



Product Description

MASTER HPI Plus

Quartz metal halide lamps with opalized outer bulb

Benefits

- High safety and comfort level, maintained over life
- Minimal maintenance cost
- Initial investment saving options with "Plus"-concept and "S" and "P"-types
- Adjustable atmosphere creation by using appropriate color temperature

Features

- Ovoid, internally white coated outer bulb
- Unique 3-band technology resulting in high luminous efficacy, both initially and over long lifetime
- Available in cool white and daylight color appearance demonstrating good color stability
- "S"-type for direct retrofit for HPL lamps
- "P"-type for use without protective front shield

Application

- High bay lighting, e.g. industrial workshops, exhibition halls, hypermarkets, shopping malls, DIY stores, churches, airports and train stations

Warnings and Safety

- Use only in totally enclosed luminaire, even during testing (IEC61167, IEC 62035, IEC60598)
- The luminaire must be able to contain hot lamp parts if the lamp ruptures
- For use with control gear designed for high-pressure mercury or sodium lamps
- A lamp breaking is extremely unlikely to have any impact on your health. If a lamp breaks, ventilate the room for 30 minutes and remove the parts, preferably with gloves. Put them in a sealed plastic bag and take it to your local waste facilities for recycling. Do not use a vacuum cleaner.

MASTER HPI Plus

Controls and Dimming

| | |
|----------|----|
| Dimmable | No |
|----------|----|

General Information

| | |
|----------------------------|---------|
| Cap-Base | E40 |
| Life To 10% Failures (Nom) | 7500 h |
| Life To 20% Failures (Nom) | 11000 h |
| Life To 50% Failures (Nom) | 20000 h |
| Life To 5% Failures (Nom) | 5000 h |
| LSF 12000 h Rated | 76 % |
| LSF 16000 h Rated | 63 % |
| LSF 2000 h Rated | 99 % |
| LSF 20000 h Rated | 50 % |
| LSF 4000 h Rated | 96 % |
| LSF 6000 h Rated | 93 % |
| LSF 8000 h Rated | 88 % |
| Operating Position | H15 |
| System Description | Base-Up |

Luminaire Design Requirements

| | |
|------------------------|--------|
| Bulb Temperature (Max) | 350 °C |
|------------------------|--------|

Light Technical

| | |
|--------------------|------|
| LLMF 12000 h Rated | 68 % |
| LLMF 16000 h Rated | 63 % |
| LLMF 2000 h Rated | 90 % |
| LLMF 20000 h Rated | 60 % |
| LLMF 4000 h Rated | 82 % |
| LLMF 6000 h Rated | 77 % |
| LLMF 8000 h Rated | 73 % |

Mechanical and Housing

| | |
|-------------|--------------|
| Bulb Finish | Coated glass |
|-------------|--------------|

Approval and Application

| Order Code | Full Product Name | Energy Consumption kWh/1000 h | Energy | |
|------------|---|----------------------------------|---------------------------|-------------------------------|
| | | | Efficiency Label (EEL) | Mercury (Hg) Content (Nom) |
| 18252410 | MASTER HPI Plus 400W/645 BU E40 1SL/6 | 446 kWh | A | 67 mg |
| 20737110 | MASTER HPI Plus 400W/667 BU E40 1SL/6 | 434 kWh | A+ | 67 mg |
| 18114515 | MASTER HPI Plus 250W/645 BU E40 1SL/12 | 282 kWh | A | 47 mg |
| 20739515 | MASTER HPI Plus 250W/667 BU E40 1SL/12 | 278 kWh | A | 47 mg |

Operating and Electrical (1/2)

| Order Code | Full Product Name | Lamp | | | |
|------------|---|-----------------------|------------------|------------------|------------------|
| | | Current (EM) (Nom) | Voltage (Max) | Voltage (Min) | Voltage (Nom) |
| 18252410 | MASTER HPI Plus 400W/645 BU E40 1SL/6 | 3.4 A | 135 V | 115 V | 125 V |
| 20737110 | MASTER HPI Plus 400W/667 BU E40 1SL/6 | 3.4 A | 135 V | 115 V | 125 V |

| Order Code | Full Product Name | Lamp | | | |
|------------|--|-----------------------|------------------|------------------|------------------|
| | | Current (EM) (Nom) | Voltage (Max) | Voltage (Min) | Voltage (Nom) |
| 18114515 | MASTER HPI Plus 250W/645 BU E40 1SL/12 | 2.2 A | 138 V | 118 V | 128 V |
| 20739515 | MASTER HPI Plus 250W/667 BU E40 1SL/12 | 2.2 A | 138 V | 118 V | 128 V |

Operating and Electrical (2/2)

| Order Code | Full Product Name | Power (Rated) (Nom) |
|------------|---------------------------------------|---------------------|
| 18252410 | MASTER HPI Plus 400W/645 BU E40 1SL/6 | 405 W |
| 20737110 | MASTER HPI Plus 400W/667 BU E40 1SL/6 | 405 W |

| Order Code | Full Product Name | Power (Rated) (Nom) |
|------------|--|---------------------|
| 18114515 | MASTER HPI Plus 250W/645 BU E40 1SL/12 | 256 W |
| 20739515 | MASTER HPI Plus 250W/667 BU E40 1SL/12 | 253.0 W |

Light Technical (1/2)

MASTER HPI Plus

| Order Code | Full Product Name | Chromaticity | | Colour | | Order Code | Full Product Name | Chromaticity | | Colour | |
|------------|---------------------------------------|--------------------|--------------------|--------|-----------------|------------|--|--------------------|--------------------|--------|-----------------|
| | | Coordinate X (Nom) | Coordinate Y (Nom) | Code | Designation | | | Coordinate X (Nom) | Coordinate Y (Nom) | Code | Designation |
| 18252410 | MASTER HPI Plus 400W/645 BU E40 1SL/6 | 367 | 374 | 645 | Cool White (CW) | 18114515 | MASTER HPI Plus 250W/645 BU E40 1SL/12 | 365 | 363 | 645 | Cool White (CW) |
| 20737110 | MASTER HPI Plus 400W/667 BU E40 1SL/6 | 310 | 341 | 667 | Daylight | 20739515 | MASTER HPI Plus 250W/667 BU E40 1SL/12 | 308 | 318 | 667 | Daylight |

Light Technical (2/2)

| Order Code | Full Product Name | Correlated Colour Temperature (Nom) | Colour | | Luminous Efficacy (rated) (Nom) | Luminous Flux (Rated) (Min) | Luminous Flux (Rated) (Nom) | Ratio Scotopic/Photopic Lumens |
|------------|--|-------------------------------------|-----------------------|-----------------------|---------------------------------|-----------------------------|-----------------------------|--------------------------------|
| | | | Rendering Index (Nom) | Rendering Index (Nom) | | | | |
| 18252410 | MASTER HPI Plus 400W/645 BU E40 1SL/6 | 4500 K | 65 | 65 | 80 lm/W | - | 32500 lm | 1.50 |
| 20737110 | MASTER HPI Plus 400W/667 BU E40 1SL/6 | 6700 K | 60 | 60 | 80 lm/W | - | 32500 lm | 2.00 |
| 18114515 | MASTER HPI Plus 250W/645 BU E40 1SL/12 | 4500 K | 65 | 65 | 66 lm/W | 15300 lm | 17000 lm | 1.50 |
| 20739515 | MASTER HPI Plus 250W/667 BU E40 1SL/12 | 6700 K | 69 | 69 | 72 lm/W | - | 18000 lm | 2.00 |

Mechanical and Housing

| Order Code | Full Product Name | Bulb Shape | Order Code | Full Product Name | Bulb Shape |
|------------|---------------------------------------|------------|------------|--|------------|
| 18252410 | MASTER HPI Plus 400W/645 BU E40 1SL/6 | BD120 | 18114515 | MASTER HPI Plus 250W/645 BU E40 1SL/12 | BD90 |
| 20737110 | MASTER HPI Plus 400W/667 BU E40 1SL/6 | BD120 | 20739515 | MASTER HPI Plus 250W/667 BU E40 1SL/12 | BD90 |

