## Instant retrofit, instant savings

## LED Highbay

Philips LED high bay lamps are a direct replacement for 250 W to 400 W metal halide lamps which will deliver substantial energy savings. Philips LED HighBays delivers bright, clean light for a fraction of the energy used by conventional HID.

## Benefits

- Energy savings of $>50 \%$
- Direct lamp replacement without a ballast or fixture change (UL Type A)
- Operates on 400W, 320W and 250W ballasts


## Features

- Standard EX39 base to replace metal halide lamps
- Works on probe and pulse start ballasts (Type A only)
- Available with 1000 lumens of "up-light" to fully illuminate fixtures (Type A only)
- Upto 5-year limited warranty
- Two beam options, wide or narrow available
- Surge 6KV


## Application

- Warehouses, Industrial \& Retail
- Gymnasiums


## LED Highbay

## Versions



LEDTForce HB Accessory


LEDTrueForce E26 120-240V 45HB

## Dimensional drawing



| Product | D | C |
| :--- | :--- | :--- |
| 145HB/LED/840/D NB DL BB G2 4/1 | 250 mm | 285 mm |
| 145HB/LED/840/D WB UDL BB G2 4/1 | 250 mm | 295 mm |
| 145HB/LED/850/D NB DL BB G2 4/1 | 250 mm | 285 mm |
| 145HB/LED/850/D WB UDL BB G2 4/1 | 250 mm | 295 mm |
| 165HB/LED/840/D NB DL BB G2 4/1 | 250 mm | 285 mm |
| 165HB/LED/840/D WB UDL BB G2 4/1 | 250 mm | 295 mm |
| 165HB/LED/850/D NB DL BB G2 4/1 | 250 mm | 285 mm |
| 165HB/LED/850/D WB UDL BB G2 4/1 | 250 mm | 295 mm |

## Temperature

Ambient temperature range

## General Information

|  |  | Cap- | Switching |  |
| :--- | :--- | :--- | :--- | :--- |
| Order Code | Full Product Name | Base | Nominal <br> Cycle | lifetime |
| 929002497104 | LED highbay sensor accessory | - | - | 50,000 <br> hour(s) |
| 929001990204 | 45HB/LED/850/ND FB 6/1 | E26 | 50,000 | 25,000 <br> hour(s) |


|  |  | Cap- | Switching | Nominal |
| :--- | :--- | :--- | :--- | :--- |
| Order Code | Full Product Name | Base | Cycle | lifetime |
| 929002496004 | $145 \mathrm{HB} / \mathrm{LED} / 840 / \mathrm{D}$ NB DL BB | EX39 | 50,000 | 50,000 |
|  | G2 4/1 |  |  | hour(s) |
| 929002496104 | $145 \mathrm{HB} / \mathrm{LED} / 840 / \mathrm{D}$ WB UDL | EX39 | 50,000 | 50,000 |
|  | BB G2 4/1 |  |  | hour(s) |


| Order Code | Full Product Name | Cap- <br> Base | Switching <br> Cycle | Nominal lifetime |
| :---: | :---: | :---: | :---: | :---: |
| 929002496204 | 145HB/LED/850/D NB DL BB | EX39 | 50,000 | 50,000 |
|  | G2 4/1 |  |  | hour(s) |
| 929002496304 | 145HB/LED/850/D WB UDL | EX39 | 50,000 | 50,000 |
|  | BB G2 4/1 |  |  | hour(s) |
| 929002496404 | 165HB/LED/840/D NB DL BB | EX39 | 50,000 | 50,000 |
|  | G2 4/1 |  |  | hour(s) |


|  |  | Cap- | Switching | Nominal |
| :--- | :--- | :--- | :--- | :--- |
| Order Code | Full Product Name | Base | Cycle <br> lifetime |  |
| 929002496504 | 165HB/LED/840/D WB UDL | EX39 | 50,000 | 50,000 |
|  | BB G2 4/1 |  |  |  |
| hour(s) |  |  |  |  |

## Light Technical

| Order Code | Full Product Name | Beam Angle (Nom) | Correlated Color <br> Temperature (Nom) | Color rendering index (CRI) | Color Code | LLMF At End Of Nominal Lifetime (Nom) | Luminous Flux |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 929002497104 | LED highbay sensor accessory | - | - | - | - | - | - |
| 929001990204 | 45HB/LED/850/ND FB 6/1 | 200 degree(s) | 5000 K | 80 | 850 | 70 \% | 4,800 lm |
| 929002496004 | 145HB/LED/840/D NB DL BB G2 4/1 | 60 degree(s) | 4000 K | 80 | 840 | $70 \%$ | 20,000 lm |
| 929002496104 | 145HB/LED/840/D WB UDL BB G2 4/1 | 120 degree(s) | 4000 K | 80 | 840 | $70 \%$ | 20,000 lm |
| 929002496204 | 145HB/LED/850/D NB DL BB G2 4/1 | 60 degree(s) | 5000 K | 80 | 850 | $70 \%$ | 20,000 lm |
| 929002496304 | 145HB/LED/850/D WB UDL BB G2 4/1 | 120 degree(s) | 5000 K | 80 | 850 | 70 \% | 20,000 lm |
| 929002496404 | 165HB/LED/840/D NB DL BB G2 4/1 | 60 degree(s) | 4000 K | 80 | 840 | 70 \% | 25,000 lm |
| 929002496504 | 165HB/LED/840/D WB UDL BB G2 4/1 | 120 degree(s) | 4000 K | 80 | 840 | 70 \% | 25,000 lm |
| 929002496604 | 165HB/LED/850/D NB DL BB G2 4/1 | 60 degree(s) | 5000 K | 80 | 850 | 70 \% | 25,000 lm |
| 929002496704 | 165HB/LED/850/D WB UDL BB G2 4/1 | 120 degree(s) | 5000 K | 80 | 850 | 70 \% | 25,000 lm |

## Operating and Electrical

| Order Code | Full Product Name | Input <br> Frequency | Line <br> Frequency | Power <br> Consumption | Starting <br> Time <br> (Nom) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 929002497104 | LED highbay <br> sensor <br> accessory | - Hz | - Hz | - | - |
| 929001990204 | 45HB/LED/85 0/ND FB 6/1 | $50 \text { to } 60 \mathrm{~Hz}$ | $50 \text { to } 60 \mathrm{~Hz}$ | 45 W | 0.5 s |
| 929002496004 | 145HB/LED/8 <br> 40/D NB DL <br> BB G2 4/1 | $50 \text { to } 60 \mathrm{~Hz}$ | 50 to 60 Hz | 145 W | 0.5 s |
| 929002496104 | 145HB/LED/8 <br> 40/D WB UDL <br> BB G2 4/1 | $50 \text { to } 60 \mathrm{~Hz}$ | $50 \text { to } 60 \mathrm{~Hz}$ | $145 \text { W }$ | 0.5 s |
| 929002496204 | 145HB/LED/8 <br> 50/D NB DL <br> BB G2 4/1 | $50 \text { to } 60 \mathrm{~Hz}$ | $50 \text { to } 60 \mathrm{~Hz}$ | 145 W | 0.5 s |
| 929002496304 | 145HB/LED/8 50/D WB UDL BB G2 4/1 | $50 \text { to } 60 \mathrm{~Hz}$ | 50 to 60 Hz | 145 W | 0.5 s |


| Order Code | Full Product Name | Input <br> Frequency | Line <br> Frequency | Power <br> Consumption | Starting <br> Time <br> (Nom) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 929002496404 | $\begin{aligned} & \text { 165HB/LED/8 } \\ & \text { 40/D NB DL } \\ & \text { BB G2 4/1 } \end{aligned}$ | $50 \text { to } 60 \mathrm{~Hz}$ | $50 \text { to } 60 \mathrm{~Hz}$ | 165 W | 0.5 s |
| 929002496504 | 165HB/LED/8 <br> 40/D WB UDL <br> BB G2 4/1 | $50 \text { to } 60 \mathrm{~Hz}$ | $50 \text { to } 60 \mathrm{~Hz}$ | 165 W | 0.5 s |
| 929002496604 | 165HB/LED/8 <br> 50/D NB DL <br> BB G2 4/1 | $50 \text { to } 60 \mathrm{~Hz}$ | $50 \text { to } 60 \mathrm{~Hz}$ | 165 W | 0.5 s |
| 929002496704 | 165HB/LED/8 <br> 50/D WB UDL <br> BB G2 4/1 | $50 \text { to } 60 \mathrm{~Hz}$ | $50 \text { to } 60 \mathrm{~Hz}$ | 165 W | 0.5 s |

Temperature

| Order Code | Full Product Name | T-Case Maximum (Nom) |
| :--- | :--- | :--- |
| 929002497104 | LED highbay sensor accessory | - |
| 929001990204 | $45 \mathrm{HB} /$ LED/850/ND FB 6/1 | $64.5^{\circ} \mathrm{C}$ |


| Order Code | Full Product Name | T-Case Maximum (Nom) |
| :--- | :--- | :--- |
| 929002496004 | $145 \mathrm{HB} / \mathrm{LED} / 840 / \mathrm{D}$ NB DL BB G2 4/1 | $60^{\circ} \mathrm{C}$ |
| 929002496104 | $145 \mathrm{HB} / \mathrm{LED} / 840 / \mathrm{D}$ WB UDL BB G2 4/1 | $60^{\circ} \mathrm{C}$ |


| Order Code | Full Product Name | T-Case Maximum (Nom) |
| :--- | :--- | :--- |
| 929002496204 | $145 \mathrm{HB} / \mathrm{LED} / 850 / \mathrm{D}$ NB DL BB G2 4/1 | $60^{\circ} \mathrm{C}$ |
| 929002496304 | $145 \mathrm{HB} / \mathrm{LED} / 850 / \mathrm{D}$ WB UDL BB G2 4/1 | $60^{\circ} \mathrm{C}$ |
| 929002496404 | $165 \mathrm{HB} / \mathrm{LED} / 840 / \mathrm{D}$ NB DL BB G2 4/1 | $58^{\circ} \mathrm{C}$ |


| Order Code | Full Product Name | T-Case Maximum (Nom) |
| :--- | :--- | :--- |
| 929002496504 | $165 \mathrm{HB} /$ LED/840/D WB UDL BB G2 4/1 | $58{ }^{\circ} \mathrm{C}$ |
| 929002496604 | $165 \mathrm{HB} / \mathrm{LED} / 850 / \mathrm{D}$ NB DL BB G2 4/1 | $58{ }^{\circ} \mathrm{C}$ |
| 929002496704 | $165 \mathrm{HB} /$ LED/850/D WB UDL BB G2 4/1 | $58{ }^{\circ} \mathrm{C}$ |

## Controls and Dimming

| Order Code | Full Product Name | Dimmable |
| :--- | :--- | :--- |
| 929002497104 | LED highbay sensor accessory | No |
| 929001990204 | $45 \mathrm{HB} /$ LED/850/ND FB 6/1 | No |
| 929002496004 | $145 \mathrm{HB} /$ LED/840/D NB DL BB G2 4/1 | Only with specific dimmers |
| 929002496104 | $145 \mathrm{HB} / \mathrm{LED} / 840 / \mathrm{D}$ WB UDL BB G2 4/1 | Only with specific dimmers |
| 929002496204 | $145 \mathrm{HB} / \mathrm{LED} / 850 / \mathrm{D}$ NB DL BB G2 4/1 | Only with specific dimmers |


| Order Code | Full Product Name | Dimmable |
| :--- | :--- | :--- |
| 929002496304 | $145 \mathrm{HB} / \mathrm{LED} / 850 / \mathrm{D}$ WB UDL BB G2 4/1 | Only with specific dimmers |
| 929002496404 | $165 \mathrm{HB} / \mathrm{LED} / 840 / \mathrm{D}$ NB DL BB G2 4/1 | Only with specific dimmers |
| 929002496504 | $165 \mathrm{HB} / \mathrm{LED} / 840 / \mathrm{D}$ WB UDL BB G2 4/1 | Only with specific dimmers |
| 929002496604 | $165 \mathrm{HB} / \mathrm{LED} / 850 / \mathrm{D}$ NB DL BB G2 4/1 | Only with specific dimmers |
| 929002496704 | $165 \mathrm{HB} / \mathrm{LED} / 850 / \mathrm{D}$ WB UDL BB G2 4/1 | Only with specific dimmers |

Mechanical and Housing

| Order Code | Full Product Name | Bulb Finish | Bulb Shape |
| :--- | :--- | :--- | :--- | :--- |
| 929002497104 | LED highbay sensor accessory | - | - |
| 929001990204 | $45 \mathrm{HB} /$ LED/850/ND FB 6/1 | Frosted | T-shape |
| 929002496004 | $145 \mathrm{HB} /$ LED/840/D NB DL BB G2 4/1 | Clear | Others |
| 929002496104 | $145 \mathrm{HB} /$ LED/840/D WB UDL BB G2 4/1 | Clear | Others |
| 929002496204 | $145 \mathrm{HB} /$ LED/850/D NB DL BB G2 4/1 | Clear | Others |


| Order Code | Full Product Name | Bulb Finish | Bulb Shape |
| :--- | :--- | :--- | :--- | :--- |
| 929002496304 | $145 \mathrm{HB} /$ LED/850/D WB UDL BB G2 4/1 | Clear | Others |
| 929002496404 | $165 \mathrm{HB} /$ LED/840/D NB DL BB G2 4/1 | Clear | Others |
| 929002496504 | $165 \mathrm{HB} /$ LED/840/D WB UDL BB G2 4/1 | Clear | Others |
| 929002496604 | $165 \mathrm{HB} /$ LED/850/D NB DL BB G2 4/1 | Clear | Others |
| 929002496704 | $165 \mathrm{HB} /$ LED/850/D WB UDL BB G2 4/1 | Clear | Others |

## Approval and Application

| Order Code | Full Product Name | Energy Consumption kWh/ |
| :--- | :--- | :--- |
| 929002497104 | LED highbay sensor accessory | - |
| 929001990204 | $45 \mathrm{HB} / \mathrm{LED} / 850 /$ ND FB 6/1 | -kWh |
| 929002496004 | $145 \mathrm{HB} / \mathrm{LED} / 840 / \mathrm{D}$ NB DL BB G2 4/1 | - |
| 929002496104 | $145 \mathrm{HB} / \mathrm{LED} / 840 / \mathrm{D}$ WB UDL BB G2 4/1 | - |
| 929002496204 | $145 \mathrm{HB} / \mathrm{LED} / 850 / \mathrm{D}$ NB DL BB G2 4/1 | - |
| 929002496304 | $145 \mathrm{HB} / \mathrm{LED} / 850 / \mathrm{D}$ WB UDL BB G2 4/1 | - |
| 929002496404 | $165 \mathrm{HB} / \mathrm{LED} / 840 / \mathrm{D}$ NB DL BB G2 4/1 | - |
| 929002496504 | $165 \mathrm{HB} / \mathrm{LED} / 840 / \mathrm{D}$ WB UDL BB G2 4/1 - |  |
| 929002496604 | $165 \mathrm{HB} / \mathrm{LED} / 850 / \mathrm{D}$ NB DL BB G2 4/1 | - |
| 929002496704 | $165 \mathrm{HB} / \mathrm{LED} / 850 / \mathrm{D}$ WB UDL BB G2 4/1 - |  |




