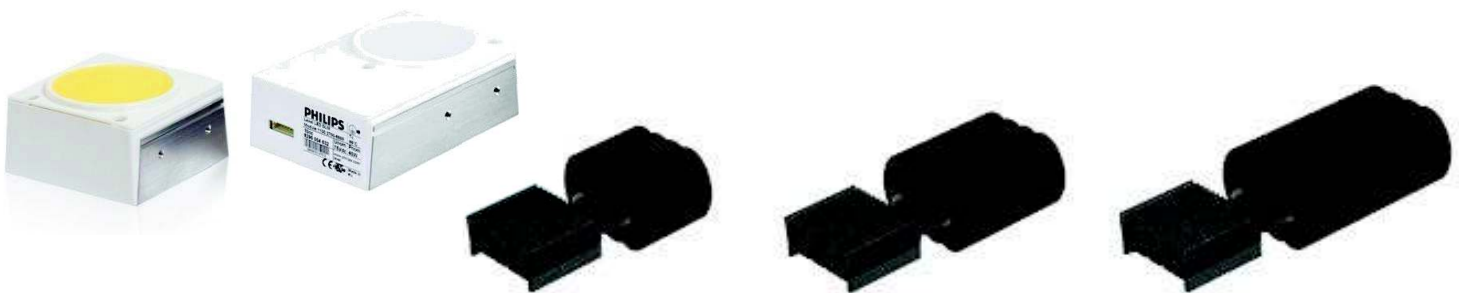
avec ses plats, brevetés design et est donc idéal pour une utilisation dans les plafonds suspendus, si peu d'espace de l'installation à la verticale.

## El OC/LC Intercambiador de calor por cambio de fase

El diseño patentado da un bajo perfil ideal para encajar en espacios que tienen altura limitada, por tanto es ideal para su uso en los falsos techos para los downlight.

## Lo scambiatore di calore OC/LC 2 fasi

con il suo piatto, design brevettato ed è quindi ideale per l'uso in soffitti sospesi, se limitato lo spazio di installazione in verticale



# PHILIPS

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2-Phasen HX	OC HPK-Fin™ 210			OC HPK-Fin™ 250			LC HPK-Fin™ 310		
Dimensions (mm)	W120xH55xL~210			W120xH55xL~250			W120xH55xL~310		
Tc 65°C - T ambient	25°C	35°C	40°C	25°C	35°C	40°C	25°C	35°C	40°C
Fortimo DLM 1000lm 20W	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fortimo DLM 2000lm 26W	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lexel DLM 2000lm 40W	✓			✓	✓		✓	✓	✓
Fortimo DLM 3000lm 44W	✓			✓	✓		✓	✓	✓
Fortimo DLM Food 50W				✓			✓	✓	

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## Der TC 2-Phasen Wärmetauscher

ist im Vergleich zu der OC/LC Version kürzer aber dafür höher. Die Lösung eignet sich ideal für den Einbau in abgehängte Decken, wenn der Einbauraum in der Horizontalen limitiert ist.

## The TC 2-Phase HX

trades the low profile of the OC/LC version for a shorter length, fitting envelopes which have limited lengthwise space available. The shape allows it to fit in typical recess downlight type applications..

## L'échangeur de chaleur de la phase 2 TC

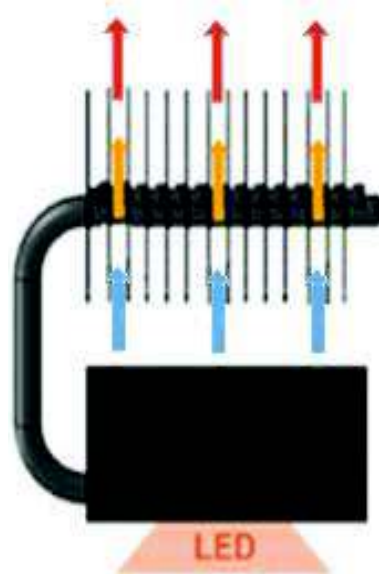
est plus élevé par rapport à la version OC/LC mais plus courtes. La solution est idéale pour l'installation de plafonds suspendus, si l'espace à l'horizontale

## El TC Intercambiador de calor por cambio de fase

es más corto y mas alto en comparación con la versión OC/LC. La solución es ideal para instalación en falsos techos cuando el espacio en la horizontal es limitado.

## TC 2 fasi scambiatore di calore

è più alto rispetto alla versione OC/LC ma più breve. La soluzione è ideale per l'installazione in soffitti sospesi, se lo spazio in orizzontale è limitato.



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2-Phasen HX	TC HPK-Fin™ 120			TC HPK-Fin™ 150			TC HPK-Fin™ 210		
Dimensions (mm)	W120xH110xL~120			W120xH110xL~150			W120xH110xL~210		
Tc 65°C - T ambient	25°C	35°C	40°C	25°C	35°C	40°C	25°C	35°C	40°C
Fortimo DLM 1000lm 20W	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fortimo DLM 2000lm 26W	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lexel DLM 2000lm 40W	✓			✓	✓		✓	✓	✓
Fortimo DLM 3000lm 44W	✓			✓			✓	✓	✓
Fortimo DLM Food 50W				✓			✓	✓	

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## Der VC 2-Phasen Wärmetauscher

Die Lösung ist sehr schmal und eignet sich in hervorragender Weise für Anwendungen mit limitiertem, horizontalen Einbauraum.

## The VC 2-Phase HX

is laid out and designed as narrow as possible. The shape allows it to accommodate applications where narrow fixtures are required.

## L'échangeur de chaleur de la phase 2 VC

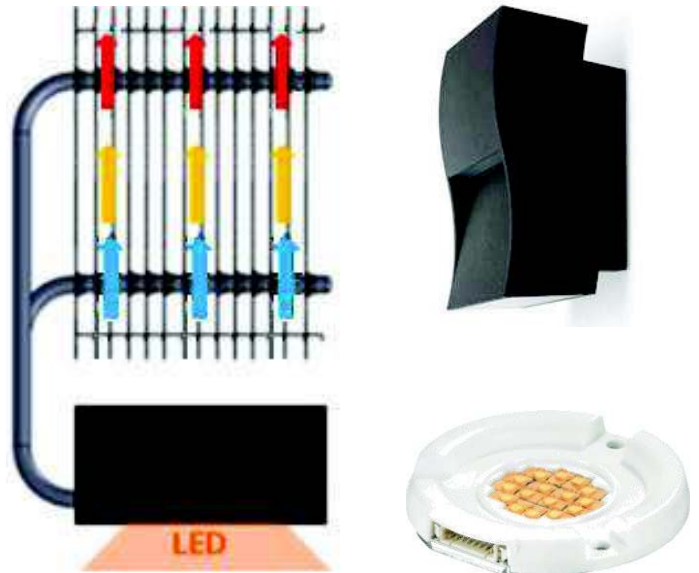
La solution est très étroite et est un excellent moyen pour les applications avec l'espace limité, horizontal.

## El VC Intercambiador de calor por cambio de fase

Esta diseñado tan estrecho como es posible. La forma permite acomodarlo en aplicaciones donde los requerimientos son muy estrechos.

## Lo scambiatore di calore VC 2 fasi

La soluzione è molto stretta e in un modo eccellente per applicazioni con spazio limitato, orizzontale.



# PHILIPS

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2-Phasen HX	VC HPK-Fin™ 120			VC HPK-Fin™ 150			VC HPK-Fin™ 210		
Dimensions (mm)	W73xH175xL~120			W73xH175xL~150			W73xH175xL~210		
Tc 65°C - T ambient	25°C	35°C	40°C	25°C	35°C	40°C	25°C	35°C	40°C
Fortimo DLM 1000lm 20W	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fortimo DLM 2000lm 26W	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lexel DLM 2000lm 40W	✓			✓	✓		✓	✓	✓
Fortimo DLM 3000lm 44W	✓			✓			✓	✓	✓
Fortimo DLM Food 50W				✓			✓	✓	

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