VERSABAY®
FLUORESCENT HIGH BAY
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VERSABAY® high bays are protected by ATM—Advanced Thermal Management—and employs a systems approach to resolving the high-temperature issues in high-bay ballast systems.

AMBIENT ISSUES
The increased use of fluorescent high bays in what was traditionally HID spaces has provided an excellent means to improve lighting in the space while providing significant energy savings. The use of fluorescent lighting with electronic ballasts in unconditioned spaces has created issues regarding the reliability of the electronic components.

In unconditioned or partially conditioned spaces, the temperature at the ceiling level can reach over 130°F, thus placing the reliability of the electronic components at risk. Heat contributors such as ambient heat, ballast heat, and lamp heat can all combine to elevate the ballast above the manufacturers’ maximum ballast can temperature of 90°C. This increase in ballast operating temperature will shorten ballast life and increase maintenance.

THE SOLUTION
Columbia Lighting’s VersaBay® high bay was developed to address the issues of elevated temperature by creating a systems approach to properly dissipate and control the heat-producing elements; thus providing a system of long-maintenance-free operation. The VersaBay® high bay, protected by ATM—Advanced Thermal Management—employs a systems approach to resolving this potential issue.

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FEATURES

ELECTRICAL COMPONENT PLACEMENT
The ballast is placed on the same plane as other heat-producing elements, allowing lamp heat to radiate out above the ballast into free air and preventing it from elevating the ballast can temperature.

CUSTOM BALLAST
Aluminum construction quickly dissipates heat out of the back of the channel, reducing the temperature in and around the ballast can. Cooler operation is maintained through the use of thermal management. Optimal spacing of heat-generating components and heat-dissipating structural elements transfer heat out of the ballast.

Up to 15°C improvement of internal ballast component temperatures is possible through the use of specially designed, higher temperature-rated discrete parts. These improvements, coupled with Advanced Thermal Management, result in lower internal operating temperatures.

HEAT DISSIPATION SLOTS
Vertical heat-radiating slots provide an avenue for airflow and promote dissipation of heat that otherwise would have been trapped in the electrical chamber. As a result, these slots provide longer ballast life and decrease the need for maintenance.

OPEN BACK DESIGN
The VersaBay® fixture’s open-back design allows a free airflow path for lamp and ballast heat into the space above and away from the ballast.

SECURE BALLAST MOUNTING
The ballast is securely mounted to the ballast chamber to provide maximum metal-to-metal contact and improved heat-sink design.

REFLECTOR SYSTEM
A high-reflectance optical system efficiently distributes heat away from the fixture.

VERSABAY® high bays provide unparalleled reliability and are backed by an unsurpassed warranty with:

T5HO 5-year warranty at 65°C backed by Universal Lighting Technologies

T8 5-year warranty at 55°C backed by GE

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VERSABAY® HIGH BAY FEATURES

1. SERVICEABILITY
The VersaBay® fixture’s unique bottom-accessed ballast features tool-less access to the electrical chamber via one user-friendly access cover. In the unlikely event that electrical service is required, no lamps, screws or reflectors must be removed to gain access.

2. VERY LOW PROFILE
Small in stature, big on performance—the diminutive 2” overall height design allows VersaBay® high bays to be installed in tight or crowded spaces.

3. EXTENDED HEIGHT END CAPS
Extended height end caps provide protection of the sockets and reflectors during shipment, handling, and installation.

4. TOP PERFORMANCE REFLECTORS
To pump up the performance, VersaBay® fixtures include your choice of 95% reflective specular aluminum or 90% white reflectors.

5. HEMMED EDGES
Hemmed edges provide ease in handling during installation or service.

6. ROTARY SOCKETS
Top quality rotary sockets conceal contacts and provide reliable lamp retention.

7. QUICK-CLIP MOUNTING
Quick and easy aircraft cable requires only one person to mount the fixture. Other mounting styles include chain, tong hanging, and single point.

8. ACCESS PLATE
For quick and labor-saving wiring, a full-size access plate is located on the back of the channel.

9. THIRD-PARTY CERTIFICATION
VersaBay® high bays are UL Listed for ambient operation up to 65°C for T5HO and 55°C for T8.

VERSABAY® high bays can provide an energy savings of over 50%, cutting your cost and improving your bottom line—while enhancing the quality of lighting in the space.

The VersaBay® fixture makes retrofitting an easy decision. Replacing 400W metal halide systems, the VersaBay® high bay can yield payback in one year while improving illumination and reducing maintenance. Your bottom line benefits from the use of fluorescent high bays through energy savings, tax deductions and rebates.

EPACT
The Energy Policy Act of 2005 (EPAct) provides tax incentives for lighting system improvements. The deduction for warehousing, manufacturing or other high bay applications is $0.60 per square foot when exceeding the ASHRAE/IESNA Standard 90.1-2001 and meeting lighting requirements. For additional information regarding tax deductions for EPAct, visit our website at http://www.hubbellighting.com/epact.

REBATES
Some local utilities and states offer significant rebates for the use of energy-efficient lighting in upgrades or new construction. Fluorescent high bays are often included in rebates for base fixtures. In many cases, additional rebates are offered for control systems such as daylight harvesting or occupancy sensors.

IMPROVED QUALITY OF LIGHT
From aisle applications to open spaces, the VersaBay® high bay, with its multiple optical and lamp options, provides:

- Enhanced color with higher CRI lamps
- Maintained illumination of 90% over the life of the system
- Improved vertical illumination
- Reduced shadows and improved uniformity

VERSABAY® HIGH BAY FEATURES
FLUORESCENT HIGH BAY ADVANTAGES

SAVES 50% ENERGY COMPARED TO TRADITIONAL HID LUMINAIRES

Energy costs are growing by 6% annually according to 2005 data from the Department of Energy. And sustainable lighting is rapidly becoming a key focus for professionals who design and maintain buildings. Since lighting makes up a large portion of your electric bill, there’s a growing demand for lighting fixtures that use less energy while retaining the quality of light.

IMMEDIATE ILLUMINATION
 Fluorescent systems provide immediate illumination after power dip or failure and eliminate downtime associated with fixture warm-up.

CONTROLLABLE SYSTEM
 Fluorescent is ideal for operation with occupancy sensors or daylight harvesting, thus reducing energy consumption and improving energy savings.

LOW PROFILE
 Fluorescent systems retain almost twice the rated lamp life of metal halide—reducing lamp replacement cost, labor, and downtime.

MORE FIXTURES PER CIRCUIT
 Fluorescent systems draw half of the amperage as HID. Thus, for new applications, it allows up to twice as many fixtures on a circuit, reducing wiring and labor costs.

VERSABAY® SHIELDING FEATURES

SIDE PANELS
 Side panels attach to standard end caps and provide structural rigidity as well as side support for lens and wire guard.

END JAW
 The end jaw securely attaches to the end cap and side panels. Each end jaw rotates for easy access to the lens and wire guard but locks in place when returned to its closed position.

LENS CLEAR
 An optional lens is available in either acrylic or polycarbonate.

SOUND
 Fluorescent systems produce virtually no sound compared to HID systems that operate at higher decibels.

VERSABAY® BALLAST WARRANTY CHART

BALLAST WARRANTED FOR AMBIENT TEMPERATURE LISTED

<table>
<thead>
<tr>
<th>Ballast</th>
<th>120-277V</th>
<th>347V</th>
<th>480V</th>
<th>Frame with Lens</th>
</tr>
</thead>
<tbody>
<tr>
<td>LHV4-432 (1) 4-Lamp, T8 Instant Start, High Light Output Ballast</td>
<td>4EHL</td>
<td>55°C</td>
<td>55°C</td>
<td>55°C</td>
</tr>
<tr>
<td>LHV4-632 (2) 3-Lamp T8 Instant Start, High Light Output Ballasts</td>
<td>3EHL</td>
<td>55°C</td>
<td>55°C</td>
<td>55°C</td>
</tr>
<tr>
<td>LHV4-832 (2) 4-Lamp T8 Instant Start, High Light Output Ballast</td>
<td>4EHL</td>
<td>45°C</td>
<td>40°C</td>
<td>40°C</td>
</tr>
<tr>
<td>LHV4-632 (2) 2-Lamp T8 Programmed Start, High Light Output Ballast</td>
<td>2EHL</td>
<td>50°C</td>
<td>50°C</td>
<td>50°C</td>
</tr>
<tr>
<td>LHV4-632 (2) 3-Lamp T8 Programmed Start, High Light Output Ballasts</td>
<td>3EPL</td>
<td>55°C</td>
<td>55°C</td>
<td>55°C</td>
</tr>
<tr>
<td>LHV4-832 (2) 3-Lamp &amp; (1) 2-Lamp T8 Programmed Start, High Light Output Ballasts</td>
<td>4EPH</td>
<td>45°C</td>
<td>40°C</td>
<td>40°C</td>
</tr>
<tr>
<td>LHV4-454 (1) 4-Lamp, T5HO Programmed Start Switchable Ballast</td>
<td>4EP</td>
<td>65°C</td>
<td>55°C</td>
<td>55°C</td>
</tr>
<tr>
<td>LHV4-654 (1) 2-Lamp &amp; (1) 4-Lamp TSHO Programmed Start Ballasts</td>
<td>24EP</td>
<td>65°C</td>
<td>55°C</td>
<td>55°C</td>
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<tr>
<td>LHV4-854 (2) 4-Lamp TSHO Programmed Start Ballasts</td>
<td>4EP</td>
<td>55°C</td>
<td>55°C</td>
<td>55°C</td>
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</table>

ENERGY SAVINGS

LUMEN MAINTENANCE
 Fluorescent systems retain 90% of their initial light levels over the rated life of the lamp. Common HID light levels depreciate over 50% of their rated life.

MORE FIXTURES PER CIRCUIT
 Fluorescent systems draw half of the amperage as HID. Thus, for new applications, it allows up to twice as many fixtures on a circuit, reducing wiring and labor costs.

MULTIPLE LAMPS
 Even if one fluorescent lamp fails, illumination levels remain basically unchanged. When a single point source HID fails, service is required. This is also beneficial for applications where switching can be employed.

IMPROVED COLOR
 High CRI improves appearance of the space and perceived light levels.

SOUND
 Fluorescent systems produce virtually no sound compared to HID systems that operate at higher decibels.
VERSABAY® MOUNTING OPTIONS

**LHVQMS5, LHVQMS10**
- Support cable assembly (pair)
- Available in 5 ft. and 10 ft. lengths
- Detachable to allow for lighting maintenance
- Height is adjustable with each kit

**LHVSPMS5**
- Single point mounting assembly
- Includes pair of 5 ft. support cables
- Mounting bracket attaches to ballast channel over electrical access plate
- Feed location sized for ¾" conduit

**LHVTH**
- Tong Hanger assembly (pair)
- Attaches to ballast channel
- Position can be adjusted along entire length of fixture

“PLUG & PLAY” ACCESSORIES

**OCCUPANCY AND DAYLIGHT HARVESTING SENSOR KITS**
- Hubbell Building Automation WASP Sensor assembly
- Mounts directly to endcap
- Easily snaps over knockout access point
- Rated up to 65°C ambient conditions
- 120/277/480VAC, 60HZ
- Used in mounting heights up to 40 ft.
- Wiring made simple to "plug and play" on standard VersaBay® fixtures
- Factory installed sensor options also available

**CORD AND PLUG KITS**
- Three different assemblies in stock (see order guide for details)
- C6TL15-120
- C6TL15-277
- C6P15-120
- UL listed and approved as a fitting accessory
- Wiring and assembly made simple to "plug and play" on standard VersaBay® fixtures

LAMP SWITCHING DIAGRAMS

**4-lamp T8 or T5HO using (1) 4-lamp Ballast**

**6-lamp T8 using (1) 2-lamp and (1) 4-lamp Ballast**

**8-lamp T8 using (2) 4-lamp Ballasts**

**6-lamp T5HO using (2) 3-lamp Ballasts**

**CORD AND PLUG KITS**

- C6TL15-120
- C6TL15-277
- C6P15-120

**CROSS SECTIONS & DIMENSIONS**

**LHV4-4 Bottom View**
- Depth without side panels, use of side panels increases depth to 2.832"
VERSABAY® PERFORMANCE

SUSTAINABLE SOLUTIONS

- 50% less energy than comparable metal halide system
- Low profile—only 2” deep construction allows more fixtures per footprint
- Reduces steel in fixture construction and saves natural resources
- Sensors, switching, and daylight harvesting further reduces energy consumption
- Fluorescent systems are good for the environment. All fluorescent lamps contain less than half the mercury of comparable metal halide systems
- Packaging requires little corrugated, thus saving natural resources

ORDERING GUIDE

Example LHV4-464-MRU-4EPU

<table>
<thead>
<tr>
<th>MODEL</th>
<th>LHV4-464-MRU-4EPU</th>
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</thead>
<tbody>
<tr>
<td>LAMP TYPE</td>
<td>4-Lamp T8 8500K T5HO</td>
</tr>
<tr>
<td>LAMPS INSTALLED</td>
<td>2-Lamp T5HO, 360° Lens, 15.6V, 15A, 120V</td>
</tr>
<tr>
<td>OPTIONS</td>
<td>Clear Acrylic Lens*</td>
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<tr>
<td></td>
<td>Clear Polycarbonate Lens</td>
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<tr>
<td></td>
<td>G4 15A 120V, 2-Lamp T5HO</td>
</tr>
<tr>
<td></td>
<td>CPWG Flat Wire Guard</td>
</tr>
<tr>
<td></td>
<td>CAWG Clear Polycarbonate Lens and Flat Wire Guard</td>
</tr>
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Example LHV4-454-CAWG

| LAMP TYPE    | 1-Lamp T8 8500K |
| LAMPS INSTALLED | 1-Lamp T8, 220V, 15A, 120V |
| OPTIONS      | CAWG Clear Polycarbonate Lens |
|             | Flat Wire Guard |

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<th>NO. OF LAMPS</th>
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TYPICAL FOOTCANDLE LEVELS

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<tr>
<th>SYSTEM</th>
<th>400 Watt MH</th>
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<th>1200 Watt MH</th>
<th>1600 Watt MH</th>
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<td>12.0</td>
<td>18.0</td>
<td>24.0</td>
<td>30.0</td>
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<tr>
<td>Horizontal</td>
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|             | Flat Wire Guard |

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SHIELDING KIT ORDERING GUIDE

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SUSTAINABILITY

VERSABAY® PERFORMANCE

1. 27 W and 36 W are available. 2. Requires 100 VAC. 3. Requires 120 VAC.