

Venture Lighting Bright Ideas Bold Innovations



NEW!
Ceramic Master-PLUS
lamp range see
Pages 20 - 21



Who is Venture? - An Innovator and Worldwide Manufacturer



Venture Lighting, the fastest growing metal halide lighting company in the world, is the only one concentrated on this technology. Since 1983, we've created a constant stream of new systems for our customers. Our range of optimized lamps and control gear, including the revolutionary Uni-Form® pulse start system, has grown to encompass lamp wattages 35 to 2,000. This unique focus offers you peak performance lighting solutions.

Our North American headquarters includes a state-of-the-art development and new products manufacturing center to support our leadership in originating new systems. The company is part of Advanced Lighting Technologies Inc. (ADLT) Our sister companies feature complementary capabilities: APL Engineered Materials (APL) is a strategic supplier of halides, amalgams and other components to the lighting industry. Deposition Sciences, Inc. (DSI) is a leader in sophisticated thin film coatings and deposition systems to the lighting industry.

Global Perspective

Venture maintains a worldwide network of low cost, lean manufacturing facilities. Quality is sustained through control systems constructed to meet ISO 9001 standards. Along with our premier lamp facility in North America. Our Indian facility, the largest metal halide plant in the Pacific Rim, produces both lamps and control gear.



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Venture Lighting - Europe

Our modern European Headquarters are based in Rickmansworth, Hertfordshire just two miles away from the M25, 20 minutes from Heathrow and close to Rickmansworth station with its links to central London.

The offices house our sales and marketing operations, administration offices, as well as our customer service teams for the UK and our European Distribution network.

Our new Technical and Distribution Centre located in Castle Donington, Derbyshire offers full technical support on all our products

We believe that the best products in Metal Halide today should be complemented by the very best service and support.

That's why we strive to offer our customers, large and small, a level of service unequalled in the industry. Our dedicated UK customer service team supported by our experienced technical department is always there to provide expert product advice and to help you with all your Metal Halide requirements.

We also pride ourselves on excellent stock availability and a next day delivery service that's the envy of the industry. Our new purpose-built warehousing and distribution facilities have been designed to improve our service even more.

In fact our emphasis on quality service is just one further reason why more and more installers, specifiers and OEMs are switching to Venture Lighting for all their Metal Halide requirements.

As a Venture Lighting customer, you're assured the very best technology combined with the very highest level of service. In short, everything you'd expect from a global leader in the industry.



Simply a Better Metal Halide Lamp

Quality

- Exclusive formed body arc tube for consistency beyond ceramic metal halide
- Patented stronger weldless mount construction to minimise delivery and handling breakages
- 'Tipless' arc tube improves performance for maximum colour and light output uniformity

Performance

- Longer lamp life
- Enhanced lumen maintenance
- Excellent system colour uniformity
- Hot restart in less than half the time of standard pinch body metal halide systems
- 50% faster warm-up

Safety

- Shrouded 'open-rated' lamps to provide protection for luminaires without lenses
- UV Shield - blocks up to 80% UV, 50% more than most UV-reducing lamps
- Reduces UV damage to merchandise and signage
- Additional GlassGuard coating available for additional protection against breakage

Selection

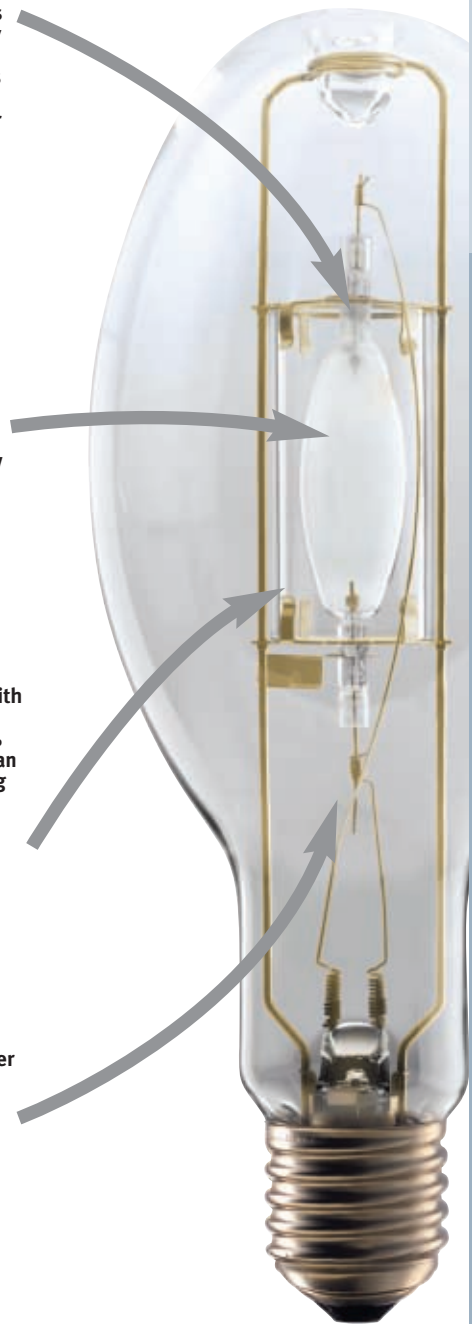
- Venture's Uni-Form pulse start series of lamps has the greatest selection of lumen packages: 50W to 450W
- Most comprehensive range of open-rated products available in the industry

Exclusive tipless arc tube - totally uniform shape further improves performance for maximum colour and light output uniformity

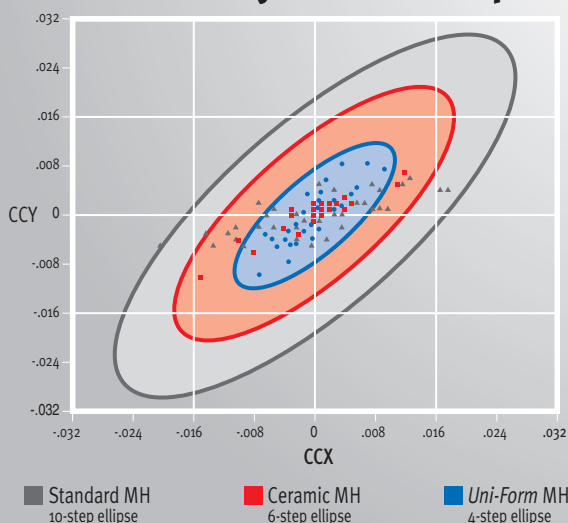
Unique formed body arc tube - shaped to follow the curve of the arc stream to deliver superior lamp efficacy

Safety shroud with UV Shield® - blocks up to 80% UV, 50% more than most UV-reducing lamps to prevent Polycarbonate fixtures from yellowing

Patented stronger weldless mount construction - no welds mean less breakage during shipping and handling



Color Uniformity - MacAdam Ellipses



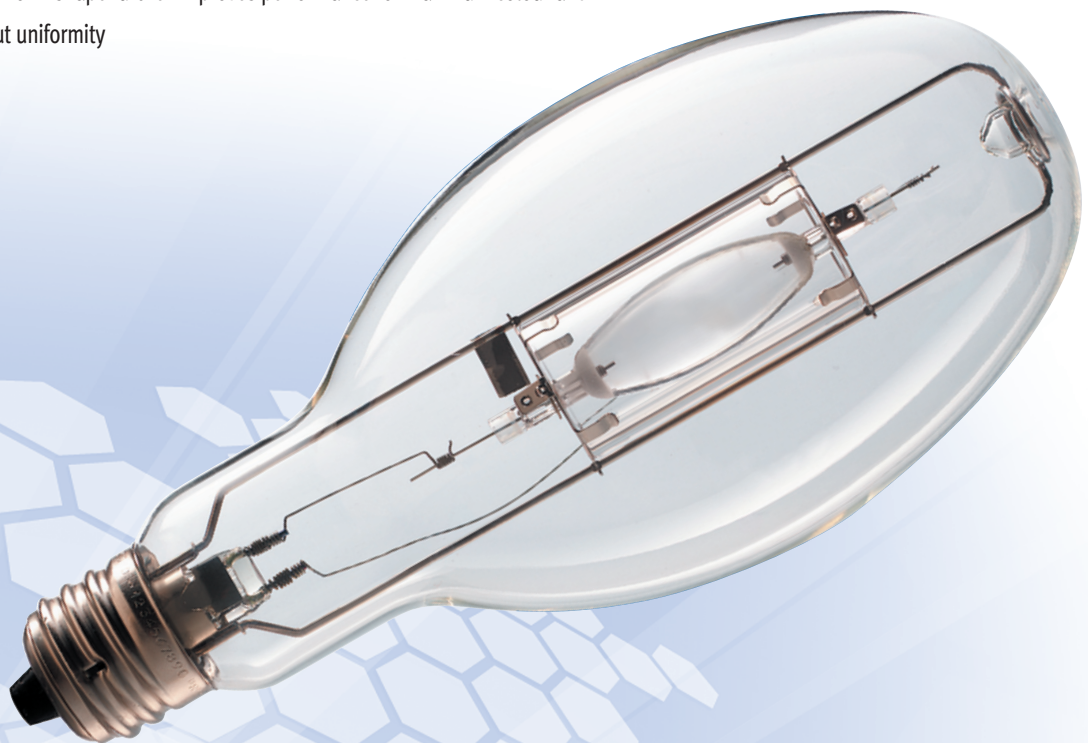
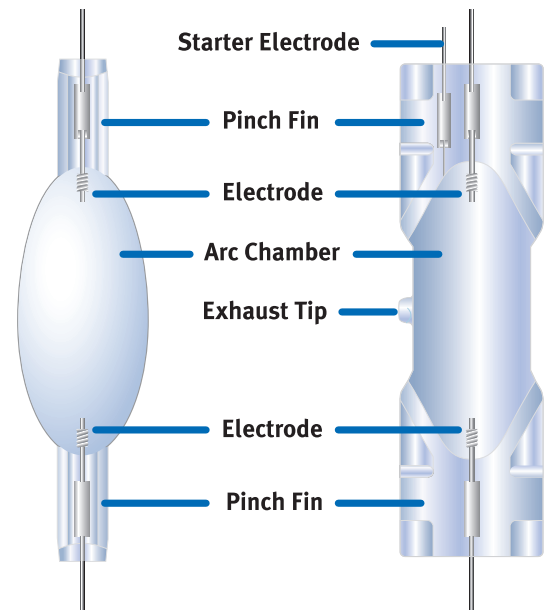
The Secret is in the Shape

Venture's Unique Formed Body Arc Tube Technology

- Superior colour uniformity, less deviation from lamp to lamp - Consistency beyond ceramic metal halide
- Highest lamp efficacy
- Patented stronger weldless arc tube mounting technology
- Higher maintained lumens, longer lamp life
- Hot restart in less than half the time of regular metal halide
- 50% faster warm-up

The Tipless Difference

- Unique formed body arc tube
 - shaped to follow the curve of the arc stream delivers superior lamp efficacy
- Exclusive tipless arc tube
 - Totally uniform shape further improves performance for maximum colour and light output uniformity



Additional Protection for your Metal Halide Lamps

Open Luminaire Rated HIPE lamps

Incorporating an internal shroud to prevent the outer envelope from shattering in the unlikely event of a lamp malfunction

- Arc tube surrounded by an internal shroud
- Continuous operation no shut off required
- Eliminates the need for a luminaire lens, to provide more light



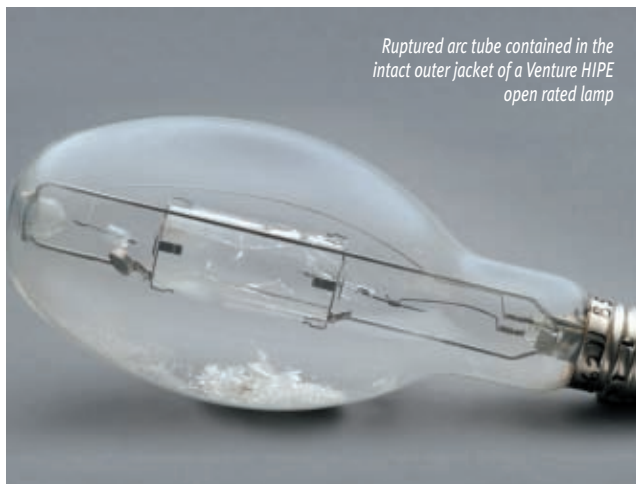
GLASS GUARD®* fragment retention technology

Prevents a lamp from shattering if dropped or mishandled

- Broken and shattered lamps are completely retained within the lamps additional protective coating.
- Completely prevents glass contamination or injury from a broken lamp
- Protects personnel, products and profits
- Available for any elliptical lamp operating vertically



* GlassGuard is a registered trademark of Fotolec Technologies plc



Ruptured arc tube contained in the intact outer jacket of a Venture HIPE open rated lamp

UV Shield® the solution to polycarbonate yellowing

Incorporating an impregnated quartz shroud to absorb ultraviolet light

- Prevents 'yellowing' of polycarbonate lenses
- Blocks up to 80% of damaging UV Light
- Can extend the life of the fitting lens up to 10 times



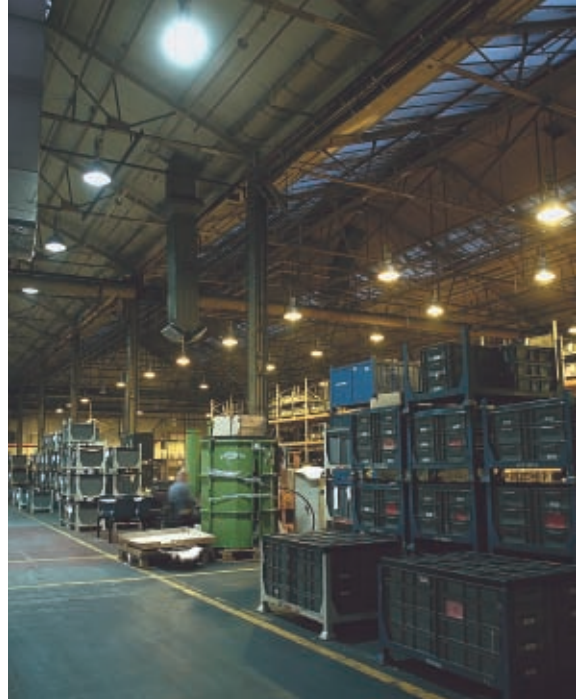
White-Lux - HPS Replacement Lamps

It's quick and simple to get rid of old, high-pressure sodium lighting – with White-Lux Plus Metal Halide lamps from Venture Lighting.

White-Lux Plus lamps can operate directly from existing HPS control gear. Even 'difficult' 70W HPS lamps with internal starters can be directly replaced, using a simple conversion kit.

So why put up with murky yellow-tinged sodium lighting when it's never been easier or more cost effective to switch – and enjoy the clean, fresh and natural white light of metal halide lamp technology!

- From the world leaders in metal halide technology
- Unique Venture Uni-Form formed body arc tube
- Faster warm-up and hot restart
- Increased efficiency
- Long life – up to 20,000 hours
- Better lamp-to-lamp consistency
- A full range of ratings from 50 to 400 watts
- A choice of tubular and elliptical designs
- Clear or coated outer jackets
- For use in open or enclosed fittings
- No thermal cut-out ballasts required
- Environmentally friendly UV shields available for fittings with poly-carbonate lenses



Open Rated Horizontal Tubular Lamps

Features:

Clear tubular lamps with UV Shield for Horizontal operation in open luminaires.

Applications:

For use in Low Bay luminaires for warehouses, retail sheds, showrooms and other commercial and industrial applications.

White-lux are direct replacements for HPS lamps.

Open Rated

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | UVShield | UNI-FORM [®] ARC TUBE TECHNOLOGY | | Reactor Control Gear | | | | |
|-------|-----------------------------|-------------|----------------|-----------------|----------|--|----------------|----------------------|--------|------------|------|----------|
| | | | | | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
| 200 | HIPT 200W/H75/UVS/T52/PS/4K | 00247 | 19000 | 15000 | 4000 | 2-3 | 3-5 | 68 | Clear | HOR±75° | A | 12 |
| 350 | HIPT 350W/H75/UVS/T52/PS/4K | 00248 | 33000 | 20000 | 4000 | 2-3 | 3-5 | 68 | Clear | HOR±75° | B | 12 |

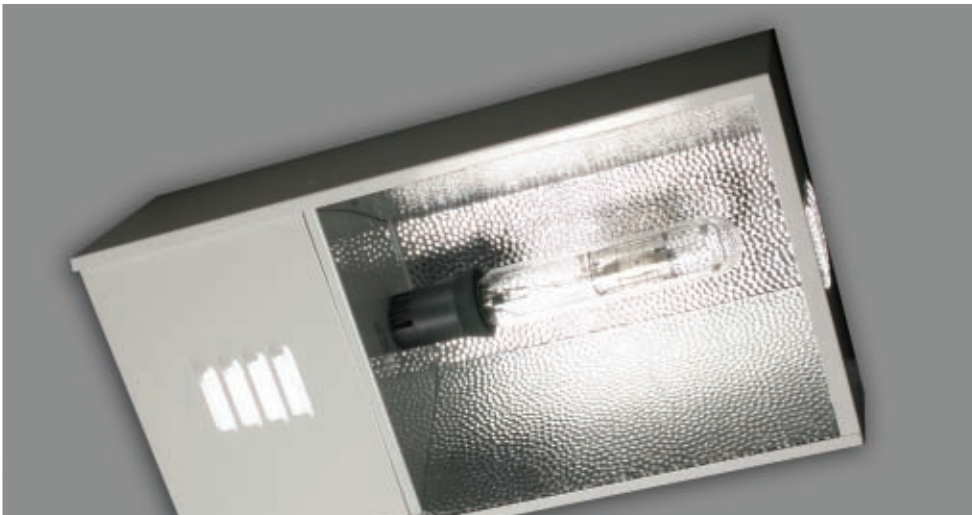
Open Rated

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | UVShield | UNI-FORM [®] ARC TUBE TECHNOLOGY | | Mercury Control Gear | | | | |
|-------|-----------------------------|-------------|----------------|-----------------|----------|--|----------------|----------------------|--------|------------|------|----------|
| | | | | | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
| 250 | HIPT 250W/H75/UVS/T52/PS/4K | 00245 | 22000 | 12000 | 4000 | 2-3 | 3-5 | 68 | Clear | HOR±75° | A | 12 |
| 400 | HIPT 400W/H75/UVS/T52/PS/4K | 00246 | 38000 | 20000 | 4000 | 2-3 | 3-5 | 68 | Clear | HOR±75° | B | 12 |

Open Rated

White-Lux Tubular

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours * | UVShield | UNI-FORM [®] ARC TUBE TECHNOLOGY | | HPS Control Gear | | | | |
|-------|-----------------------------|-------------|----------------|-------------------|----------|--|----------------|------------------|--------|------------|------|----------|
| | | | | | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
| 250 | HIPT 250W/H75/LU/UVS/T52/4K | 00249 | 20000 | 12000 | 4000 | 2-3 | 3-5 | 68 | Clear | HOR±75° | A | 12 |
| 400 | HIPT 400W/H75/LU/UVS/T52/4K | 00250 | 36000 | 20000 | 4000 | 2-3 | 3-5 | 68 | Clear | HOR±75° | B | 12 |



Some lamp descriptions include the 3 digit International Ra/CCT Code



T52

Dia. = 52mm
MOL = 211mm
LCL = 132mm
Base = E40



T52B

Dia. = 52mm
MOL = 285mm
LCL = 146mm
Base = E40

White-Lux® Plus

White-Lux® Plus metal halide lamps in 50,70, 100, 150, 250, 400, 600 and 1000 wattages offer increased lumen efficiency over existing White-Lux metal halide lamps. These lamps can be used to convert the harsh yellow light of sodium lamps in existing installations to clean white metal halide light.

They also provide the added benefit of a formed body arc tube for faster starting. White-Lux Plus metal halide lamps operate on standard HPS ballasts and ignitors.

Features:

- High lumen efficiency
- Long lamp life
- Enclosed and open fixture designs
- Uni-Form® formed body arc tube for faster starting
- UV Shield® option available (UVS)

Enclosed Rated

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | UNI-FORM® ARC TUBE TECHNOLOGY | | RA | Finish | HPS Control Gear | | |
|-------|--------------------|-------------|----------------|-----------------|---------|----------------------------------|----------------|----|--------|------------------|------|----------|
| | | | | | | Warm-Up (Min) | Restrike (Min) | | | Oper. Pos. | Fig. | Case Qty |
| 50 | HIE 50W/U/LU/4K | 67331 | 3400V | 10000V | 4000 | 1-2 | 1-2 | 68 | Clear | U | A | 12 |
| 70 | HIE 70W/U/LU/4K | 27373 | 5600V | 15000V | 4000 | 1-2 | 1-2 | 68 | Clear | U | A | 12 |
| 70 | HIE 70W/C/U/LU/4K | 63173 | 5300V | 15000V | 3700 | 1-2 | 1-2 | 70 | Coated | U | A | 12 |
| 70 | HIE 70W/U/LU/3K | 23660 | 5600V | 15000V | 3200 | 1-2 | 1-2 | 68 | Clear | U | A | 12 |
| 70 | HIE 70W/C/U/LU/3K | 96720 | 5300V | 15000V | 3200 | 1-2 | 1-2 | 70 | Coated | U | A | 12 |
| 100 | HIE 100W/U/LU/4K | 50340 | 9000V | 15000V | 4000 | 1-2 | 2-4 | 68 | Clear | U | A | 12 |
| 100 | HIE 100W/C/U/LU/4K | 19031 | 8500V | 15000V | 3700 | 1-2 | 2-4 | 70 | Coated | U | A | 12 |
| 100 | HIE 100W/U/LU/3K | 79457 | 9000V | 15000V | 3200 | 1-2 | 2-4 | 68 | Clear | U | A | 12 |
| 100 | HIE 100W/C/U/LU/3K | 45157 | 8500V | 15000V | 3200 | 1-2 | 2-4 | 70 | Coated | U | A | 12 |
| 150 | HIE 150W/U/LU/4K | 30544 | 14000V | 15000V | 4000 | 1-2 | 2-4 | 68 | Clear | U | A | 12 |
| 150 | HIE 150W/C/U/LU/4K | 40563 | 13300V | 15000V | 3700 | 1-2 | 2-4 | 70 | Coated | U | A | 12 |
| 150 | HIE 150W/C/U/LU/3K | 69876 | 13300V | 15000V | 3200 | 1-2 | 2-4 | 70 | Coated | U | A | 12 |

Open Rated

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | UV Shield® | | UNI-FORM® ARC TUBE TECHNOLOGY | | RA | Finish | HPS Control Gear | | |
|-------|-----------------------------|-------------|----------------|-----------------|---------|---------------|----------------|----------------------------------|--------|-------|--------|------------------|--|--|
| | | | | | | Warm-Up (Min) | Restrike (Min) | Oper. Pos. | Fig. | | | Case Qty | | |
| 70 | HIPE 70W/C/U/LU/UVS/3K | 52910 | 5000V | 15000V | 3200 | 1-2 | 2-4 | 70 | Coated | U | B | 12 | | |
| 70 | HIPE 70W/C/V/LU/UVS/27K | 48692 | 5000V | 15000V | 2700 | 1-2 | 2-4 | 70 | Coated | V±15° | B | 12 | | |
| 70 | HIPE 70W/U/LU/UVS/4K | 10002 | 5300V | 15000V | 4000 | 1-2 | 2-4 | 68 | Clear | U | B | 12 | | |
| 70 | HIPE 70W/C/U/LU/UVS/4K | 10003 | 5000V | 15000V | 3700 | 1-2 | 2-4 | 70 | Coated | U | B | 12 | | |
| 100 | HIPE 100W/U/LU/UVS/3K | 82539 | 8500V | 15000V | 3200 | 1-2 | 3-5 | 68 | Clear | U | B | 12 | | |
| 100 | HIPE 100W/C/U/LU/UVS/3K | 65850 | 8100V | 15000V | 3200 | 1-2 | 3-5 | 70 | Coated | U | B | 12 | | |
| 100 | HIPE 100W/C/V/LU/UVS/27K | 39468 | 8100V | 15000V | 2700 | 1-2 | 3-5 | 70 | Coated | V±15° | B | 12 | | |
| 100 | HIPE 100W/U/LU/UVS/4K | 10004 | 8500V | 15000V | 4000 | 1-2 | 3-5 | 68 | Clear | U | B | 12 | | |
| 100 | HIPE 100W/C/U/LU/UVS/4K | 10005 | 8100V | 15000V | 3700 | 1-2 | 3-5 | 70 | Coated | U | B | 12 | | |
| 100 | HIPE 100W/U/LU/E90/UVS/4K | 10050 | 8500V | 15000V | 4000 | 1-2 | 3-5 | 68 | Clear | U | C | 12 | | |
| 150 | HIPE 150W/U/LU/UVS/3K | 22822 | 13300V | 15000V | 3200 | 1-2 | 3-5 | 68 | Clear | U | B | 12 | | |
| 150 | HIPE 150W/C/U/LU/UVS/3K | 22833 | 12600V | 15000V | 3200 | 1-2 | 3-5 | 70 | Coated | U | B | 12 | | |
| 150 | HIPE 150W/C/V/LU/UVS/27K | 41700 | 12600V | 15000V | 2700 | 1-2 | 3-5 | 70 | Coated | V±15° | B | 12 | | |
| 150 | HIPE 150W/U/LU/E90/UVS/4K | 10051 | 13300V | 15000V | 4000 | 1-2 | 3-5 | 68 | Clear | U | C | 12 | | |
| 150 | HIPE 150W/C/U/LU/E90/UVS/4K | 10082 | 12600V | 15000V | 3700 | 1-2 | 3-5 | 70 | Coated | U | C | 12 | | |
| 150 | HIPE 150W/U/LU/UVS/4K | 10006 | 13300V | 15000V | 4000 | 1-2 | 3-5 | 68 | Clear | U | B | 12 | | |
| 150 | HIPE 150W/C/U/LU/UVS/4K | 10007 | 12600V | 15000V | 3700 | 1-2 | 3-5 | 70 | Coated | U | B | 12 | | |

Conversion Kit (Lamp and Ignitor)

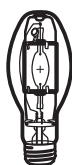
| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | UV Shield® | | UNI-FORM® ARC TUBE TECHNOLOGY | | RA | Finish | HPS Control Gear | | |
|-------|------------------------|-------------|----------------|-----------------|---------|---------------|----------------|----------------------------------|--------|----|--------|------------------|--|--|
| | | | | | | Warm-Up (Min) | Restrike (Min) | Oper. Pos. | Fig. | | | Case Qty | | |
| 70 | HIPE 70W/U/LU/UVS/4K | 10101 | 5300V | 15000V | 4000 | 1-2 | 2-4 | 68 | Clear | U | D | 12 | | |
| 70 | HIPE 70W/C/U/LU/UVS/4K | 10102 | 5000V | 15000V | 3700 | 1-2 | 2-4 | 70 | Coated | U | D | 12 | | |

Some lamp descriptions include the 3 digit International Ra/CCT Code



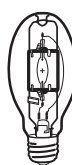
A
E54

Dia. = 54mm
MOL = 141mm
LCL = 89mm
Base = E27



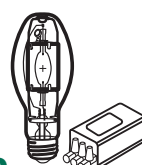
B
EX54

Dia. = 54mm
MOL = 141mm
LCL = 89mm
Base = E27



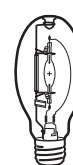
C
E90

Dia. = 90mm
MOL = 215mm
LCL = 131mm
Base = E40



D
KIT

Dia. = 54mm
MOL = 141mm
LCL = 89mm
Base = E27



E
E90

Dia. = 90mm
MOL = 215mm
LCL = 131mm
Base = E40

10



White-Lux® Plus

Applications:

Floodlighting
Factories
Car Parks

Retail warehouses
Security lighting
Showrooms/Warehouses

For Tubular Open
Rated Lamps See
Page 13

Lamps

White-Lux®

Enclosed Rated

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|-------------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 250 | HIE 250W/V/LU/4K | 31668 | 22000 | 20000 | 4000 | 2-3 | 3-5 | 68 | Clear | V±15° | E | 12 |
| 250 | HIE 250W/C/V/LU/4K | 56266 | 21000 | 20000 | 3700 | 2-3 | 3-5 | 70 | Coated | V±15° | E | 12 |
| 250 | HIE 250W/C/H75/LU/4K | 43634 | 20000 | 20000 | 3700 | 2-3 | 4-6 | 70 | Coated | HOR±75° | E | 12 |
| 400 | HIE 400W/V/LU/4K | 60112 | 44000 | 20000 | 4000 | 2-3 | 4-6 | 68 | Clear | V±15° | F | 6 |
| 400 | HIE 400W/C/V/LU/4K | 54695 | 42000 | 20000 | 3700 | 2-3 | 4-6 | 70 | Coated | V±15° | F | 6 |
| 400 | HIE 400W/C/H75/LU/4K | 68110 | 38000 | 20000 | 3700 | 2-3 | 5-8 | 70 | Coated | HOR±75° | F | 6 |
| 1000 | HIE 1000W/V/LU/BT120/4K | 00154 | 90000 | 8000 | 4000 | 2-3 | 10-15 | 68 | Clear | V±15° | P | 6 |

UNI-FORM®
ARC TUBE TECHNOLOGY

HPS Control Gear

Open Rated

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|---------------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 250 | HIPE 250W/HBU/LU/UVS/4K | 10016 | 21000V | 20000V | 4000 | 2-3 | 4-6 | 68 | Clear | V±15° | C | 12 |
| 250 | HIPE 250W/C/HBU/LU/UVS/4K | 10076 | 20000V | 20000V | 3700 | 2-3 | 4-6 | 70 | Coated | V±15° | C | 12 |
| 250 | HIPE 250W/C/H75/LU/UVS/4K | 29486 | 20000 | 20000 | 3700 | 2-3 | 4-6 | 70 | Coated | HOR±75° | C | 12 |
| 400 | HIPE 400W/V/LU/UVS/4K | 10077 | 42000 | 20000 | 4000 | 2-3 | 5-8 | 68 | Clear | V±15° | G | 6 |
| 400 | HIPE 400W/C/V/LU/UVS/4K | 10043 | 40000 | 20000 | 3700 | 2-3 | 5-8 | 70 | Coated | V±15° | G | 6 |
| 400 | HIPE 400W/C/H75/LU/UVS/4K | 40511 | 38000 | 20000 | 3700 | 2-3 | 5-8 | 70 | Clear | HOR±75° | G | 6 |

UVShield

UNI-FORM®
ARC TUBE TECHNOLOGY

HPS Control Gear

Open Rated (High Output)

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|----------------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 400 | HIPE 400W/V/LU/UVS/HO/4K | 54918 | 47000 | 20000 | 4000 | 2-3 | 5-8 | 68 | Clear | V±15° | G | 6 |
| 400 | HIPE 400W/C/V/LU/UVS/HO/4K | 42067 | 45000 | 20000 | 3700 | 2-3 | 5-8 | 70 | Coated | V±15° | G | 6 |

UVShield

UNI-FORM®
ARC TUBE TECHNOLOGY

HPS Control Gear

Enclosed Rated

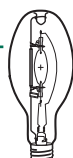
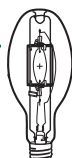
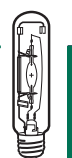

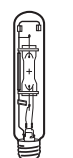
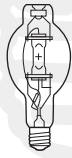
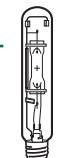
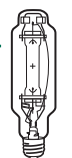
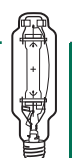


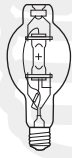
| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|----------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 70 | HIT 70W/U/LU/4K | 13742 | 5300V | 15000V | 4000 | 1-2 | 1-2 | 68 | Clear | U | H | 12 |
| 100 | HIT 100W/U/LU/T38/4K | 76738 | 9000V | 15000V | 4000 | 1-2 | 2-4 | 68 | Clear | U | H | 12 |
| 100 | HIT 100W/U/LU/T46/4K | 87368 | 9000V | 15000V | 4000 | 1-2 | 2-4 | 68 | Clear | U | I | 12 |
| 150 | HIT 150W/U/LU/T38/4K | 62272 | 14000V | 15000V | 4000 | 1-2 | 2-4 | 68 | Clear | U | H | 12 |
| 150 | HIT 150W/U/LU/T46/4K | 71144 | 14000V | 15000V | 4000 | 1-2 | 2-4 | 68 | Clear | U | I | 12 |
| 250 | HIT 250W/U/LU/4K | 48768 | 19000V | 10000V | 4000 | 3-5 | 5-10 | 68 | Clear | U | J | 12 |
| 250 | HIT 250W/U/LU/5K | 10855 | 16800V | 10000V | 5200 | 3-5 | 5-10 | 75 | Clear | U | J | 12 |
| 250 | HIT 250W/H75/LU/4K | 27965 | 20000 | 15000 | 4000 | 3-5 | 5-10 | 68 | Clear | HOR±75° | N | 12 |
| 400 | HIT 400W/U/LU/4K | 98748 | 36000V | 20000V | 4000 | 3-5 | 5-10 | 68 | Clear | U | K | 12 |
| 400 | HIT 400W/U/LU/5K | 21044 | 32000V | 20000V | 5200 | 3-5 | 5-10 | 75 | Clear | U | K | 12 |
| 400 | HIT 400W/H75/LU/4K | 43898 | 40000 | 15000 | 4000 | 3-5 | 5-10 | 68 | Clear | HOR±75° | O | 12 |
| 600 | HIT 600W/U/LU/4K | 54631 | 55000V | 12000V | 4000 | 3-5 | 5-10 | 68 | Clear | BU±90° | L | 6 |
| 1000 | HIT 1000W/U/LU/4K | 83265 | 90000V | 8000V | 4000 | 3-5 | 10-15 | 68 | Clear | U | M | 6 |
| 1000 | HIT 1000W/U/LU/5K | 00083 | 80000V | 8000V | 5000 | 3-5 | 10-15 | 68 | Clear | U | M | 6 |

White-Lux® Tubular

UNI-FORM®
ARC TUBE TECHNOLOGY

HPS Control Gear

Some lamp descriptions include the 3 digit International Ra/CCT Code

| | | | | | |
|---|---|---|--|---|--|
| <p>E120 F</p> <p>Dia. = 120mm MOL = 296mm LCL = 182mm Base = E40</p>  | <p>E120 G</p> <p>Dia. = 120mm MOL = 296mm LCL = 182mm Base = E40</p>  | <p>T38 F</p> <p>Dia. = 38mm MOL = 156mm LCL = 182mm Base = E27</p>  | <p>T46 I</p> <p>Dia. = 46mm MOL = 211mm LCL = 132mm Base = E40</p>  | <p>T46 J</p> <p>Dia. = 46mm MOL = 225mm LCL = 146mm Base = E40</p>  |  |
| <p>T46 K</p> <p>Dia. = 46mm MOL = 285mm LCL = 175mm Base = E40</p>  | <p>T76 L</p> <p>Dia. = 76mm MOL = 283mm LCL = 175mm Base = E40</p>  | <p>T76 M</p> <p>Dia. = 76mm MOL = 340mm LCL = 220mm Base = E40</p>  | <p>T46 N</p> <p>Dia. = 46mm MOL = 225mm LCL = 146mm Base = E40</p>  | <p>T46 O</p> <p>Dia. = 46mm MOL = 285mm LCL = 175mm Base = E40</p>  | <p>BT120 P</p> <p>Dia. = 120mm MOL = 296mm LCL = 182mm Base = E40</p>  |

Energy Saving Lamps -

With Achievable Savings of Almost 50%

There is now a rapidly growing demand for ever more energy efficient lighting systems to help the environment.

Venture Lighting is leading the way worldwide in developing innovative new energy efficient lighting products to help reduce overall energy usage costs but without compromising on lighting quality.

Now, Venture's pulse start metal halide lighting systems are widely regarded as the most advanced available. They offer more light than conventional systems, excellent colour uniformity, longer life and – most important of all – significant energy savings



Energy Saving Uni-Form® Pulse Start

The 200 and 350 watt Uni-Form® Energy Saving lamps are designed to replace standard 250 and 400 watt metal halide lamps. These lamps operate on reactor/ignitor ballast systems specifically designed to realise the best performance from these light sources, including longer life and better lumen maintenance.

Features:

- Higher lumens vs. standard designs
- System savings, up to 50 watts
- Longer life (up to 20,000 hours)
- Faster warm-up and hot restrike
- Improved lumen maintenance
- Reduced colour shift
- Better cold temperature starting (-40°C)
- UV Shield® option available (UVS)

Applications:

- Petrol station canopies
- Industrial high bay and low bay fittings
- Larger retail areas

Enclosed Rated

UNI-FORM®
ARC TUBE TECHNOLOGY

Reactor Control Gear

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|---------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 200 | HIE 200W/U/PS/740 | 88247 | 21000V | 15000V | 4000 | 1-2 | 2-4 | 68 | Clear | U | A | 12 |
| 200 | HIE 200W/C/U/PS/737 | 10058 | 20000V | 15000V | 3700 | 1-2 | 2-4 | 70 | Coated | U | A | 12 |
| 350 | HIE 350W/V/PS/740 | 20138 | 37000 | 20000+ | 4000 | 2-3 | 4-6 | 68 | Clear | V±15° | C | 6 |
| 350 | HIE 350W/C/V/PS/737 | 10056 | 35000 | 20000+ | 3700 | 2-3 | 4-6 | 70 | Coated | V±15° | C | 6 |
| 350 | HIE 350W/H75/PS/740 | 96307 | 33000 | 15000 | 4000 | 2-3 | 4-6 | 68 | Clear | HOR±75° | C | 6 |

Open Rated

UVShield®

UNI-FORM®
ARC TUBE TECHNOLOGY

Reactor Control Gear

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|------------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 200 | HIPE 200W/V/UVS/PS/740 | 10067 | 20000 | 15000 | 4000 | 1-2 | 3-5 | 68 | Clear | V±15° | B | 12 |
| 350 | HIPE 350W/V/UVS/PS/740 | 10068 | 35000 | 20000+ | 4000 | 2-3 | 5-8 | 68 | Clear | V±15° | D | 6 |

Open Rated

UVShield®

UNI-FORM®
ARC TUBE TECHNOLOGY

Reactor Control Gear

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|--------------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 200 | HIPE 200W/C/V/UVS/PS/737 | 10059 | 19000 | 15000 | 3700 | 1-2 | 3-5 | 70 | Coated | V±15° | B | 12 |
| 350 | HIPE 350W/C/V/UVS/PS/737 | 10057 | 33000 | 20000+ | 3700 | 2-3 | 5-8 | 70 | Coated | V±15° | D | 6 |

NOTE: A life rating of 20,000+ hours means that 70% of the lamps initially installed will still be operating after 20,000 hours.

Enclosed Rated

Pulse Start Tubular

UNI-FORM®
ARC TUBE TECHNOLOGY

Reactor Control Gear

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|--------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 200 | HIT 200W/H75/PS/4K | 00285 | 20000 | 15000 | 4000 | 2-3 | 5-8 | 68 | Clear | HOR±75° | H | 12 |
| 350 | HIT 350W/H75/PS/4K | 00283 | 33000 | 20000 | 4000 | 2-3 | 5-8 | 68 | Clear | HOR±75° | I | 12 |

Open Rated

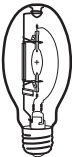
UVShield®

UNI-FORM®
ARC TUBE TECHNOLOGY

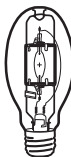
Ventronic

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|-----------------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 320 | HIPE 320W/C/V/UVS/EL/PS/737 | 40904 | 30000 | 20000+ | 3700 | 2-3 | 5-8 | 70 | Coated | V±15° | D | 6 |
| 320 | HIPE 320W/V/UVS/EL/PS/740 | 49786 | 32000 | 20000+ | 4000 | 2-3 | 5-8 | 70 | Clear | V±15° | D | 6 |

Some lamp descriptions include the 3 digit International Ra/CCT Code



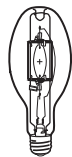
A
E90
Dia. = 90mm
MOL = 215mm
LCL = 131mm
Base = E40



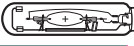
B
E90
Dia. = 90mm
MOL = 215mm
LCL = 131mm
Base = E40



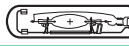
C
E120
Dia. = 120mm
MOL = 2965mm
LCL = 182mm
Base = E40



D
E120
Dia. = 120mm
MOL = 296mm
LCL = 182mm
Base = E40



E
T46
Dia. = 46mm
MOL = 225mm
LCL = 146mm
Base = E40



I
T46
Dia. = 46mm
MOL = 285mm
LCL = 175mm
Base = E40

Uni-Form® Pulse Start High Performance

Lamps

Uni-Form® Pulse Start

Uni-Form® 250, 400 and 450 Watt High Performance lamps are designed to out perform standard pinch body 250W and 400W metal halide lamps. These lamps operate on reactor/ignitor ballast systems specifically designed to realise the best performance from these light sources, including longer life and better lumen maintenance. 450W lamps operate on HPS Control Gear

Features:

- Higher lumens vs. standard designs
- System savings, up to 50 watts
- Longer life (20,000+hours)
- Faster warm-up and hot restrike
- Improved lumen maintenance
- Reduced colour shift
- Better cold temperature starting (-40°C)
- UV Shield® option available (UVS)
- Impact Guard™ coating available for base-up application- call for details

Enclosed Rated

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|-----------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 250 | HIE 250W/V/PS/740 | 18980 | 25000 | 15000 | 4000 | 2-3 | 3-5 | 68 | Clear | V±15° | A | 12 |
| 250 | HIE 250W/C/V/PS/737 | 61513 | 23800 | 15000 | 3700 | 2-3 | 3-5 | 70 | Coated | V±15° | A | 12 |
| 250 | HIE 250W/C/H75/PS/737 | 91947 | 20000 | 15000 | 3700 | 2-3 | 3-5 | 70 | Coated | HOR±75° | A | 12 |
| 400 | HIE 400W/V/PS/740 | 92008 | 44000 | 20000+ | 4000 | 2-3 | 4-6 | 68 | Clear | V±15° | C | 6 |
| 400 | HIE 400W/C/V/PS/737 | 60444 | 42000 | 20000+ | 3700 | 2-3 | 4-6 | 70 | Coated | V±15° | C | 6 |
| 400 | HIE 400W/C/H75/PS/737 | 68592 | 40000 | 20000 | 3700 | 2-3 | 4-6 | 70 | Coated | HOR±75° | C | 6 |

UNI-FORM®
ARC TUBE TECHNOLOGY

Mercury Control Gear

Open Rated

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|------------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 250 | HIPE 250W/V/UVS/PS/740 | 10008 | 23800 | 15000 | 4000 | 2-3 | 4-6 | 68 | Clear | V±15° | B | 12 |
| 400 | HIPE 400W/V/UVS/PS/740 | 10015 | 41000 | 20000+ | 4000 | 2-3 | 5-8 | 68 | Clear | V±15° | D | 6 |

UV Shield®

UNI-FORM®
ARC TUBE TECHNOLOGY

Mercury Control Gear

Open Rated

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|------------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 450 | HIPE 450W/V/UVS/PS/740 | 47224 | 47000 | 20000+ | 4000 | 2-3 | 5-8 | 68 | Clear | V±15° | D | 6 |

UV Shield®

UNI-FORM®
ARC TUBE TECHNOLOGY

HPS Control Gear

Open Rated

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|--------------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 250 | HIPE 250W/C/V/UVS/PS/737 | 10014 | 23000 | 15000 | 3700 | 2-3 | 4-6 | 70 | Coated | V±15° | B | 12 |
| 400 | HIPE 400W/C/V/UVS/PS/737 | 10041 | 40000 | 20000+ | 3700 | 2-3 | 5-8 | 70 | Coated | V±15° | D | 6 |

UV Shield®

UNI-FORM®
ARC TUBE TECHNOLOGY

Mercury Control Gear

Open Rated

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|--------------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 450 | HIPE 450W/C/V/UVS/PS/737 | 74517 | 45000 | 20000+ | 3700 | 2-3 | 5-8 | 70 | Coated | V±15° | D | 6 |

UV Shield®

UNI-FORM®
ARC TUBE TECHNOLOGY

HPS Control Gear

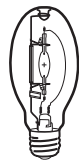
Enclosed Rated

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|---------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 250 | HIT 250W/H75/PS/740 | 26240 | 22000 | 15000 | 4000 | 2-3 | 5-8 | 68 | Clear | HOR±75° | E | 12 |
| 400 | HIT 400W/H75/PS/740 | 56842 | 42000 | 20000 | 4000 | 2-3 | 5-8 | 68 | Clear | HOR±75° | F | 12 |

UNI-FORM®
ARC TUBE TECHNOLOGY

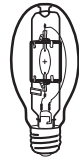
Mercury Control Gear

Some lamp descriptions include the 3 digit International Ra/CCT Code



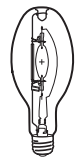
A
E90

Dia. = 90mm
MOL = 125mm
LCL = 131mm
Base = E40



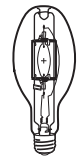
B
E90

Dia. = 90mm
MOL = 215mm
LCL = 131mm
Base = E40



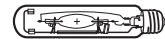
C
E120

Dia. = 120mm
MOL = 296mm
LCL = 182mm
Base = E40



D
E120

Dia. = 120mm
MOL = 296mm
LCL = 182mm
Base = E40



E
T46

Dia. = 46mm
MOL = 225mm
LCL = 146mm
Base = E40



F
T46

Dia. = 46mm
MOL = 285mm
LCL = 175mm
Base = E40

14



Tubular Metal Halide

Features:

- Full range of wattages
- Unique tubular lamps
- Compact light source
- Choice of colour temperatures

Applications:

- Floodlighting
- Sports lighting
- General lighting
- Street lighting

For Tubular Open Rated Lamps See Page 13

Lamps

Tubular Metal Halide

Enclosed Rated

Pulse Start Tubular

UNI-FORM[®]
ARC TUBE TECHNOLOGY

Reactor Control Gear

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|-----------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 200 | HIT 200W/U/H75/PS/4K | 00285 | 20000 | 15000 | 4000 | 2-3 | 5-8 | 68 | Clear | HOR±75° | H | 12 |
| 250 | HIT 250W/U/H75/PS/740 | 26240 | 22000 | 15000 | 4000 | 2-3 | 5-8 | 68 | Clear | HOR±75° | H | 12 |
| 350 | HIT 350W/U/H75/PS/4K | 00283 | 33000 | 20000 | 4000 | 2-3 | 5-8 | 68 | Clear | HOR±75° | I | 12 |
| 400 | HIT 400W/U/H75/PS/740 | 56842 | 40000 | 20000 | 4000 | 2-3 | 5-8 | 68 | Clear | HOR±75° | I | 12 |

Enclosed Rated

White-Lux Plus Tubular

UNI-FORM[®]
ARC TUBE TECHNOLOGY

HPS Control Gear

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|----------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 70 | HIT 70W/U/LU/4K | 13742 | 5300V | 15000V | 4000 | 1-2 | 1-2 | 68 | Clear | U | A | 12 |
| 100 | HIT 100W/U/LU/T38/4K | 76738 | 9000V | 15000V | 4000 | 1-2 | 2-4 | 68 | Clear | U | A | 12 |
| 100 | HIT 100W/U/LU/T46/4K | 87368 | 9000V | 15000V | 4000 | 1-2 | 2-4 | 68 | Clear | U | B | 12 |
| 150 | HIT 150W/U/LU/T38/4K | 62272 | 14000V | 15000V | 4000 | 1-2 | 2-4 | 68 | Clear | U | A | 12 |
| 150 | HIT 150W/U/LU/T46/4K | 71144 | 14000V | 15000V | 4000 | 1-2 | 2-4 | 68 | Clear | U | B | 12 |

Enclosed Rated

White-Lux Tubular

HPS Control Gear

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|----------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 250 | HIT 250W/U/LU/4K | 48768 | 19000V | 10000V | 4000 | 3-5 | 5-10 | 68 | Clear | U | C | 12 |
| 250 | HIT 250W/U/LU/5K | 10855 | 16800V | 10000V | 5200 | 3-5 | 5-10 | 75 | Clear | U | C | 12 |
| 250 | HIT 250W/U/H75/LU/4K | 27965 | 19000 | 15000 | 4000 | 3-5 | 5-10 | 68 | Clear | HOR±75° | H | 12 |
| 400 | HIT 400W/U/LU/4K | 98748 | 36000V | 15000V | 4000 | 3-5 | 5-10 | 68 | Clear | U | D | 12 |
| 400 | HIT 400W/U/LU/5K | 21044 | 32000V | 15000V | 5200 | 3-5 | 5-10 | 75 | Clear | U | D | 12 |
| 400 | HIT 400W/U/H75/LU/4K | 43898 | 40000 | 15000 | 4000 | 3-5 | 5-10 | 68 | Clear | HOR±75° | I | 12 |
| 600 | HIT 600W/U/LU/4K | 54631 | 55000V | 12000V | 4000 | 3-5 | 5-10 | 68 | Clear | U | E | 6 |
| 1000 | HIT 1000W/U/LU/4K | 83265 | 90000V | 8000V | 4000 | 3-5 | 10-15 | 68 | Clear | U | F | 6 |
| 1000 | HIT 1000W/U/LU/5K | 00083 | 80000V | 8000V | 5000 | 3-5 | 10-15 | 68 | Clear | U | F | 6 |

Enclosed Rated

Euro Tubular

Mercury Control Gear

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|----------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 250 | HIT 250W/U/EURO/4K | 33950 | 21000V | 10000V | 4000 | 3-5 | 5-10 | 68 | Clear | U | C | 12 |
| 250 | HIT 250W/HOR/EURO/4K | 57712 | 23000 | 10000 | 4000 | 3-5 | 5-10 | 68 | Clear | HOR±45° | C1 | 12 |
| 250 | HIT 250W/U/EURO/5K | 00033 | 19000V | 7500V | 5000 | 3-5 | 5-10 | 68 | Clear | U | C | 12 |
| 400 | HIT 400W/U/EURO/5K | 00034 | 32000V | 15000V | 5000 | 3-5 | 5-10 | 68 | Clear | U | D | 12 |
| 400 | HIT 400W/U/EURO/4K | 25830 | 36000V | 15000V | 4000 | 3-5 | 10-15 | 68 | Clear | U | D | 12 |
| 400 | HIT 400W/HOR/EURO/4K | 88410 | 40000 | 15000 | 4000 | 3-5 | 10-15 | 68 | Clear | HOR±45° | D1 | 12 |

Enclosed Rated

Tubular

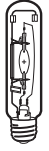
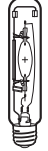
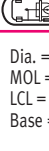
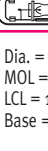


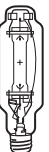
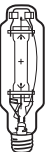
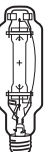


Reactor Control Gear

| Watts | Lamp Description | Lamp Current | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|----------------------|--------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 1000 | HIT 1000W/U/EURO/4K | Note ① | 00008 | 90000V | 8000V | 4000 | 3-5 | 10-15 | 68 | Clear | U | F | 6 |
| 1000 | HIT 1000W/U/EURO/5K | Note ① | 00282 | 80000V | 8000V | 5000 | 3-5 | 10-15 | 68 | Clear | U | F | 6 |
| 2000 | HIT 2000W/U/4K | Note ① | 00066 | 230000V | 5000V | 4000 | 3-5 | 10-15 | 68 | Clear | U | G | 6 |
| 2000 | HIT 2000W/U/230V/45K | Note ① | 00067 | 185000V | 5000V | 4500 | 3-5 | 10-15 | 68 | Clear | U | G | 6 |

Some lamp descriptions include the 3 digit International Ra/CCT Code

Notes

Note ① Ignitor can be supplied with lamp

| | | | | | |
|---|---|---|---|---|--|
| <p>A T38 Dia. = 38mm MOL = 156mm LCL = 102mm Base = E27</p>  | <p>B T46 Dia. = 46mm MOL = 211mm LCL = 132mm Base = E40</p>  | <p>C T46 Dia. = 46mm MOL = 225mm LCL = 146mm Base = E40</p>  | <p>D T46 Dia. = 46mm MOL = 225mm LCL = 146mm Base = E40PO</p>  | <p>D T46 Dia. = 46mm MOL = 285mm LCL = 175mm Base = E40</p>  | <p>D1 T46 Dia. = 46mm MOL = 285mm LCL = 175mm Base = E40PO</p>  |
| <p>E T76 Dia. = 76mm MOL = 283mm LCL = 175mm Base = E40</p>  | <p>F T76 Dia. = 76mm MOL = 340mm LCL = 220mm Base = E40</p>  | <p>G T100 Dia. = 100mm MOL = 420mm LCL = 220mm Base = E40</p>  | <p>H T46 Dia. = 46mm MOL = 225mm LCL = 146mm Base = E40</p>  | <p>I T46 Dia. = 46mm MOL = 285mm LCL = 175mm Base = E40</p>  | |

Euro Metal Halide

Euro Lamps make up a range of metal halide lamps suitable for mercury ballasts with either 600-900 volt 2-wire parallel igniters, or 3000-4500 volt igniters. The 125W Mercury Retrofit lamp operates on a mercury ballast with an 1800-2500 volt ignitor.

Features:

- Operates on mercury ballast with standard metal halide ignitor
- Vertical and horizontal lamps provide high performance and long life
- Tubular and elliptical design
- Clear and coated bulb finishes

Applications:

- Petrol station canopies
- Industrial high bay and low bay fittings
- Larger retail areas

Enclosed Rated 125W Mercury Retrofit

UNI-FORM[®]
ARC TUBE TECHNOLOGY

Mercury Control Gear

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|-------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 125 | HIE 125W/C/HBU/4K | 97765 | 12000V | 12000V | 3700 | 1-2 | 2-4 | 70 | Coated | BU±90° | A | 12 |
| 125 | HIE 125W/C/HBD/4K | 59372 | 12000V | 12000V | 3700 | 1-2 | 2-4 | 70 | Coated | BD±90° | A | 12 |

Enclosed Rated

Mercury Control Gear

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|--------------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 175 | HIE 175W/U/E54/EURO/4K | 84971 | 14000V | 10000V | 4000 | 3-5 | 5-10 | 68 | Clear | U | B | 12 |
| 175 | HIE 175W/C/U/E54/EURO/4K | 24729 | 13300V | 10000V | 3700 | 3-5 | 5-10 | 70 | Coated | U | B | 12 |
| 175 | HIE 175W/U/EURO/4K | 36279 | 14000V | 10000V | 4000 | 3-5 | 5-10 | 68 | Clear | U | C | 12 |
| 175 | HIE 175W/C/U/EURO/4K | 40698 | 13300V | 10000V | 3700 | 3-5 | 5-10 | 70 | Coated | U | C | 12 |
| 250 | HIE 250W/BU/EURO/4K | 81203 | 23000V | 10000V | 4000 | 2-4 | 5-10 | 68 | Clear | BU±15° | C | 12 |
| 250 | HIE 250W/C/BU/EURO/4K | 81202 | 22000V | 10000V | 3700 | 2-4 | 5-10 | 70 | Coated | BU±15° | C | 12 |
| 250 | HIE 250W/U/EURO/4K | 88246 | 21000V | 10000V | 4000 | 3-5 | 5-10 | 68 | Clear | U | C | 12 |
| 250 | HIE 250W/C/U/EURO/4K | 21303 | 20000V | 10000V | 3700 | 3-5 | 5-10 | 70 | Coated | U | C | 12 |

Enclosed Rated

Tubular

Mercury Control Gear

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|----------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 250 | HIT 250W/U/EURO/4K | 33950 | 21000V | 10000V | 4000 | 3-5 | 5-10 | 68 | Clear | U | D | 12 |
| 250 | HIT 250W/U/EURO/5K | 00033 | 19000V | 7500V | 5000 | 3-5 | 5-10 | 75 | Clear | U | D | 12 |
| 250 | HIT 250W/HOR/EURO/4K | 57712 | 23000 | 10000H | 4000H | 3-5 | 5-10 | 68 | Clear | HOR±45° | D1 | 12 |

Some lamp descriptions include the 3 digit International Ra/CCT Code



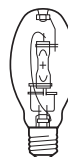
A
E54

Dia. = 54mm
MOL = 141mm
LCL = 89mm
Base = E27



B
E54

Dia. = 54mm
MOL = 141mm
LCL = 89mm
Base = E27



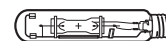
C
E90

Dia. = 90mm
MOL = 215mm
LCL = 131mm
Base = E40



D
T46

Dia. = 46mm
MOL = 225mm
LCL = 146mm
Base = E40



D1
T46

Dia. = 46mm
MOL = 225mm
LCL = 146mm
Base = E40PO

Euro Metal Halide

Enclosed Rated

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|---------------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 400 | HIE 400W/BU/EURO/4K | 33544 | 40000 | 15000 | 4000 | 3-5 | 10-15 | 68 | Clear | BU±15° | B | 6 |
| 400 | HIE 400W/C/BU/EURO/4K | 31545 | 38000 | 15000 | 3700 | 3-5 | 10-15 | 70 | Coated | BU±15° | B | 6 |
| 400 | HIE 400W/C/HOR/EURO/4K | 63958 | 38000 | 15000 | 3700 | 3-5 | 10-15 | 70 | Coated | HOR±45° | B1 | 6 |
| 400 | HIE 400W/U/EURO/4K | 20137 | 36000V | 15000V | 4000 | 3-5 | 8-12 | 68 | Clear | U | B | 6 |
| 400 | HIE 400W/C/U/E90/EURO/4K* | 58122 | 34000V | 15000V | 3700 | 3-5 | 8-12 | 70 | Coated | U | A | 12 |
| 400 | HIE 400W/C/U/EURO/4K | 88787 | 34000V | 15000V | 3700 | 3-5 | 8-12 | 70 | Coated | U | B | 6 |

* Reduced jacket

Mercury Control Gear

Open Rated

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|------------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 400 | HIPE 400W/BU/EURO/4K | 99441 | 38000 | 15000 | 4000 | 3-5 | 10-15 | 68 | Clear | BU±15° | D | 6 |
| 400 | HIPE 400W/C/BU/EURO/4K | 94102 | 36000 | 15000 | 3700 | 3-5 | 10-15 | 70 | Coated | BU±15° | D | 6 |

Mercury Control Gear

Enclosed Rated

Tubular

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|----------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 400 | HIT 400W/U/EURO/4K | 25830 | 36000V | 15000V | 4000 | 3-5 | 10-15 | 68 | Clear | U | C | 12 |
| 400 | HIT 400W/U/EURO/5K | 00034 | 32000V | 15000V | 5000 | 3-5 | 10-15 | 75 | Clear | U | C | 12 |
| 400 | HIT 400W/HOR/EURO/4K | 88410 | 40000 | 15000 | 4000 | 3-5 | 10-15 | 68 | Clear | HOR±45° | C1 | 12 |

Mercury Control Gear

Enclosed Rated

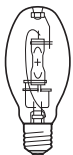
Tubular

| Watts | Lamp Description | Note | Lamp Current | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|----------------------|--------|--------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 1000 | HIT1000W/U/EURO/4K | Note ① | 8.2 | 00008 | 90000V | 8000V | 4000 | 3-5 | 10-15 | 68 | Clear | U | E | 6 |
| 1000 | HIT1000W/U/EURO/5K | Note ① | 8.2 | 00282 | 80000V | 8000V | 5000 | 3-5 | 10-15 | 68 | Clear | U | E | 6 |
| 2000 | HIT 2000W/U/4K | Note ① | 8.8 | 00066 | 230000V | 5000V | 4000 | 3-5 | 10-15 | 68 | Clear | U | F | 6 |
| 2000 | HIT 2000W/U/230V/45K | Note ① | 16.5 | 00067 | 185000V | 5000V | 4500 | 3-5 | 10-15 | 68 | Clear | U | F | 6 |

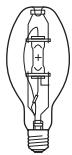
Reactor Control Gear

Some lamp descriptions include the 3 digit International Ra/CCT Code

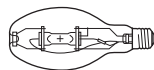
Notes
Note ① Ignitor can be supplied with lamp



A
E90
Dia. = 90mm
MOL = 215mm
LCL = 131mm
Base = E40



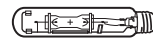
B
E120
Dia. = 120mm
MOL = 296mm
LCL = 182mm
Base = E40



B1
E120
Dia. = 120mm
MOL = 296mm
LCL = 182mm
Base = E40PO

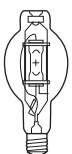


C
T46
Dia. = 46mm
MOL = 285mm
LCL = 175mm
Base = E40

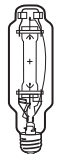


C1
T46
Dia. = 46mm
MOL = 285mm
LCL = 175mm
Base = E40PO

D
BT120
Dia. = 120mm
MOL = 296mm
LCL = 182mm
Base = E40



E
T76
Dia. = 76mm
MOL = 340mm
LCL = 220mm
Base = E40



F
T100
Dia. = 100mm
MOL = 420mm
LCL = 220mm
Base = E40



Natural White Full Spectrum

New *Natural White* lamps offer light output in all parts of the visual spectrum to provide better colour than ceramic metal halide lamps.

With *Natural White* lamps blues are true blue and reds are more vibrant; whites are whiter and skin tones look like they're under sunlight.

- More consistent lamp to lamp colour
- Light output in all parts of the visual spectrum
- Excellent colour uniformity and stability for the life of the lamp
- Provides better colour than ceramic metal halide
- Ideal for daylight harvesting applications
- Lamps feature superior Uni-Form® pulse start technology



Ceramic Metal Halide 4000K - 90 CRI



Uni-Form Natural White™ 5000K - 90+ CRI



Compact Fluorescent 3500K - 80 CRI



Natural White

Features:

Lamps with improved Colour Rendering Index (Ra) for high bay luminaires without protective cover glasses.

Applications:

- Retail stores or commercial and industrial applications requiring excellent colour rendering and colour matching.
- Museums, Art Galleries.

Open Rated

| Watts | Lamp Description | Natural White™ | | | UVShield® | | UNI-FORM® ARC TUBE TECHNOLOGY | | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|---------------------------------|----------------|--------------------------|-----------------|-----------|---------------|----------------------------------|-----|--------|------------|------|----------|
| | | Product No. | Initial Lumens Note ① | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | | | | |
| 35 | HIT 35W/G12/UVS/950 | 67520 | 2200 | 10000V | 5000 | 1-2 | 2-4 | 90+ | Clear | U | C | 25 |
| 150 | HIT 150w/G12/UVS/950 | 15897 | 11000 | 10000V | 5000 | 1-2 | 2-4 | 90+ | Clear | U | B | 25 |
| 150 | HIPE 150w/C/U/950 | 39542 | 10400 | 15000V | 5000 | 1-2 | 2-4 | 90+ | Coated | U | D | 12 |
| 225 | HIPE 225W/BU/UVS/PS/950 Note ③ | 22994 | 21000 | 20000+ | 5000 | 2-3 | 4-6 | 90+ | Clear | BU±15° | E | 12 |
| 310 | HIPE 310W/BU/UVS/PS/950 Note ④ | 58216 | 28500 | 20000+ | 5000 | 2-3 | 5-8 | 90+ | Clear | BU±15° | A | 6 |
| 365 | HIPE 365W/C/V/UVS/PS/950 Note ② | 53613 | 32100 | 20000+ | 5000 | 2-3 | 5-8 | 90+ | Coated | V±15° | A | 6 |

Some lamp descriptions include the 3 digit International Ra/CCT Code

Notes

- Note ① Scotopically Enhanced Task Lumens (S/P) 0.78
 Note ② Lamp operates at 365W on 400W Mercury ballast
 Note ③ Lamp operates on 250W Mercury ballast
 Note ④ Lamp operates on 350W ballast



A
E120
Dia. = 120mm
MOL = 296mm
LCL = 182mm
Base = E40

B
G12
Dia. = 23mm
MOL = 110mm
LCL = 56mm
Base = G12

C
G12
Dia. = 19mm
MOL = 90mm
LCL = 56mm
Base = G12

D
E54
Dia. = 54mm
MOL = 141mm
LCL = 89mm
Base = E27

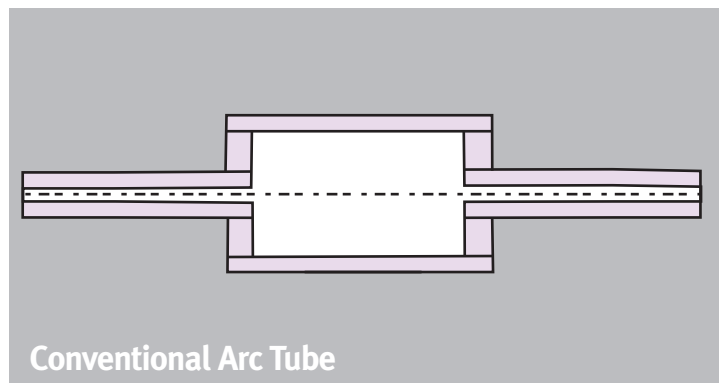
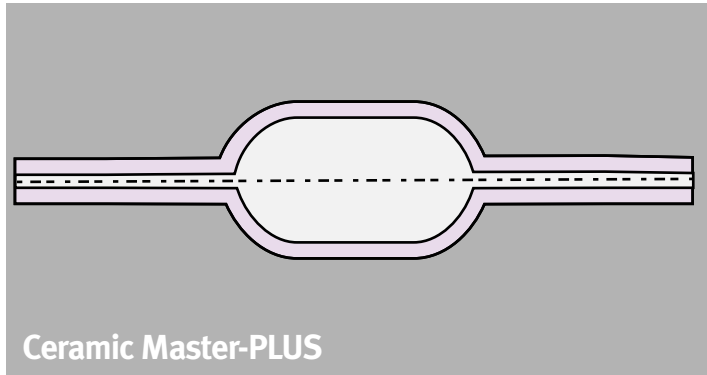
E
E90
Dia. = 90mm
MOL = 215mm
LCL = 131mm
Base = E40

Ceramic Master-PLUS Metal Halide

Ceramic Master-PLUS Metal Halide lamps from Venture offer an unbeatable combination of performance and reliability, as you'd expect from the world's leading name in Metal Halide technology.

Features:

- Excellent light quality
- Exceptional colour rendering and consistency
- Increased lamp life
- Lower maintenance requirements
- Reduced heat output
- Significantly less power consumption than halogen equivalents
- Ideal for use with quality interior décors



Venture Ceramic Master-PLUS lamps use the latest in ceramic arc tube design. Our slip cast arc tube provides excellent reliability due to its factory formed construction. The single piece arc tube with contours similar to Venture **UNIFORM** lamps offers better colour control, higher Lumens and longer life

Energy Efficient

Venture Ceramic lamps are highly energy efficient and offer truly exceptional performance, delivering up to 100 lumens per watt. They therefore consume considerably less energy and generate less heat than a halogen equivalent. Maintenance requirements are reduced too, as the lamps are both robust and reliable and offer a life expectancy of up to 18,000 hours.

Excellent Light & Colour

The quality and consistency of light generated by Venture Metal Halide lamps has always been at the forefront of our design technology. The Venture Ceramic Master-PLUS range offers a clean white light and excellent colour rendering, making it ideal for display use and for accentuating quality interiors and decors. Colours, features and textures really stand out.

Lamp-to-lamp colour uniformity is comparable to Venture **UNIFORM** lamps, so the effect you want is never lost.

Ceramic Master-PLUS Metal Halide

Ceramic Lamp G8.5

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | RA | Burn Pos. | Fig | Ctn. Qty |
|-------|-------------------------------|-------------|----------------|-----------------|---------|-----|-----------|-----|----------|
| 20W | CM-PLUS TC 20W/U/UVS/G8.5/830 | 00354 | 1800 | 9000 | 3000 | 80+ | U | A | 12 |
| 20W | CM-PLUS TC 20W/U/UVS/G8.5/942 | 00355 | 1800 | 9000 | 4200 | 90+ | U | A | 12 |
| 35W | CM-PLUS TC 35W/U/UVS/G8.5/830 | 00356 | 3400 | 12000 | 3000 | 80+ | U | A | 12 |
| 35W | CM-PLUS TC 35W/U/UVS/G8.5/942 | 00357 | 3300 | 12000 | 4200 | 90+ | U | A | 12 |
| 70W | CM-PLUS TC 70W/U/UVS/G8.5/830 | 00358 | 7000 | 12000 | 3000 | 80+ | U | A | 12 |
| 70W | CM-PLUS TC 70W/U/UVS/G8.5/942 | 00359 | 6600 | 12000 | 4200 | 90+ | U | A | 12 |

Ceramic Lamp G12

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | RA | Burn Pos. | Fig | Ctn. Qty |
|-------|------------------------------|-------------|----------------|-----------------|---------|-----|-----------|-----|----------|
| 20W | CM-PLUS T 20W/U/UVS/G12/830 | 00360 | 1800 | 10000 | 3000 | 80+ | U | B | 12 |
| 20W | CM-PLUS T 20W/U/UVS/G12/942 | 00361 | 1650 | 10000 | 4200 | 90+ | U | B | 12 |
| 35W | CM-PLUS T 35W/U/UVS/G12/830 | 00362 | 3400 | 12000 | 3000 | 80+ | U | B | 12 |
| 35W | CM-PLUS T 35W/U/UVS/G12/942 | 00363 | 3300 | 12000 | 4200 | 90+ | U | B | 12 |
| 70W | CM-PLUS T 70W/U/UVS/G12/830 | 00364 | 7000 | 12000 | 3000 | 80+ | U | C | 12 |
| 70W | CM-PLUS T 70W/U/UVS/G12/942 | 00365 | 6600 | 12000 | 4200 | 90+ | U | C | 12 |
| 100W | CM-PLUS T 100W/U/UVS/G12/830 | 00366 | 9500 | 12000 | 3000 | 80+ | U | D | 12 |
| 100W | CM-PLUS T 100W/U/UVS/G12/942 | 00367 | 9000 | 12000 | 4200 | 90+ | U | D | 12 |
| 150W | CM-PLUS T 150W/U/UVS/G12/830 | 00368 | 15000 | 12000 | 3000 | 80+ | U | D | 12 |
| 150W | CM-PLUS T 150W/U/UVS/G12/942 | 00369 | 13500 | 12000 | 4200 | 90+ | U | D | 12 |

Ceramic Lamp MH-DE

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | RA | Burn Pos. | Fig | Ctn. Qty |
|-------|--------------------------------|-------------|----------------|-----------------|---------|-----|-----------|-----|----------|
| 70W | CM-PLUS TD 70W/U/UVS/RX7s/830 | 00370 | 7000 | 15000 | 3000 | 80+ | U | E | 12 |
| 70W | CM-PLUS TD 70W/U/UVS/RX7s/942 | 00371 | 6600 | 15000 | 4200 | 90+ | U | E | 12 |
| 150W | CM-PLUS TD 150W/U/UVS/RX7s/830 | 00372 | 14000 | 15000 | 3000 | 80+ | U | F | 12 |
| 150W | CM-PLUS TD 150W/U/UVS/RX7s/942 | 00373 | 12500 | 15000 | 4200 | 90+ | U | F | 12 |

Ceramic Lamp Tubular

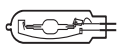
| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | RA | Burn Pos. | Fig | Ctn. Qty |
|-------|---------------------------|-------------|----------------|-----------------|---------|-----|-----------|-----|----------|
| 70W | CM-PLUS TT 70W/U/UVS/830 | 00374 | 7000 | 18000 | 3000 | 80+ | U | H | 12 |
| 70W | CM-PLUS TT 70W/U/UVS/942 | 00375 | 6600 | 18000 | 4200 | 90+ | U | H | 12 |
| 100W | CM-PLUS TT 100W/U/UVS/830 | 00376 | 9500 | 18000 | 3000 | 80+ | U | G | 12 |
| 100W | CM-PLUS TT 100W/U/UVS/942 | 00377 | 9000 | 18000 | 4200 | 90+ | U | G | 12 |
| 150W | CM-PLUS TT 150W/U/UVS/830 | 00378 | 14000 | 18000 | 3000 | 80+ | U | G | 12 |
| 150W | CM-PLUS TT 150W/U/UVS/942 | 00379 | 13500 | 18000 | 4200 | 90+ | U | G | 12 |

Ceramic Lamp Elliptical

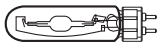
| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | RA | Burn Pos. | Fig | Ctn. Qty |
|-------|---------------------------|-------------|----------------|-----------------|---------|-----|-----------|-----|----------|
| 70W | CM-PLUS ED 70W/U/UVS/830 | 00380 | 7000 | 18000 | 3000 | 80+ | U | I | 12 |
| 70W | CM-PLUS ED 70W/U/UVS/942 | 00381 | 6600 | 18000 | 4200 | 90+ | U | I | 12 |
| 100W | CM-PLUS ED 100W/U/UVS/830 | 00382 | 9500 | 18000 | 3000 | 80+ | U | I | 12 |
| 100W | CM-PLUS ED 100W/U/UVS/942 | 00383 | 9000 | 18000 | 4200 | 90+ | U | I | 12 |
| 150W | CM-PLUS ED 150W/U/UVS/830 | 00384 | 14000 | 18000 | 3000 | 80+ | U | I | 12 |
| 150W | CM-PLUS ED 150W/U/UVS/942 | 00385 | 13500 | 18000 | 4200 | 90+ | U | I | 12 |

All performance data is based on operation on Ventronic electronic ballasts

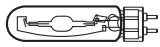
Some lamp descriptions include the 3 digit International Ra/CCT Code



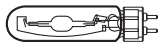
G8.5
Dia. = 14,5mm
MOL = 85mm
LCL = 52mm



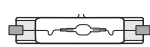
G12
Dia. = 14,5mm
MOL = 90mm
LCL = 56mm
Base = G12



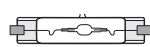
G12
Dia. = 19mm
MOL = 90mm
LCL = 56mm
Base = G12



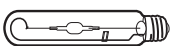
G12
Dia. = 19mm
MOL = 100mm
LCL = 56mm
Base = G12



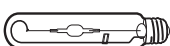
CMP70E
Dia. = 23mm
MOL = 120mm
LCL = 57mm
Base = RX7S



CMP150
Dia. = 23mm
MOL = 135mm
LCL = 66mm
Base = RX7S



T46G
Dia. = 46mm
MOL = 211mm
LCL = 132mm
Base = E40



T38H
Dia. = 38mm
MOL = 156mm
LCL = 102mm
Base = E27



E54
Dia. = 54mm
MOL = 141mm
LCL = 89mm
Base = E27

CWA Metal Halide

Direct replacement for 'Multi-vapor' and 'Super Metal Arc' lamps. Operate on CWA control gear.

Features:

- Full range of wattages
- Clear and coated bulb finishes
- Reduced jacket options
- Choice of colour temperatures
- 400 watt lamps are open rated when operated base up $\pm 15^\circ$
- Asymmetric arc tube design allows horizontal $\pm 45^\circ$ operation

Applications:

- Universal – Floodlighting
Sports lighting
General lighting
- Vertical – Architectural area lighting
Commercial downlighting
Industrial highbay
- Horizontal – Advertising hoardings
Petrol station canopies
Indoor sports

Enclosed Rated

CWA Control Gear

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|--------------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|-------------------|------|----------|
| 175 | HIE 175W/U/E54/EURO/4K | 84971 | 14000V | 10000V | 4000 | 3-5 | 5-10 | 68 | Clear | U | H | 12 |
| 175 | HIE 175W/C/U/E54/EURO/4K | 24729 | 13300V | 10000V | 3700 | 3-5 | 5-10 | 70 | Coated | U | H | 12 |
| 175 | HIE 175W/U/EURO/4K | 36279 | 14000V | 10000V | 4000 | 3-5 | 5-10 | 68 | Clear | U | A | 12 |
| 175 | HIE 175W/C/U/EURO/4K | 40698 | 13300V | 10000V | 3700 | 3-5 | 5-10 | 70 | Coated | U | A | 12 |
| 250 | HIE 250W/BU/EURO/4K | 81203 | 23000 | 10000 | 4000 | 2-4 | 5-10 | 68 | Clear | BU $\pm 15^\circ$ | A | 12 |
| 250 | HIE 250W/C/BU/EURO/4K | 81202 | 22000 | 10000 | 3700 | 2-4 | 5-10 | 70 | Coated | BU $\pm 15^\circ$ | A | 12 |
| 250 | HIE 250W/U/EURO/4K | 88246 | 21000V | 10000V | 4000 | 3-5 | 5-10 | 68 | Clear | U | A | 12 |
| 250 | HIE 250W/C/U/EURO/4K | 21303 | 20000V | 10000V | 3700 | 3-5 | 5-10 | 70 | Coated | U | A | 12 |

Enclosed Rated

CWA Control Gear

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|---------------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|--------------------|------|----------|
| 400 | HIE 400W/BU/EURO/4K | 33544 | 40000 | 15000 | 4000 | 3-5 | 10-15 | 68 | Clear | BU $\pm 15^\circ$ | B | 6 |
| 400 | HIE 400W/C/BU/EURO/4K | 31545 | 38000 | 15000 | 3700 | 3-5 | 10-15 | 70 | Coated | BU $\pm 15^\circ$ | B | 6 |
| 400 | HIE 400W/C/HOR/EURO/4K | 63958 | 38000 | 15000 | 3700 | 3-5 | 10-15 | 70 | Coated | HOR $\pm 45^\circ$ | C | 6 |
| 400 | HIE 400W/U/EURO/4K | 20137 | 36000V | 15000V | 4000 | 3-5 | 8-12 | 68 | Clear | U | B | 6 |
| 400 | HIE 400W/C/U/E90/EURO/4K* | 58122 | 34000V | 15000V | 3700 | 3-5 | 8-12 | 70 | Coated | U | A | 12 |
| 400 | HIE 400W/C/U/EURO/4K | 88787 | 34000V | 15000V | 3700 | 3-5 | 8-12 | 70 | Coated | U | B | 6 |

* Reduced jacket

Open Rated

CWA Control Gear

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|------------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|-------------------|------|----------|
| 400 | HIPE 400W/BU/EURO/4K | 99441 | 38000 | 15000 | 4000 | 3-5 | 10-15 | 68 | Clear | BU $\pm 15^\circ$ | E | 6 |
| 400 | HIPE 400W/C/BU/EURO/4K | 94102 | 36000 | 15000 | 3700 | 3-5 | 10-15 | 70 | Coated | BU $\pm 15^\circ$ | E | 6 |

Enclosed Rated

Tubular

CWA Control Gear

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|----------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|--------------------|------|----------|
| 250 | HIT 250W/HOR/EURO/4K | 57712 | 23000 | 10000 | 4000 | 3-5 | 5-10 | 68 | Clear | HOR $\pm 45^\circ$ | I | 12 |
| 400 | HIT 400W/HOR/EURO/4K | 88410 | 40000 | 15000 | 4000 | 3-5 | 10-15 | 68 | Clear | HOR $\pm 45^\circ$ | D | 12 |

Enclosed Rated

CWA Control Gear

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|-----------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 1000 | HIE 1000W/U/4K | 46109 | 110000V | 12000V | 4000 | 3-5 | 10-15 | 68 | Clear | U | F | 6 |
| 1000 | HIE 1000W/C/U/4K | 12175 | 105000V | 12000V | 3700 | 3-5 | 10-15 | 70 | Coated | U | F | 6 |
| 1000 | HIE 1000W/U/BT120/4K* | 46423 | 105000V | 12000V | 4000 | 3-5 | 10-15 | 68 | Clear | U | G | 6 |

* Reduced jacket

Some lamp descriptions include the 3 digit International Ra/CCT Code

A

E90

Dia. = 90mm
MOL = 215mm
LCL = 131mm
Base = E40

B

E120

Dia. = 120mm
MOL = 296mm
LCL = 182mm
Base = E40

C

E120

Dia. = 120mm
MOL = 296mm
LCL = 182mm
Base = E40PO

D

T46

Dia. = 46mm
MOL = 285mm
LCL = 175mm
Base = E40PO

E

BT120

Dia. = 120mm
MOL = 296mm
LCL = 182mm
Base = E40

F

BT180

Dia. = 180mm
MOL = 395mm
LCL = 245mm
Base = E40

G

BT120

Dia. = 120mm
MOL = 296mm
LCL = 182mm
Base = E40

H

E54

Dia. = 54mm
MOL = 141mm
LCL = 89mm
Base = E27

High Wattage Lamps

Features include

- Compact linear lamp for excellent optical control
- Cooler base design for improved field performance
- High lumen output

Applications:

- Sports lighting
- Stadia
- Large area floodlighting

Open Rated

Pulse Start

Reactor Control Gear

| Watts | Lamp Description | Lamp Current | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|----------------------|--------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 875 | HIPE 875W/BU/PS/740 | 3.7 | 87588 | 95000 | 20000+ | 4000 | 3-5 | 8-12 | 68 | Clear | BU±15° | I | 6 |
| 875 | HIPE 875W/C/BU/PS/4K | 3.7 | TBA | 90000 | 20000+ | 3700 | 3-5 | 8-12 | 70 | Coated | BU±15° | I | 6 |

Enclosed Rated

Pulse Start

Reactor Control Gear

| Watts | Lamp Description | Lamp Current | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|-------------------|--------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 875 | HIE 875W/BU/PS/4K | 3.7 | 85410 | 100000 | 20000+ | 4000 | 3-5 | 8-12 | 68 | Clear | BU±15° | I | 6 |

Enclosed Rated

Tubular White-Lux

HPS Control Gear

| Lamp Watts | Product Description | Lamp Current | Initial No. | Avg. Life Lumens | CCT Hours | Warm-Up (K) | Restrike (Min) | (Min) | RA | Oper. Finish | Pos. | Case Fig. Qty |
|------------|---------------------|--------------|-------------|------------------|-----------|-------------|----------------|-------|----|--------------|------|---------------|
| 1000 | HIT 1000W/U/LU/4K | 10.3 | 83265 | 90000V | 8000V | 4000 | 3-5 | 10-15 | 68 | Clear | U | G 6 |
| 1000 | HIT1000W/U/LU/5K | 10.3 | 00083 | 8000V | 8000V | 5000 | 3-5 | 10-15 | 68 | Clear | U | G 6 |

Enclosed Rated

Double Ended (RSC-RX7s)

Reactor Control Gear

| Watts | Lamp Description | Lamp Current | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|------------------|--------------|-------------|----------------|-----------------|---------|---------------|----------------|----|---------|------------|------|----------|
| 1000 | MBIL S 1000W | 4.4 | 22417 | 80000H | 6000H | 5200 | 1-2 | 5-10 | 68 | Frosted | HOR±15° | A | 6 |
| 1500 | MBIL S 1500W | 6.7 | 22151 | 130000H | 6000H | 5200 | 2-4 | 5-10 | 68 | Frosted | HOR±15° | B | 6 |

Enclosed Rated

Reactor Control Gear

| Watts | Lamp Description | Lamp Current | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|-----------------------------|--------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 1000 | HIE 1000W/U/4K | 4.1 | 46109 | 110000V | 12000V | 4000 | 3-5 | 10-15 | 68 | Clear | U | E | 6 |
| 1000 | HIE 1000W/C/U/4K | 4.1 | 12175 | 105000V | 12000V | 3700 | 3-5 | 10-15 | 70 | Coated | U | E | 6 |
| 1000 | HIE 1000W/U/BT120/4K Note ② | 4.1 | 46423 | 105000V | 12000V | 4000 | 3-5 | 10-15 | 68 | Clear | U | F | 6 |

Enclosed Rated

Tubular

Reactor Control Gear

| Watts | Lamp Description | Lamp Current | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|------------------------------|--------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 1000 | HIT1000W/U/EURO/4K Note ① | 8.2 | 00008 | 90000V | 8000V | 4000 | 3-5 | 10-15 | 68 | Clear | U | G | 6 |
| 1000 | HIT1000W/U/EURO/5K Note ① | 8.2 | 00282 | 80000V | 8000V | 5000 | 3-5 | 10-15 | 68 | Clear | U | G | 6 |
| 2000 | HIT 2000W/U/4K Note ①&④ | 8.8 | 00066 | 230000V | 5000V | 4000 | 3-5 | 10-15 | 68 | Clear | U | H | 6 |
| 2000 | HIT 2000W/U/230V/45K Note ① | 16.5 | 00067 | 185000V | 5000V | 4500 | 3-5 | 10-15 | 68 | Clear | U | H | 6 |
| 2000 | HIT 2000/U/EURO/45K Note ①&③ | 16.5 | 00387 | 185000V | 5000V | 4500 | 3-5 | 10-15 | 68 | Clear | U | H | 6 |

Enclosed Rated

Double Ended (Special Base)

Reactor Control Gear

| Watts | Lamp Description | Lamp Current | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|------------------|--------------|-------------|----------------|-----------------|---------|---------------|----------------|----|---------|------------|------|----------|
| 2000 | MBIL S 2000W | 10.3 | 22132 | 215000H | 6000H | 5200 | 10 | 15 | 68 | Frosted | HOR±15° | C | 2 |

Enclosed Rated


Double Ended (K12S-36)

Reactor Control Gear


| Watts | Lamp Description | Lamp Current | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|----------------------|--------------|-------------|----------------|-----------------|---------|---------------|----------------|----|---------|------------|------|----------|
| 2000 | MH-TS 2000W/L/K12/4K | 10.3 | 84203 | 240000H | 5000H | 4500 | 3-5 | 10-15 | 68 | Frosted | HOR±45° | D | 2 |

Some lamp descriptions include the 3 digit International Ra/CCT Code


A
MBIL S
Contacts = 256mm
Effective arc length = 168mm
Base = RSC (RX7s)




B
MBIL S
Contacts = 256mm
Effective arc length = 168mm
Base = RSC (RX7s)




C
MBIL S
Contacts = 311mm
Effective arc length = 188mm
Base = SINGLE CONTACT-SPECIAL




D
MH-TS D
MOL = 270mm
Nominal Arc Length = 142mm
Base = K12S-36




E
BT180
Dia. = 180mm
MOL = 395mm
LCL = 245mm
Base = E40




F
BT120
Dia. = 120mm
MOL = 296mm
LCL = 182mm
Base = E40




G
T76
Dia. = 76mm
MOL = 340mm
LCL = 220mm
Base = E40



H
T100
Dia. = 100mm
MOL = 420mm
LCL = 220mm
Base = E40



I
E120
Dia. = 120mm
MOL = 296mm
LCL = 182mm
Base = E40



Notes
 Note ① Ignitor can be supplied with lamp
 Note ② Reduced jacket
 Note ③ Low voltage ignitor only
 Note ④ High voltage ignitor only

Double Ended & G12

Features:

- Compact configuration
- Precise optical control
- Long life
- Excellent colour uniformity
- Uni-Form® formed body arc tube
- The lamps on this page feature UV Shield® ultraviolet protection (70, 100 and 150 Watt)

Applications:

- Accent lighting
- Downlighting
- Retail environments
- Showrooms

Enclosed Rated Single Ended (G12/BiPin)

UV Shield

UNI-FORM[®]
ARC TUBE TECHNOLOGY

HPS Reactor Gear

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|---------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 70 | HIT 70W/G12/UVS/4K | 52983 | 5600V | 10000V | 4200 | 1-2 | 2-4 | 70 | Clear | U | A | 25 |
| 70 | HIT 70W/G12/UVS/3K | 12108 | 5600V | 10000V | 3000 | 1-2 | 2-4 | 70 | Clear | U | A | 25 |
| 150 | HIT 150W/G12/UVS/4K | 25779 | 14000V | 10000V | 4200 | 1-2 | 2-4 | 70 | Clear | U | A | 25 |
| 150 | HIT 150W/G12/UVS/3K | 12106 | 14000V | 10000V | 3000 | 1-2 | 2-4 | 70 | Clear | U | A | 25 |

Enclosed Rated Double Ended (RSC-RX7s)

UV Shield

UNI-FORM[®]
ARC TUBE TECHNOLOGY

HPS Reactor Gear

| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|----------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 70 | MH-DE 70W/UVS/4K | 60248 | 5500 | 10000 | 4200 | 1-2 | 2-4 | 70 | Clear | HOR±45° | B | 25 |
| 70 | MH-DE 70W/UVS/3K | 16786 | 5200 | 10000 | 3000 | 1-2 | 2-4 | 70 | Clear | HOR±45° | B | 25 |
| 70 | MH-DE 70W/UVS/FS/6K | 79470 | 4800 | 10000 | 6500 | 1-2 | 2-4 | 90 | Clear | HOR±45° | B | 25 |
| 150 | MH-DE 150W/UVS/4K | 74756 | 11250 | 10000 | 4200 | 1-2 | 2-4 | 70 | Clear | HOR±45° | C | 25 |
| 150 | MH-DE 150W/UVS/3K | 11295 | 11250 | 10000 | 3000 | 1-2 | 2-4 | 70 | Clear | HOR±45° | C | 25 |
| 150 | MH-DE 150W/UVS/FS/6K | 29963 | 11250 | 10000 | 6500 | 1-2 | 2-4 | 90 | Clear | HOR±45° | C | 25 |

Enclosed Rated Double Ended (Fc2)

HPS Reactor Gear

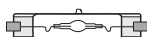
| Watts | Lamp Description | Product No. | Initial Lumens | Avg. Life Hours | CCT (K) | Warm-Up (Min) | Restrike (Min) | RA | Finish | Oper. Pos. | Fig. | Case Qty |
|-------|-------------------|-------------|----------------|-----------------|---------|---------------|----------------|----|--------|------------|------|----------|
| 250 | MH-DE 250W/3K/Fc2 | 84727 | 20000 | 10000 | 3000 | 2-4 | 5-10 | 70 | Clear | HOR±45° | D | 25 |
| 250 | MH-DE 250W/4K/Fc2 | 72748 | 20000 | 10000 | 4200 | 2-4 | 5-10 | 70 | Clear | HOR±45° | D | 25 |

Some lamp descriptions include the 3 digit International Ra/CCT Code



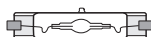
A
G12

Dia. = 23mm
MOL = 110mm
LCL = 56mm
Base = G12



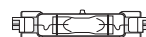
B
MH-DE

MOL = 114.2mm
Base = RSC (R7s)



C
MH-DE

MOL = 132mm
Base = RSC (RX7s)



D
MH-DE

MOL = 163mm
Base = Fc2

Designer Colour

Features:

- Primary colour generation - no filtration required
- Highly efficient - fewer fixtures required
- Operate on standard ballasts
- Compact size - good optical control

Applications:

Theme parks
Architectural lighting
Building facades

Enclosed Rated Double Ended (RSC-RX7s)

UVShield™

UNI-FORM®
ARC TUBE TECHNOLOGY

| Watts | Description | Lamp No. | Colour | Op. Pos. | Fig. | Case Qty |
|-------|--------------------|----------|---------|----------|------|----------|
| 70 | MH-DE 70W/UVS/BDX | 00177 | Blue | HOR±45° | A | 25 |
| 70 | MH-DE 70W/UVS/GDX | 00178 | Green | HOR±45° | A | 25 |
| 70 | MH-DE 70W/UVS/PDX | 00179 | Pink | HOR±45° | A | 25 |
| 70 | MH-DE 70W/UVS/MDX | 00180 | Magenta | HOR±45° | A | 25 |
| 150 | MH-DE 150W/UVS/BDX | 33496 | Blue | HOR±45° | B | 25 |
| 150 | MH-DE 150W/UVS/GDX | 33851 | Green | HOR±45° | B | 25 |
| 150 | MH-DE 150W/UVS/PDX | 00181 | Pink | HOR±45° | B | 25 |
| 150 | MH-DE 150W/UVS/MDX | 00182 | Magenta | HOR±45° | B | 25 |

Enclosed Rated Single Ended (G12/BiPin)

UVShield™

UNI-FORM®
ARC TUBE TECHNOLOGY

| Watts | Description | Lamp No. | Colour | Op. Pos. | Fig. | Case Qty |
|-------|----------------------|----------|---------|----------|------|----------|
| 70 | HIT 70W/G12/UVS/BDX | 00183 | Blue | U | C | 25 |
| 70 | HIT 70W/G12/UVS/GDX | 00184 | Green | U | C | 25 |
| 70 | HIT 70W/G12/UVS/PDX | 00185 | Pink | U | C | 25 |
| 70 | HIT 70W/G12/UVS/MDX | 00186 | Magenta | U | C | 25 |
| 150 | HIT 150W/G12/UVS/BDX | 84684 | Blue | U | C | 25 |
| 150 | HIT 150W/G12/UVS/GDX | 26786 | Green | U | C | 25 |
| 150 | HIT 150W/G12/UVS/PDX | 00187 | Pink | U | C | 25 |
| 150 | HIT 150W/G12/UVS/MDX | 00188 | Magenta | U | C | 25 |

Enclosed Rated Single Ended (E27)

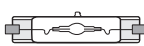
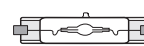
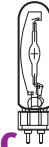



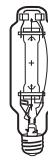
UNI-FORM®
ARC TUBE TECHNOLOGY

| Watts | Description | Lamp No. | Colour | Op. Pos. | Fig. | Case Qty |
|-------|-------------------|----------|---------|----------|------|----------|
| 150 | HIE 150W/U/LU/BDX | 33051 | Blue | U | D | 12 |
| 150 | HIE 150W/U/LU/GDX | 33520 | Green | U | D | 12 |
| 150 | HIE 150W/U/LU/PDX | 00189 | Pink | U | D | 12 |
| 150 | HIE 150W/U/LU/MDX | 00190 | Magenta | U | D | 12 |

Enclosed Rated Single Ended Tubular (E40)

| Watts | Description | Lamp No. | Colour | Op. Pos. | Fig. | Case Qty |
|-------|---------------------|----------|---------|----------|------|----------|
| 250 | HIT 250W/U/LU/BDX | 00163 | Blue | U | E | 12 |
| 250 | HIT 250W/U/LU/GDX | 00164 | Green | U | E | 12 |
| 250 | HIT 250W/U/LU/PDX | 00191 | Pink | U | E | 12 |
| 250 | HIT 250W/U/LU/MDX | 00192 | Magenta | U | E | 12 |
| 400 | HIT 400W/U/EURO/BDX | 88342 | Blue | U | F | 12 |
| 400 | HIT 400W/U/EURO/GDX | 64390 | Green | U | F | 12 |
| 400 | HIT 400W/U/EURO/PDX | 97354 | Pink | U | F | 12 |
| 400 | HIT 400W/U/EURO/MDX | 00242 | Magenta | U | F | 12 |
| 400 | HIT 400W/U/LU/BDX | 00239 | Blue | U | F | 12 |
| 400 | HIT 400W/U/LU/GDX | 00240 | Green | U | F | 12 |
| 400 | HIT 400W/U/LU/PDX | 00241 | Pink | U | F | 12 |
| 400 | HIT 400W/U/LU/MDX | 00194 | Magenta | U | F | 12 |
| 1000 | HIT 1000W/U/LU/BDX | 00195 | Blue | U | G | 6 |
| 1000 | HIT 1000W/U/LU/GDX | 00196 | Green | U | G | 6 |

Some lamp descriptions include the 3 digit International Ra/CCT Code

| | | | | | | |
|--|---|---|---|---|--|---|
|  |  |  |  |  |  |  |
| A | B | C | D | E | F | G |
| MH-E | MH-DE | G12 | E54 | T46 | T46 | T76 |
| Contact to Contact= 114.2mm Base = RSC (RX7s) | Contact to Contact= 132mm Base = RSC (RX7s) | Dia. = 23mm MOL = 110mm LCL = 56mm Base = G12 | Dia. = 54mm MOL = 141mm LCL = 89mm Base = E27 | Dia. = 46mm MOL = 225mm LCL = 146mm Base = E40 | Dia. = 46mm MOL = 285mm LCL = 175mm Base = E40 | Dia. = 76mm MOL = 340mm LCL = 220mm Base = E40 |

Aquatic & Special Purpose Lamps

Enclosed Rated

Double Ended

UNI-FORM[®]
ARC TUBE TECHNOLOGY

| Lamp Watts | Product Description | Product No. | Col. Temp. | Op. Pos. | Fig. | Case Qty |
|------------|---------------------|-------------|------------|----------|------|----------|
| 70 | MH-DE 70W/6.5K | 00255 | 6500 | HOR±45° | A | 25 |
| 70 | MH-DE 70W/10K | 00143 | 10000 | HOR±45° | A | 25 |
| 70 | MH-DE 70W/15K | 00256 | 15000 | HOR±45° | A | 25 |
| 70 | MH-DE 70W/20K | 00257 | 20000 | HOR±45° | A | 25 |
| 150 | MH-DE 150W/6.5K | 00258 | 6500 | HOR±45° | B | 25 |
| 150 | MH-DE 150W/10K | 00144 | 10000 | HOR±45° | B | 25 |
| 150 | MH-DE 150W/15K | 00259 | 15000 | HOR±45° | B | 25 |
| 150 | MH-DE 150W/20K | 00260 | 20000 | HOR±45° | B | 25 |

Enclosed Rated

Double Ended

UNI-FORM[®]
ARC TUBE TECHNOLOGY

| Lamp Watts | Product Description | Product No. | Col. Temp. | Op. Pos. | Fig. | Case Qty |
|------------|---------------------|-------------|------------|----------|------|----------|
| 250 | MH-DE 250W/6.5K | 00261 | 6500 | HOR±45° | C | 25 |
| 250 | MH-DE 250W/10K | 00145 | 10000 | HOR±45° | C | 25 |
| 250 | MH-DE 250W/15K | 00262 | 15000 | HOR±45° | C | 25 |
| 250 | MH-DE 250W/20K | 00263 | 20000 | HOR±45° | C | 25 |

Enclosed Rated

Tubular E27

UNI-FORM[®]
ARC TUBE TECHNOLOGY

| Lamp Watts | Product Description | Product No. | Col. Temp. | Op. Pos. | Fig. | Case Qty |
|------------|---------------------|-------------|------------|----------|------|----------|
| 150 | HIT 150W/6.5K | 00264 | 6500 | U | D | 12 |
| 150 | HIT 150W/10K | 00265 | 10000 | U | D | 12 |
| 150 | HIT 150W/15K | 00266 | 15000 | U | D | 12 |
| 150 | HIT 150W/20K | 00267 | 20000 | U | D | 12 |

Enclosed Rated

Tubular E40

| Lamp Watts | Product Description | Product No. | Col. Temp. | Op. Pos. | Fig. | Case Qty |
|------------|---------------------|-------------|------------|----------|------|----------|
| 250 | HIT 250W/6.5K | 00268 | 6500 | U | E | 12 |
| 250 | HIT 250W/10K | 00146 | 10000 | U | E | 12 |
| 250 | HIT 250W/15K | 00269 | 15000 | U | E | 12 |
| 250 | HIT 250W/20K | 00270 | 20000 | U | E | 12 |
| 400 | HIT 400W/6.5K | 00271 | 6500 | U | F | 12 |
| 400 | HIT 400W/10K | 00147 | 10000 | U | F | 12 |
| 400 | HIT 400W/15K | 00272 | 15000 | U | F | 12 |
| 400 | HIT 400W/20K | 00273 | 20000 | U | F | 12 |
| 1000 | HIT 1000W/10K | 00274 | 10000 | U | G | 6 |

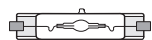
Open Rated

UNI-FORM[®]
ARC TUBE TECHNOLOGY

| Lamp Watts | Product Description | Product No. | Col. Temp. | Op. Pos. | Fig. | Case Qty |
|------------|---------------------|-------------|------------|----------|------|----------|
| 250 | HIPT 250W/10K | 00275 | 10000 | U | H | 12 |
| 400 | HIPT 400W/10K | 00276 | 10000 | U | I | 12 |

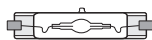
Please contact the sales office for details of suitable control gear.

Some lamp descriptions include the 3 digit International Ra/CCT Code



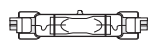
A
MH-DE

MOL = 114.2mm
Base = RSC (R7s)



B
MH-DE

MOL = 132mm
Base = RSC (RX7s)

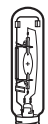


C
MH-DE

MOL = 163mm
Base = Fc2

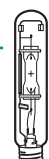
D
T38

Dia. = 38mm
MOL = 156mm
LCL = 102mm
Base = E27



E
T46

Dia. = 46mm
MOL = 225mm
LCL = 146mm
Base = E40



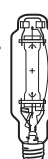
F
T46

Dia. = 46mm
MOL = 285mm
LCL = 175mm
Base = E40



G
T76

Dia. = 76mm
MOL = 340mm
LCL = 220mm
Base = E40



H
T52

Dia. = 52mm
MOL = 211mm
LCL = 132mm
Base = E40



I
T52

Dia. = 52mm
MOL = 225mm
LCL = 146mm
Base = E40



Description Codes & Ordering Information

Metal Halide Lamp Description Code:

Your lamp has an imprinted code that identifies the important features you need to select a replacement. A complete explanation appears below.

Lamp Description Example: HIPE 150W/C/U/LU/E90/UVS/4K

Lamp Type: 150 watt White-Lux® Plus pulse start lamp, open luminaire rated, universal burning, coated, reduced outer jacket with UV Shield® protection

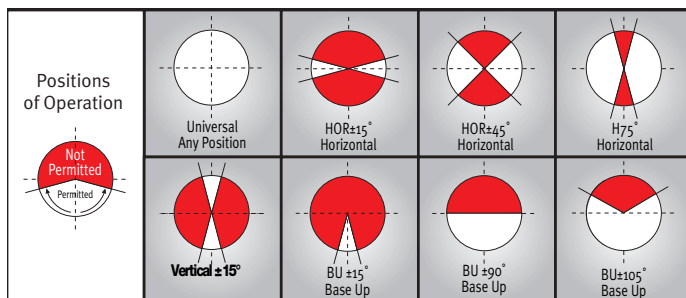
| HIPE | 150W | C | U | LU | E90 | UVS | 4K |
|-------------------|--------------|---------------------|--------------------|----------------------|--|-----------------|---------------------------|
| Metal halide type | Lamp wattage | Outer jacket finish | Operating position | White-Lux® Plus lamp | Bulb shape and diameter, if non-standard | UV Shield® lamp | Colour temperature family |



LAMP DESCRIPTION CODES

- HIE** E27 or E40 European-based elliptical bulb, enclosed luminaire required
- HIPE** E27 or E40 European-based elliptical bulb, protected arc tube for open luminaire operation
- HIPT** E27 or E40 European-based tubular bulb, protected arc tube for open luminaire operation
- HIT** E40 European-based tubular bulb, arc tube for enclosed luminaire operation
- MBIL** High wattage, double ended lamp
- MH** E26 or E39 North American-based metal halide elliptical bulb, enclosed luminaire required
- MH-DE** Double-ended metal halide lamp
- MH-TS** Double-ended metal halide lamp with a fly-wire contact
- C** Lamps with a coated (diffuse) outer jacket
- BU** Lamps designed for base up ($\pm 15^\circ$) operating position
- V** Lamps designed for a vertical ($\pm 15^\circ$) operating position
- H75** Lamps designed for horizontal operation $\pm 75^\circ$,
- HBU** Lamps designed for horizontal to base up operating position (or base up $\pm 90^\circ$)
- HO** High Output
- HOR** Horizontal operating position
- EL** Lamp optimised for Ventronic ballasts

- U** Universal operating position
- LU** White-Lux® metal halide lamp designed for use with HPS control gear
- EURO** Lamps designed to run on mercury reactor ballast with low pulse ignitors, usually in Europe. Euro lamps can also operate on CWA gear. See page 18-19 for more information.
- WLC** White-Lux® City metal halide lamp featuring UV Shield® tubular lamps designed for horizontal operation and for use with HPS gear.
- E##** Bulb shape (elliptical) and diameter in millimeters
- K##** Spade connectors and the width of the fly-lead wire in millimeters
- T##** Bulb shape (tubular) and diameter in millimeters
- UVS** UV Shield® lamps with reduced ultraviolet output
- PS** Uni-Form® pulse start lamp featuring Venture's exclusive formed body arc tube designed to follow the curve of the arc stream
- 27K** 2700K - 2800K correlated colour temperature (nominal)
- 3K** 3000K - 3200K correlated colour temperature (nominal)
- 4K** 3700K - 4000K correlated colour temperature (nominal)
- 5K** 5000K correlated colour temperature (nominal)
- 6K** 6500K correlated colour temperature (nominal)



- CM-PLUS** Ceramic Metal Halide
- TC** Ceramic lamps with G8.5 base
- T** Ceramic lamps with G12 base
- TD** Double ended ceramic lamps
- TT** Tubular ceramic lamps
- ED** Elliptical Ceramic lamps

Ventronic Dimmable HID Control Gear

Ballasts

Ventronic



28



Ventronic Dimmable HID Control Gear

Introducing Ventronic from Venture Lighting, one of the world's leading names in advanced lighting design and technology.

With the Ventronic solution, you can determine the light levels you require at any given time, either manually, automatically through the use of light meters or by programmable options.

Saves money by making use of ambient light

With conventional control gear the light is either ON or OFF. You burn full power - even when you don't need it. However, using Ventronic, the lights can be dimmed when it's bright outside, and only revert to a higher power when necessary. Ventronic can also be linked to a PIR sensor to produce more light when a particular area is occupied.

'Daylight Harvesting', as this technique is referred to, is an excellent way of saving energy costs and extending the life of the lamp without compromising on light levels. As it takes into consideration and therefore makes use of natural ambient light, it can also make a very positive contribution to a company's environmental policies.



Ventronic Dimmable HID Control Gear

Only Ventronic Offers You all These Benefits

- Significantly increased lumen maintenance
- Vastly improved lamp life
- Superior light quality
- Exceptional energy savings
- Dimming
- Daylight harvesting
- Economy mode
- High efficiency
- Soft start ignition technology
- No start - up current
- Controllability
- Simple installation with reduced costs
- Reduced maintenance
- Built-in diagnostics
- High reliability
- High Power Factor
- Thermal Protection with auto reset
- ENEC and VDE approved
- No ignitor required
- No capacitor required
- Ballast operates upto approximately 30 meters from lamp - 3000pF max.

Ventronic Models Currently Available

Ventronic is available in the following wattages suitable to operate both HPS and Venture Metal Halide Pulse Start Lamps, 150W, 200W, 250W, 320W, 350W, 400W, 450W and 600W.



Ordering Information

As standard, Ventronic is supplied with internal dimming control switches. A communication or control option can be ordered separately.

- SEEP module
- RS485 interface
- Wireless communication

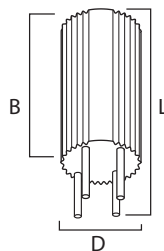


Ventronic POD



- Thermally designed convective case.
- Complies with relevant sections of EN 61347-1.
- Fully EMC compliant.
- Can be customised to suit OEM requirements.

fig 39



Ventronic High Frequency Electronic Dimmable Control Gear For HPS and Venture MH Pulse Start lamps

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Max Case Temp (tc) | Dimensions (Dia x L B/Fix) (mm) | Weight (kg) | Fig | Circuit Diagram | Lamp Types |
|----------|---------|--------------|-------------------|-------------------|---------------------|--------------------|---------------------------------|-------------|-----|-----------------|-----------------------------------|
| 200 | 1.6 | VTP200255 | 185-254 | 216 | 0.9 | 90 | 132x332 212 / 55 x 90 x M5 | 1.9 | 39 | W1 | Venture Pulse Start and HPS Lamps |
| 250 | 2.1/3.0 | VTP250255 | 185-254 | 270 | 1.13 | 90 | 132x332 212 / 55 x 90 x M5 | 1.9 | 39 | W1 | Venture Pulse Start and HPS Lamps |
| 320 | 2.63 | VTP320255 | 185-254 | 346 | 1.3 | 90 | 132x332 212 / 55 x 90 x M5 | 2.4 | 39 | W1 | Venture Pulse Start and HPS Lamps |
| 350 | 2.8 | VTP350255 | 185-254 | 378 | 1.6 | 90 | 132x332 212 / 55 x 90 x M5 | 2.4 | 39 | W1 | Venture Pulse Start and HPS Lamps |
| 400 | 3.2/4.5 | VTP400255 | 185-254 | 432 | 1.8 | 90 | 132x332 212 / 55 x 90 x M5 | 2.4 | 39 | W1 | Venture Pulse Start and HPS Lamps |
| 450 | 3.7 | VTP450255 | 185-254 | 482 | 2.0 | 90 | 132x332 212 / 55 x 90 x M5 | 2.4 | 39 | W1 | Venture Pulse Start and HPS Lamps |
| 600 | 6.2 | VTP600255 | 185-254 | 650 | 2.7 | 90 | 132x332 212 / 55 x 90 x M5 | 2.6 | 39 | W1 | Venture Pulse Start and HPS Lamps |

Ventronic Low Wattage



Only Ventronic Offers You all These Benefits

- Perfect partner for track spotlights
- Metal base and enclosure
- Ignition voltage <2,5kV
- ENEC approval
- 2.5mm² terminal block
- Available in 120V (on request - different dimensions)
- Fast start
- Compact and lightweight
- Microprocessor controlled
- Remote operation up to 25m
- Easy fixing
- Accepts 0.75mm² to 2.5mm² solid and stranded cable
- Operate stand-alone or
- Compatible with WiMAC⁸⁶⁸
- 3 Output Light Levels (50%, 75%, 100%) + Off
- Conformally coated for moisture resistance
- Can be dimmable to 50% power at midnight (or other factory preset time) and if still on after 6 hours, switches back to full power
- Operates from a photocell
- Energy saving
- Operates Ceramic Metal Halide, Quartz Metal Halide, HPS

Ventronic HID Control Gear

Ventronic Electronic Control Gear

Terminal Block Versions

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Max Case Temp (tc) | Dimensions (LxWxH/Fix) (mm) | Weight (kg) | Fig | Circuit Diagram | Lamp Types |
|----------|-------|--------------|-------------------|-------------------|---------------------|--------------------|-----------------------------------|-------------|-----|-----------------|---|
| 20 | 0.225 | V20MSB255 | 185-254 | 24 | 0.1 | 80 | 116 x 76 x 32/100 x 64 | 0.23 | 31 | V2 | UNIFORM CMH, BritSpot |
| 25 | TBA | V25MSB255 | 185-254 | 29 | 0.12 | 80 | 116 x 76 x 32/100 x 64 | 0.23 | 31 | V2 | UNIFORM |
| 35 | 0.5 | V35MSB255 | 185-254 | 45 | 0.19 | 80 | 116 x 76 x 32/100 x 64 | 0.23 | 31 | V2 | UNIFORM CMH, CDM, HCI, ColorArc, BritSpot |
| 50 | 0.76 | V50MSB255 | 185-254 | 56 | 0.23 | 80 | 116 x 76 x 32/100 x 64 | 0.23 | 31 | V2 | UNIFORM CMH, CDM, HCI, ColorArc |
| 70 | 1.0 | V70MSB255 | 185-254 | 79 | 0.33 | 80 | 116 x 76 x 32/100 x 64 | 0.23 | 31 | V2 | UNIFORM CMH, CDM, HCI, ColorArc |
| 100 | 1.1 | V100SSB255 | 185-254 | 110 | 0.46 | 80 | 144 x 91 x 37/130 - 135 x 73 - 78 | 0.425 | 31 | V2 | UNIFORM CMH, CDM, HCI, SON, ColorArc |
| 150 | 1.8 | V150SSB255 | 185-254 | 161 | 0.67 | 80 | 144 x 91 x 37/130 - 135 x 73 - 78 | 0.425 | 31 | V2 | UNIFORM CMH, CDM, HCI, SON, ColorArc |

Ventronic Electronic Control Gear

Cable Clamp Versions

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Max Case Temp (tc) | Dimensions (LxWxH/Fix) (mm) | Weight (kg) | Fig | Circuit Diagram | Lamp Types |
|----------|-------|--------------|-------------------|-------------------|---------------------|--------------------|-----------------------------|-------------|-----|-----------------|--------------------------------------|
| 20 | 0.225 | V20MSC255 | 185-254 | 24 | 0.1 | 80 | 116 x 76 x 32/100 x 64 | 0.23 | 33 | V2 | CMH |
| 25 | TBA | V25MSC255 | 185-254 | 29 | 0.12 | 80 | 116 x 76 x 32/100 x 64 | 0.23 | 33 | V2 | UNIFORM |
| 35 | 0.54 | V35MSC255 | 185-254 | 45 | 0.19 | 80 | 116 x 76 x 32/100 x 64 | 0.23 | 33 | V2 | UNIFORM CMH, CDM, HCI, ColorArc |
| 50 | 0.76 | V50MSC255 | 185-254 | 56 | 0.23 | 80 | 116 x 76 x 32/100 x 64 | 0.23 | 33 | V2 | UNIFORM CMH, CDM, HCI, ColorArc |
| 70 | 1.0 | V70MSC255 | 185-254 | 79 | 0.33 | 80 | 116 x 76 x 32/100 x 64 | 0.23 | 33 | V2 | UNIFORM CMH, CDM, HCI, ColorArc |
| 100 | 1.1 | V100SSC255 | 185-254 | 110 | 0.46 | 80 | 171 x 91 x 37/147 | 0.425 | 33 | V2 | UNIFORM CMH, CDM, HCI, SON, ColorArc |
| 150 | 1.8 | V150SSC255 | 185-254 | 161 | 0.67 | 80 | 171 x 91 x 37/147 | 0.425 | 33 | V2 | UNIFORM CMH, CDM, HCI, SON, ColorArc |

Ventronic Electronic Control Gear WiMAC⁸⁶⁸ Enabled

Terminal Block Versions

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Max Case Temp (tc) | Dimensions (LxWxH/Fix) (mm) | Weight (kg) | Fig | Circuit Diagram | Lamp Types |
|----------|-----|------------------|-------------------|-------------------|---------------------|--------------------|-----------------------------|-------------|-----|-----------------|---|
| 70 | 1.0 | V70SSB255-WiMAC | 185-254 | 79 | 0.33 | 80 | 144 x 91 x 37/130 - 135 | 0.23 | 32 | U2 | UNIFORM CMH, CDM, HCI, SON, SDW-T, ColorArc |
| 100 | 1.1 | V100SSB255-WiMAC | 185-254 | 110 | 0.46 | 80 | 144 x 91 x 37/130 - 135 | 0.425 | 32 | U2 | UNIFORM CMH, CDM, HCI, SON, SDW-T, ColorArc |
| 150 | 1.8 | V150SSB255-WiMAC | 185-254 | 161 | 0.67 | 80 | 144 x 91 x 37/130 - 135 | 0.425 | 32 | U2 | UNIFORM CMH, CDM, HCI, SON, SDW-T, ColorArc |

Ventronic Electronic Dimmable Control Gear Part Night

Terminal Block Versions

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Max Case Temp (tc) | Dimensions (LxWxH/Fix) (mm) | Weight (kg) | Fig | Circuit Diagram | Lamp Types |
|----------|-----|---------------|-------------------|-------------------|---------------------|--------------------|-----------------------------|-------------|-----|-----------------|---|
| 70 | 1.0 | V70SSB255-PN | 185-254 | 79 | 0.33 | 80 | 144 x 91 x 37/130 - 135 | 0.23 | 31 | V2 | UNIFORM CMH, CDM, HCI, SON, SDW-T, ColorArc |
| 100 | 1.1 | V100SSB255-PN | 185-254 | 110 | 0.46 | 80 | 144 x 91 x 37/130 - 135 | 0.425 | 31 | V2 | UNIFORM CMH, CDM, HCI, SON, SDW-T, ColorArc |
| 150 | 1.8 | V150SSB255-PN | 185-254 | 161 | 0.67 | 80 | 144 x 91 x 37/130 - 135 | 0.425 | 31 | V2 | UNIFORM CMH, CDM, HCI, SON, SDW-T, ColorArc |

Ventronic Electronic Dimmable Control Gear Switch Dimming

Terminal Block Versions

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Max Case Temp (tc) | Dimensions (LxWxH/Fix) (mm) | Weight (kg) | Fig | Circuit Diagram | Lamp Types |
|----------|-----|---------------|-------------------|-------------------|---------------------|--------------------|-----------------------------|-------------|-----|-----------------|---|
| 70 | 1.0 | V70SSB255-SD | 185-254 | 79 | 0.33 | 80 | 144 x 91 x 37/130 - 135 | 0.23 | 31 | W2 | UNIFORM CMH, CDM, HCI, SON, SDW-T, ColorArc |
| 100 | 1.1 | V100SSB255-SD | 185-254 | 110 | 0.46 | 80 | 144 x 91 x 37/130 - 135 | 0.425 | 31 | W2 | UNIFORM CMH, CDM, HCI, SON, SDW-T, ColorArc |
| 150 | 1.8 | V150SSB255-SD | 185-254 | 161 | 0.67 | 80 | 144 x 91 x 37/130 - 135 | 0.425 | 31 | W2 | UNIFORM CMH, CDM, HCI, SON, SDW-T, ColorArc |

Ventronic High Frequency Electronic Dimmable Control Gear For HPS and Venture MH UNIFORM Pulse Start lamps

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Max Case Temp (tc) | Dimensions (LxWxH/Fix) (mm) | Weight (kg) | Fig | Circuit Diagram | Lamp Types |
|----------|---------|--------------|-------------------|-------------------|---------------------|--------------------|-----------------------------|-------------|-----|-----------------|---|
| 200 | 1.6 | VTC200255 | 185-254 | 216 | 0.9 | 90 | 196 x 108 x 82/210 | 1.7 | 29 | W1 | Venture UNIFORM Pulse Start and HPS Lamps |
| 250 | 2.1/3.0 | VTC250255 | 185-254 | 270 | 1.13 | 90 | 196 x 108 x 82/210 | 1.7 | 29 | W1 | Venture UNIFORM Pulse Start and HPS Lamps |
| 320 | 2.63 | VTC320255 | 185-254 | 346 | 1.3 | 90 | 219 x 120 x 91/233 | 2.2 | 29 | W1 | Venture UNIFORM Pulse Start and HPS Lamps |
| 350 | 2.8 | VTC350255 | 185-254 | 378 | 1.6 | 90 | 219 x 120 x 91/233 | 2.2 | 29 | W1 | Venture UNIFORM Pulse Start and HPS Lamps |
| 400 | 3.2/4.5 | VTC400255 | 185-254 | 432 | 1.8 | 90 | 219 x 120 x 91/233 | 2.2 | 29 | W1 | Venture UNIFORM Pulse Start and HPS Lamps |
| 450 | 3.7 | VTC450255 | 185-254 | 482 | 2.0 | 90 | 219 x 120 x 91/233 | 2.2 | 29 | W1 | Venture UNIFORM Pulse Start and HPS Lamps |
| 600 | 6.2 | VTC600255 | 185-254 | 650 | 2.7 | 90 | 230 x 120 x 91/244 | 2.4 | 29 | W1 | Venture UNIFORM Pulse Start and HPS Lamps |

fig 29

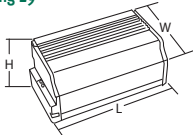


fig 31

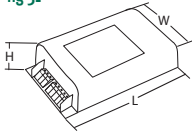
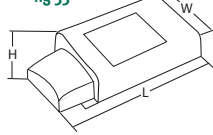


fig 32



fig 33



For Ventronic POD details see page 31

Venture Parmar Ballasts



PARMAR HID control gear has been recognised for its quality and performance since the PARRY manufacturing company was formed by Mr Parry and Mr Martin (PARMAR) 60 years ago.

Synonymous with bespoke and specialist control gear the Venture Parmar range of HID Control Gear can be found in highly specialist luminaires such as those used in explosive atmospheres or in road and tunnel lighting as well as conventional commercial and industrial markets.

The acquisition of the PARMAR brand by Venture Lighting International in the late 1990's provided the foundation to build the current extensive range of both electro-magnetic and electronic HID control gear.

Accommodating our Technical and Product Managers, Venture Lighting's European Technical & Distribution Centre at Castle Donington is centrally located in the UK, housing our enviably large and unmatched UK stock of lamps, ballasts, ignitors and capacitors





With a huge product offering, boasting in excess of 500 types, Venture Lighting Europe will today supply HID ballasts of all wattages from 35W through to 3.5kW – single voltage 50Hz through to multi voltage 50 & 60Hz with Ignitors to suit all lamp & ballast types, including timed & long distance remote mounting

In support of our ballast and ignitors, we also offer a large range of PFC lighting Capacitors available in all values, both standard 250V and high voltage 440V

Venture PARMAR HID control gear, high performance and quality product range, available from UK stock to support our European Lighting Industry. First Class HID control gear, second to none service and supply



The J-Range and P-Range

HID Ballast

Metal Halide lamps from Venture Lighting Europe are widely recognised to be the best in the world, combining technical innovation with truly outstanding performance.

And to get the very best from your lamps, you need the very best control gear.

Introducing the new, high quality I-Pac Ballast and Ignitor system - combining the advanced P-range and further enhanced



The P-Range and further enhanced J-Range HID ballast group includes units rated at 35W, 50W, 70W, 100W, 150W, 250W, 400W HPS & 250W, 400W HPMV. Each features an impressive, low weight design and offers a standard "European" footprint.

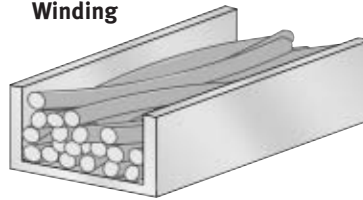
Precision Wound and High Build Quality

All ballasts in the range are Precision Wound to provide the best possible thermal and electrical durability. This method offers distinct advantages over the conventional

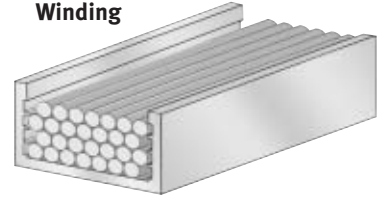
J-range Ballast with the Mci Series Ignitor to offer optimum performance from all Venture Metal Halide lamps.

Together, they have been optimised for maximum performance and reliability, through all wattages from 35W to 600W, offering a fully universal solution

Scramble Winding



Precision Winding



Scramble or Random Wound methods. With Precision Winding, each coil is wound onto grooved insulation material, ensuring that each turn of wire is accurately positioned in parallel with each one of its neighbouring/adjacent turns of wire. A high grade of winding wire classified above 200C is always used to further enhance performance and reliability. This, coupled with Venture's intensive Vacuum Impregnation methods, guarantees the highest possible standards, and ensures the longest possible ballast life.

High Grade Thermal Protection

P-Range and further enhanced J-Range HID ballasts are thermally protected at 160C a value specifically chosen that will protect the ballast against any abnormal conditions and will eliminate nuisance tripping in poorly ventilated / high ambient temperature areas.

Excellent Temperature Characteristics

The lower wattages in the P-Range and further enhanced J-Range are as low as Delta t 60°C. Indeed, the 400W @ 240V is only 75°C. To compliment this further, all P-Range units are rated tw.140°C



The MCI Series Ignitor

The Venture MCI Series Ignitor is a digital, intelligent timed ignitor, designed for universal operation covering 35W through to 600W.

Compact Design

The MCI ignitor is only 5cm in length, with a cross section of less than 2.5cm x 2.0cm - making it ideal for installations where space is at an absolute premium.

Zero Watts Loss - and No Internal Temperature Rise

Unlike all conventional SIP ignitors, the MCI Series ignitor does not add a single Watt of power - or a single degree of heat to your light fitting. This means a more cost and energy efficient performance, while helping to prolong the life of the unit and thus reducing maintenance requirements.

A Longer Reach

"Remote lamp" situations no longer pose any problems, as the MCI Series ignitor is designed to reliably strike a lamp up to a distance of 10 Metres.

Digital Intelligence

The unit has been specifically designed to offer minimum stress to all circuit components, minimum radio frequency interference combined with minimum Hot Re-Strike time.

The MCI Series ignitor does not continuously pulse for 20 minutes. Whilst monitoring the circuit, an initial 5 second pulse cycle will try to strike the lamp. In the event the lamp does not strike, the pulsing will pause for 1 minute, before repeating another 5 second pulse cycle. This process will continue until the lamp strikes, or until the 20 minutes have elapsed.

By holding off the high voltage pulses in 1 minute segments, all HID circuits and components are protected. Any radio frequency interference is kept to a bare minimum, and a hot lamp arc tube is allowed to cool much quicker, resulting in a faster hot re-strike.

The timing circuit is also intelligent enough to distinguish between a cycling lamp and a mains supply interruption, allowing 3 lamp cycles before shutting down.



Component Benefits at a Glance

J-range & P-Range HID ballast

- Covers 35W, 50W, 70W, 100W, 150W 250, 400W HPS and 250, 400W HPMV lamps
- Compact, lightweight design with 'European' footprint
- High temperature thermal protection to eliminate nuisance tripping
- Precision wound and using vacuum impregnation for maximum life

MCI Series Ignitor

- Digital intelligent timed ignitor for universal operation
- Offers zero watts loss and no internal temperature rise
- 10 metre range eliminates remote lamp problems
- Virtually eliminates component stress and radio frequency interference

Control Gear for HPS, MH & Ceramic MH Lamps

35W & 50W

50Hz Control Gear For HPS, MH & Ceramic MH Lamps

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | $\Delta t/tw$ (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor $\mu F/V$ | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|----------|--------------|-------------------|-------------------|---------------------|--------------------|---------------------------------|-------------|----|-----|---------------------|------------------|---------|---------------|---------|
| 35 | 0.54 | HSA03723221 | 230/240 | 48 | 0.24 | 60/140 | 120 x 69 x 56/106-111 Note ③ | TBA | Y | 17 | 6/250 | PAE400255* | Y | MCi6* | X |
| | | | | | | | | | | | | PXE070255 | Y | PCX070255 | Y |
| | | | | | | | | | | | | PXE100255* | Y | PCX400255* | Y |
| 35 | 0.54 | HSJ03723221 | 230/240 | 48 | 0.24 | 60/140 | 106 x 68 x 56/86-97 Note ② | 1.0 | Y | 35 | 6/250 | PAE400255* | Y | MCi6* | X |
| | | | | | | | | | | | | PXE070255 | Y | PCX070255 | Y |
| | | | | | | | | | | | | PXE100255* | Y | PCX400255* | Y |
| 35 | 0.54 | HSP03723221 | 230/240 | 48 | 0.24 | 60/140 | 106 x 65 x 52/52 x 86-98 | 0.8 | Y | 2 | 6/250 | PAE400255* | Y | MCi6* | X |
| | | | | | | | | | | | | PXE070255 | Y | PCX070255 | Y |
| | | | | | | | | | | | | PXE100255* | Y | PCX400255* | Y |
| 35 | 0.54 | DGO38822221 | 220/230/240/250 | 48 | 0.24 | 60/140 | 153 x 53 x 46/131-146 | 0.9 | Y | 7 | 6/250 | PAE400255* | N | PCX070255 | N |
| | | | | | | | | | | | | PXE070255 | N | PCX400255* | N |
| | | | | | | | | | | | | PXE100255* | N | | |
| 50 | 0.76 | HSA05223221 | 230/240 | 63 | 0.29 | 70/140 | 120 x 69 x 56/106-111 Note ③ | 1.1 | Y | 17 | 8/250 | PAE400255* | Y | MCi57 | X |
| | | | | | | | | | | | | PXE070255 | Y | MCi6* | X |
| | | | | | | | | | | | | PXE100255* | Y | PCX070255 | Y |
| 50 | 0.76 | HSJ05223221 | 230/240 | 63 | 0.29 | 70/140 | 106 x 68 x 56/86-97 Note ② | 1.2 | Y | 35 | 8/250 | PAE400255* | Y | MCi57 | X |
| | | | | | | | | | | | | PXE070255 | Y | MCi6* | X |
| | | | | | | | | | | | | PXE100255* | Y | PCX070255 | Y |
| 50 | 0.76 | HSP05223221 | 230/240 | 63 | 0.29 | 70/140 | 106 x 65 x 52/52 x 86-98 | 1 | Y | 2 | 8/250 | PAE400255* | Y | MCi57 | X |
| | | | | | | | | | | | | PXE070255 | Y | MCi6* | X |
| | | | | | | | | | | | | PXE100255* | Y | PCX070255 | Y |
| 50 | 0.76 | HSG05322221 | 220/230/240/250 | 65 | 0.3 | 70/140 | 173 x 53 x 46/150-165 | 1.1 | Y | 7 | 8/250 | PAE400255* | N | PCX070255 | N |
| | | | | | | | | | | | | PBo70K255 | A1 | PCX400255* | N |
| | | | | | | | | | | | | PXE070255 | N | PJ070K255 | A1 |
| 50 | 0.76 | HSZ05322221 | 220/230/240/250 | 62 | 0.29 | 55/140 | 100 x 66 x 46/52 x 57-68 | 1.2 | Y | 1 | 8/250 | PAE400255* | N | PCX070255 | N |
| | | | | | | | | | | | | PBo70K255 | A1 | PCX400255* | N |
| | | | | | | | | | | | | PXE070255 | N | PJ070K255 | A1 |
| 50 | 0.76 | HSV05222421 | 220/240 | 64 | 0.3 | 60/140 | 86 x 75 x 63/47 x 54 Note ① | 1.2 | Y | 19 | 8/250 | PAE400255* | F1 | PCX070255 | F1 |
| | | | | | | | | | | | | PBo70K255 | G1 | PCX400255* | F1 |
| | | | | | | | | | | | | PXE070255 | F1 | PJ070K255 | G1 |
| 50/70 | 0.76/1.0 | HSA57223221 | 230/240 | 62/85 | 0.29/0.39 | 70/140 | 120 x 69 x 56/106-111 Note ③ | 1.6 | Y | 17 | 8/250 10/250 | PAE400255* | U | MCi57 | P1 |
| | | | | | | | | | | | | PXE070255 | U | PCX070255 | U |
| | | | | | | | | | | | | PXE100255* | U | PCX400255* | U |
| 50/70 | 0.76/1.0 | HSJ57223221 | 230/240 | 62/85 | 0.29/0.39 | 70/140 | 106 x 68 x 56/86-97 Note ② | 1.3 | Y | 35 | 8/250 10/250 | PAE400255* | U | MCi57 | P1 |
| | | | | | | | | | | | | PXE070255 | U | PCX070255 | U |
| | | | | | | | | | | | | PXE100255* | U | PCX400255* | U |
| 50/70 | 0.76/1.0 | HSP57223221 | 230/240 | 62/85 | 0.29/0.39 | 70/140 | 106 x 65 x 52/52 x 86-98 | 1.3 | Y | 2 | 8/250 10/250 | PAE400255* | U | MCi57 | P1 |
| | | | | | | | | | | | | PXE070255 | U | PCX070255 | U |
| | | | | | | | | | | | | PXE100255* | U | PCX400255* | U |
| 50/70 | 0.76/1.0 | HSG57024521 | 240 | 65/86 | 0.3/0.4 | 70/140 | 173 x 53 x 46/150-165 | 1.5 | Y | 7 | 8/250 10/250 | PAE400255* | Q1 | PCX070255 | Q1 |
| | | | | | | | | | | | | PXE070255 | Q1 | PCX400255* | Q1 |
| | | | | | | | | | | | | PXE100255* | Q1 | | |
| 50/70 | 0.76/1.0 | HSZ57223221 | 230/240 | 62/85 | 0.29/0.39 | 70/140 | 118 x 66 x 46/52 x 75-86 | 1.5 | Y | 1 | 8/250 10/250 | PAE400255* | U | PCX070255 | U |
| | | | | | | | | | | | | PXE070255 | U | PCX400255* | U |
| | | | | | | | | | | | | PXE100255* | U | | |

60Hz Control Gear For HPS, MH & Ceramic MH Lamps

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | $\Delta t/tw$ (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor $\mu F/V$ | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|------|--------------|-------------------|-------------------|---------------------|--------------------|---------------------------------|-------------|----|-----|---------------------|------------------|---------|---------------|---------|
| 35 | 0.54 | HSA037222BD | 220/230 | 48 | 0.24 | 70/140 | 120 x 69 x 56/106-111 Note ③ | TBA | Y | 17 | 5/250 | PAE400255* | J1 | MCi6-6* | H1 |
| | | | | | | | | | | | | PXE070255 | J1 | PCX070255 | J1 |
| | | | | | | | | | | | | PXE100255* | J1 | PCX400255* | J1 |
| 35 | 0.54 | HSJ037222BD | 220/230 | 48 | 0.24 | 70/140 | 106 x 68 x 56/86-97 Note ② | TBA | Y | 35 | 5/250 | PAE400255* | J1 | MCi6-6* | H1 |
| | | | | | | | | | | | | PXE070255 | J1 | PCX070255 | J1 |
| | | | | | | | | | | | | PXE100255* | J1 | PCX400255* | J1 |
| 35 | 0.54 | HSP037222BD | 220/230 | 48 | 0.24 | 70/140 | 106 x 65 x 52/52 x 86-98 | 0.8 | Y | 2 | 5/250 | PAE400255* | J1 | MCi6-6* | H1 |
| | | | | | | | | | | | | PXE070255 | J1 | PCX070255 | J1 |
| | | | | | | | | | | | | PXE100255* | J1 | PCX400255* | J1 |
| 50 | 0.76 | HSA052222BD | 220/230 | 63 | 0.29 | 70/140 | 120 x 69 x 56/106-111 Note ③ | 1.1 | Y | 17 | 7/250 | PAE400255* | J1 | MCi6-6* | H1 |
| | | | | | | | | | | | | PXE070255 | J1 | PCX070255 | J1 |
| | | | | | | | | | | | | PXE100255* | J1 | PCX400255* | J1 |
| 50 | 0.76 | HSJ052222BD | 220/230 | 63 | 0.29 | 70/140 | 106 x 68 x 56/86-97 Note ② | 1.2 | Y | 35 | 7/250 | PAE400255* | J1 | MCi6-6* | H1 |
| | | | | | | | | | | | | PXE070255 | J1 | PCX070255 | J1 |
| | | | | | | | | | | | | PXE100255* | J1 | PCX400255* | J1 |
| 50 | 0.76 | HSP052222BD | 220/230 | 63 | 0.29 | 70/140 | 106 x 65 x 52/52 x 86-98 | 1 | Y | 2 | 7/250 | PAE400255* | J1 | MCi6-6* | H1 |
| | | | | | | | | | | | | PXE070255 | J1 | PCX070255 | J1 |
| | | | | | | | | | | | | PXE100255* | J1 | PCX400255* | J1 |

fig 1



fig 2

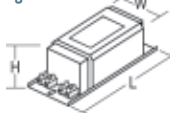


fig 7

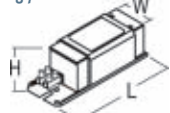


fig 17

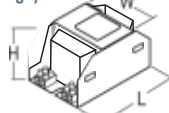


fig 19

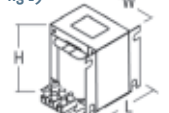
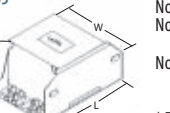


fig 35



Notes

- Note ① Additional fixings 47 x 42 mm
- Note ② Additional fixings 52 x 86 - 92 mm and side fixings 84 - 96 mm
- Note ③ Additional fixings 53 x 96 - 109 mm and side fixings 95 - 109 mm

* These ignitors produce 3.0 - 4.5kV and are suitable for MH lamps and some HPS and Ceramic Lamps

Control Gear for HPS, MH & Ceramic MH Lamps

70W

Ballasts
70W

50Hz Control Gear For HPS, MH & Ceramic MH Lamps

| Lamp (W) | Lamp (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μF/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|----------|--------------|-------------------|-------------------|---------------------|------------|---------------------------------|-------------|----|-----|-----------------|--|-------------------|---|--------------------|
| 70 | 1.0 | HSA07223221 | 230/240 | 86 | 0.39 | 70/140 | 107 x 69 x 56/86-97 Note ③ | 1.4 | Y | 17 | 10/250 | PAE400255* PXE070255 PXE100255* | Y Y Y | MCI57 MCI6* PCX070255 PCX400255* | X X Y Y |
| 70 | 1.0 | HSJ07223221 | 230/240 | 86 | 0.39 | 70/140 | 106 x 68 x 56/86-97 Note ① | 1.3 | Y | 35 | 10/250 | PAE400255* PXE070255 PXE100255* | Y Y Y | MCI57 MCI6* PCX070255 PCX400255* | X X Y Y |
| 70 | 1.0 | HSP07223221 | 230/240 | 86 | 0.39 | 70/140 | 106 x 65 x 52/52 x 86-98 | 1.1 | Y | 2 | 10/250 | PAE400255* PXE070255 PXE100255* | Y Y Y | MCI57 MCI6* PCX070255 PCX400255* | X X Y Y |
| 70 | 1.0 | HSG07322221 | 220/230/240/250 | 86 | 0.4 | 65/140 | 173 x 53 x 46/150-165 | 1.3 | Y | 7 | 10/250 | PAE400255* PB070K255 PXE070255 PXE100255* | N A1 N N | PCX070255 PCX400255* PJ070K255 | N N A1 A1 |
| 70 | 1.0 | HSZ07322221 | 220/230/240/250 | 85 | 0.39 | 60/140 | 118 x 66 x 46/52 x 75-86 | 1.4 | Y | 1 | 10/250 | PAE400255* PB070K255 PXE070255 PXE100255* | N A1 N N | PCX070255 PCX400255* PJ070K255 | N N A1 A1 |
| 70 | 1.0 | HSV07322221 | 220/230/240/250 | 87 | 0.39 | 70/140 | 94 x 75 x 63/54 x 54 Note ② | 1.5 | Y | 19 | 10/250 | PAE400255* PB070K255 PXE070255 PXE100255* | N A1 N N | PCX070255 PCX400255* PJ070K255 | N N A1 A1 |
| 50/70 | 0.76/1.0 | HSA57223221 | 230/240 | 62/85 | 0.29/0.39 | 70/140 | 120 x 69 x 56/106-111 Note ④ | 1.3 | Y | 17 | 8/250 10/250 | PAE400255* PXE070255 PXE100255* | U U U | MCI57 PCX070255 PCX400255* | P1 U U |
| 50/70 | 0.76/1.0 | HSJ57223221 | 230/240 | 62/85 | 0.29/0.39 | 70/140 | 106 x 68 x 56/86-97 Note ① | 1.3 | Y | 35 | 8/250 10/250 | PAE400255* PXE070255 PXE100255* | U U U | MCI57 PCX070255 PCX400255* | P1 U U |
| 50/70 | 0.76/1.0 | HSP57223221 | 230/240 | 62/85 | 0.29/0.39 | 70/140 | 106 x 65 x 52/52 x 86-98 | 1.3 | Y | 2 | 8/250 10/250 | PAE400255* PXE070255 PXE100255* | U U U | MCI57 PCX070255 PCX400255* | P1 U U |
| 50/70 | 0.76/1.0 | HSG57024521 | 240 | 65/86 | 0.3/0.4 | 70/140 | 173 x 53 x 46/150-165 | 1.5 | Y | 7 | 8/250 10/250 | PAE400255* PXE070255 PXE100255* | Q1 Q1 Q1 | PCX070255 PCX400255* | Q1 Q1 |
| 50/70 | 0.76/1.0 | HSZ57223221 | 230/240 | 62/85 | 0.29/0.39 | 70/140 | 118 x 66 x 46/52 x 75-86 | 1.5 | Y | 1 | 8/250 10/250 | PAE400255* PXE070255 PXE100255* | U U U | PCX070255 PCX400255* | U U |

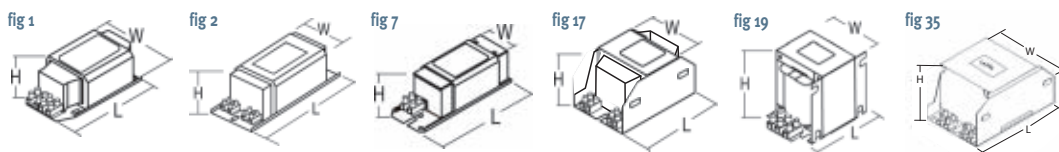
60Hz Control Gear For HPS, MH & Ceramic MH Lamps

| Lamp (W) | Lamp (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μF/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|----------|--------------|-------------------|-------------------|---------------------|------------|---------------------------------|-------------|----|-----|----------------|--|----------------------|--------------------------------------|----------------------|
| 70 | 1.0 | HSA072222BD | 220/230 | 86 | 0.39 | 70/140 | 120 x 69 x 56/106-111 Note ③ | 1.4 | Y | 17 | 8/250 | PAE400255* PXE070255 PXE100255* | J1 J1 J1 | MCI6-6* PCX070255 PCX400255* | H1 J1 J1 |
| 70 | 1.0 | HSJ072222BD | 220/230 | 86 | 0.39 | 70/140 | 106 x 68 x 56/86-97 Note ① | 1.3 | Y | 35 | 8/250 | PAE400255* PXE070255 PXE100255* | J1 J1 J1 | MCI6-6* PCX070255 PCX400255* | H1 J1 J1 |
| 70 | 1.0 | HSP072222BD | 220/230 | 86 | 0.39 | 70/140 | 106 x 65 x 52/52 x 86-98 | 1.1 | Y | 2 | 8/250 | PAE400255* PXE070255 PXE100255* | J1 J1 J1 | MCI6-6* PCX070255 PCX400255* | H1 J1 J1 |
| 70 | 1.0 | HSZ073226X7 | 220/230/240/254 | 85 | 0.39 | 60/140 | 118 x 66 x 46/52 x 75-86 | 1.4 | Y | 1 | 8/250 | PAE400255* PB070K255 PXE070255 PXE100255* | L1 M1 L1 L1 | PCX070255 PCX400255* PJ070K255 | L1 L1 M1 M1 |
| 70 | 1.0 | HSZ072218Y2 | 210 (230 50Hz) | 85 | 0.39 | 60/140 | 118 x 66 x 46/52 x 75-86 | 1.4 | Y | 1 | 8/250 | PAE400255* PXE070255 PXE100255* | K1 K1 K1 | PCX070255 PCX400255* | K1 K1 |

Notes

- Note ① Additional fixings 52 x 86 - 92 mm and side fixings 84 - 96 mm
- Note ② Additional fixings 54 x 42 mm
- Note ③ Additional fixings 53 x 96 - 109 mm and side fixings 95 - 109 mm
- Note ④ Additional fixings 53 x 96 - 109 mm

* These ignitors produce 3.0 - 4.5kV and are suitable for MH lamps and some HPS and Ceramic Lamps



Control Gear for HPS, MH & Ceramic MH Lamps 100W 150W & 200W

Ballasts

100 - 200W

50Hz Control Gear For HPS, MH & Ceramic MH Lamps

| Lamp (W) | (A) | Ballast Code (V) | Input Voltage (W) | Circuit Watts (A) | Running Current | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μf/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|-------------|-----|-----------------------|---------------------------------------|-------------------|-----------------|------------|---------------------------------|-------------|----|-----|----------------|-------------------------------------|----------------|------------------------|----------|
| 100 | 1.1 | HSA10223221 | 230/240 | 118 | 0.53 | 75/140 | 120 x 69 x 56/106-111 Note ⑦ | 1.6 | Y | 17 | 12/250 | PAE400255 PXE100255 | Y Y | MCi6 PCX400255 | X Y |
| 100 | 1.1 | HSJ10223221 | 230/240 | 118 | 0.53 | 75/140 | 106 x 68 x 56/88-97 Note ⑤ | 1.4 | Y | 35 | 12/250 | PAE400255 PXE100255 | Y Y | MCi6 PCX400255 | X Y |
| 100 | 1.1 | HSP10223221 | 230/240 | 118 | 0.53 | 75/140 | 106 x 65 x 52/52 x 86-98 | 1.3 | Y | 2 | 12/250 | PAE400255 PXE100255 | Y Y | MCi6 PCX400255 | X Y |
| 100 | 1.1 | HSG10322221 | 220/230/240/250 | 123 | 0.56 | 75/140 | 173 x 53 x 46/150-165 | 1.5 | Y | 7 | 12/250 | PAE400255 PXE100255 | N N | PCX400255 | N |
| 100 | 1.1 | HSZ10322221 | 220/230/240/250 | 117 | 0.54 | 60/140 | 128 x 66 x 46/52 x 85-96 | 1.5 | Y | 1 | 12/250 | PAE400255 PXE100255 | N N | PCX400255 | N |
| 100 | 1.1 | HSV10322221 | 220/230/240/250 | 120 | 0.56 | 75/140 | 94 x 75 x 63/54 x 54 Note ② | 1.5 | Y | 19 | 12/250 | PAE400255 PXE100255 | N N | PCX400255 | N |
| 150 | 1.8 | HSA15223221 | 230/240 | 176 | 0.8 | 75/140 | 120 x 69 x 56/133-141 Note ⑧ | 2.3 | Y | 17 | 20/250 | PAE400255 PXE100255 | Y Y | MCi6 PCX400255 | X Y |
| 150 | 1.8 | HSJ15223221 | 230/240 | 176 | 0.8 | 75/140 | 120 x 68 x 56/106-111 | 1.8 | Y | 35 | 20/250 | PAE400255 PXE100255 | Y Y | MCi6 PCX400255 | X Y |
| 150 | 1.8 | HSP15223221 | 230/240 | 176 | 0.8 | 75/140 | 135 x 65 x 52/52 x 118-127 | 1.8 | Y | 2 | 20/250 | PAE400255 PXE100255 | Y Y | MCi6 PCX400255 | X Y |
| 150 | 1.8 | HSZ15322221 | 220/230/240/250 | 172 | 0.79 | 60/140 | 158 x 66 x 46/52 x 115-126 | 2.2 | Y | 1 | 20/250 | PAE400255 PXE100255 | N N | PCX400255 | N |
| 150 | 1.8 | HSV16322221 | 220/230/240/250 | 175 | 0.8 | 75/140 | 125 x 78 x 65/110 | 2.4 | Y | 9 | 20/250 | PAE400255 PBo19K255 PXE100255 | N A1 N | PCX400255 Pj019K255 | N A1 |
| 150 | 1.8 | HSN155202 | 200/210/220/ 230/240/250 Note ① | 167 | 0.74 | 50/130 | 133 x 108 x 109/76 x 113 | 4.4 | | 5 | 20/250 | PAE400255 PXE100255 | V1 V1 | PCX400255 | V1 |
| 150 | 1.8 | HSF165192 | 190/200/210/ 220/230/240 Note ③ | 175 | 0.8 | 70/130 | 172 x 92 x 80/150 - 160 | 3.4 | | 21 | 20/250 | PAE400255 PBo19K255 PXE100255 | T1 U1 T1 | PCX400255 Pj019K255 | T1 U1 |
| 150/ 100 | 1.8 | AV101523221 Note ④ | 230/240 | 175 | 0.8 | 60/140 | 150 x 98 x 81/135 x 76 | TBA | Y | 9 | 20/250 | PAE400255 PXE100255 | X1 X1 | PCX400255 | X1 |

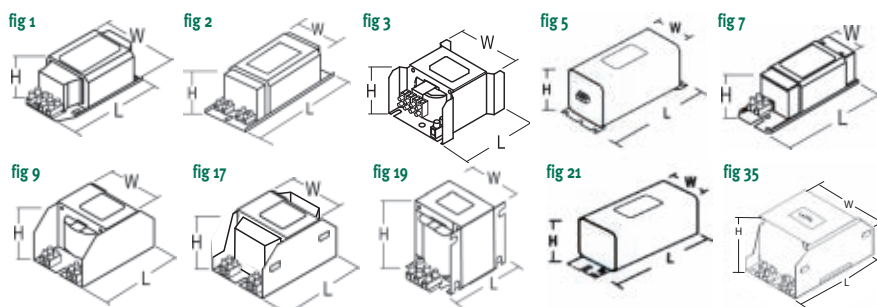
60Hz Control Gear For HPS, MH & Ceramic MH Lamps

See Also HSN155202 & HSF165192 Above

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μf/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|-----|--------------|-------------------|-------------------|---------------------|------------|---------------------------------|-------------|----|-----|----------------|------------------------|----------|---------------------|----------|
| 100 | 1.1 | HSJ102222BD | 220/230 | 118 | .53 | 75/140 | 106 x 68 x 56/86-97 Note ⑤ | 1.4 | Y | 35 | 10/250 | PAE400255 PXE100255 | J1 J1 | MCi6-6 PCX400255 | H1 J1 |
| 100 | 1.1 | HSP102222BD | 220/230 | 118 | .53 | 75/140 | 106 x 65 x 52/52 x 86-98 | 1.3 | Y | 2 | 10/250 | PAE400255 PXE100255 | J1 J1 | MCi6-6 PCX400255 | H1 J1 |
| 150 | 1.8 | HSJ152222BD | 220/230 | 176 | 0.8 | 75/140 | 136 x 68 x 56/113-125 Note ⑥ | 1.8 | Y | 35 | 16/250 | PAE400255 PXE100255 | J1 J1 | MCi6-6 PCX400255 | H1 J1 |
| 150 | 1.8 | HSP152222BD | 220/230 | 176 | 0.8 | 75/140 | 135 x 65 x 52/52 x 118-127 | 1.8 | Y | 2 | 16/250 | PAE400255 PXE100255 | J1 J1 | MCi6-6 PCX400255 | H1 J1 |
| 150 | 1.8 | HSZ16322645 | 220/230/240 | 175 | 0.8 | 75/140 | 135 x 66 x 46/52 x 85-96 | 1.8 | | 1 | 16/250 | PAE400255 PXE100255 | A A | PCX400255 | A |

50Hz Control Gear For MH Lamps

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μf/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|-------------|-------------|-----------------------|-------------------|-------------------|---------------------|------------------|---------------------------------|-------------|----|-----|------------------|------------------------|----------|-------------------|---------|
| 200 | 1.6 | HMA20223221 | 230/240 | 220 | 1.02 | 70/140 | 150 x 69 x 56/133-141 Note ⑧ | 2.3 | Y | 17 | 12/250 | PAE400255 PXE100255 | Y Y | MCi6 PCX400255 | X Y |
| 200 | 1.6 | HMJ20223221 | 230/240 | 220 | 1.02 | 70/140 | 136 x 68 x 56/113-125 Note ⑥ | TBA | Y | 35 | 12/250 | PAE400255 PXE100255 | Y Y | MCi6 PCX400255 | X Y |
| 200 | 1.6 | HMP20223221 | 230/240 | 220 | 1.02 | 70/140 | 135 x 65 x 52/52 x 118-127 | 1.9 | Y | 2 | 12/250 | PAE400255 PXE100255 | Y Y | MCi6 PCX400255 | X Y |
| 200 | 1.6 | HMZ20322245 | 220/230/240 | 217 | 1.02 | 60/140 | 158 x 66 x 46/52 x 115-126 | 2.2 | | 1 | 12/250 | PAE400255 PXE100255 | A A | PCX400255 | A |
| 200/ 250 | 1.6/ 2.1 | JH202523221 Note ④ | 230/240 | 217/ 282 | 1.0/ 1.28 | 50/140 80/140 | 106 x 94 x 65/80 x 90 | 2.5 | Y | 3 | 12/250 20/250 | PAE400255 PXE100255 | Y1 Y1 | PCX400255 | Y1 |



- Notes
- Note ① 220/230/240/250/260/270 for 60Hz Capacitor 16/TBA
 - Note ② Additional fixings 54 x 42 mm
 - Note ③ 210/220/230/240/250/260 for 60Hz Capacitor 16/TBA
 - Note ④ Suitable for step dimming to 100W
 - Note ⑤ Additional fixings 52 x 86 - 92 mm and side fixings 84 - 96 mm
 - Note ⑥ Additional fixings 52 x 11 - 18 mm side fixings 112 - 125 mm
 - Note ⑦ Additional fixings 53 x 96 - 109 mm side fixings 95 - 109 mm
 - Note ⑧ Additional fixings 53 x 126 - 139 mm side fixings 95 - 109 mm



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Control Gear HPS, MH & Ceramic MH Lamps 250W

50Hz Control Gear For HPS, MH & Ceramic MH Lamps

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μF/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|-------------|-----|-----------------------|---------------------------------------|-------------------|---------------------|------------|-----------------------------------|-------------|----|-----|----------------|-------------------------------------|----------------|------------------------|----------|
| 250 | 3.0 | HSA25223221 | 230/240 | 286 | 1.32 | 75/140 | 167 x 87 x 72/150-160 Note ⑧ | 3.6 | Y | 17 | 30/250 | PAE400255 PXE100255 | Y Y | MCI6 PCX400255 | X Y |
| 250 | 3.0 | HSA252232CH | 230/240 | 286 | 1.32 | 75/140 | 150 x 87 x 72/133 x 143 Note ⑨ | 3.4 | Y | 17 | 30/250 | PAE400255 PXE100255 | Y Y | MCI6 PCX400255 | X Y |
| 250 | 3.0 | HSJ25223221 | 230/240 | 286 | 1.32 | 75/140 | 137 x 86 x 74/116-128 Note ③ | 3.2 | Y | 35 | 30/250 | PAE400255 PXE100255 | Y Y | MCI6 PCX400255 | X Y |
| 250 | 3.0 | HSP25223221 | 230/240 | 286 | 1.32 | 75/140 | 127 x 86 x 73/108-118 Note ② | 2.8 | Y | 17 | 30/250 | PAE400255 PXE100255 | Y Y | MCI6 PCX400255 | X Y |
| 250 | 3.0 | HSZ25322221 | 220/230/240/250 | 285 | 1.32 | 75/140 | 198 x 66 x 46/52 x 155-166 | 3.0 | Y | 1 | 30/250 | PAE400255 PXE100255 | N N | PCX400255 | N |
| 250 | 3.0 | HDV26322221 | 220/230/240/250 | 285 | 1.32 | 75/140 | 150 x 98 x 81/135 x 76 | 3.6 | Y | 9 | 30/250 | PAE400255 PB404K255 PXE100255 | N A1 N | PCX400255 PJ404K255 | N A1 |
| 250 | 3.0 | JDV26322221 | 220/230/240/250 | 285 | 1.32 | 80/140 | 120 x 104 x 81/90 x 100 | 3.6 | Y | 3 | 30/250 | PAE400255 PB404K255 PXE100255 | N A1 N | PCX400255 PJ404K255 | N A1 |
| 250 | 3.0 | EAV255202 | 200/210/220/ 230/240/250 Note ① | 275 | 1.26 | 65/140 | 150 x 98 x 81/135 x 76 | 2.3 | | 9 | 30/250 | PAE400255 PB404K255 PXE100255 | V1 Z1 V1 | PCX400255 PJ404K255 | V1 Z1 |
| 250 | 3.0 | HDM255202 | 200/210/220/ 230/240/250 Note ① | 275 | 1.26 | 60/130 | 166 x 107 x 109/146 x 76 | 5.0 | | 5 | 30/250 | PAE400255 PB404K255 PXE100255 | V1 Z1 V1 | PCX400255 PJ404K255 | V1 Z1 |
| 250 | 3.0 | HDN25520221 | 200/210/220/ 230/240/250 Note ① | 275 | 1.26 | 60/130 | 133 x 107 x 109/113 x 76 | 4.6 | Y | 5 | 30/250 | PAE400255 PB404K255 PXE100255 | V1 Z1 V1 | PCX400255 PJ404K255 | V1 Z1 |
| 250 | 3.0 | HDN26322221 | 220/230/240/250 | 285 | 1.32 | 70/130 | 133 x 107 x 109/113 x 76 | 4.6 | Y | 5 | 30/250 | PAE400255 PB404K255 PXE100255 | N A1 N | PCX400255 PJ404K255 | N A1 |
| 250/ 150 | 3.0 | AV152523221 Note ③ | 230/240 | 285 | 1.32 | 60/140 | 150 x 98 x 81/135 x 76 | 4.1 | Y | 9 | 30/250 | PAE400255 PXE100255 | X1 X1 | PCX400255 | X1 |

60Hz Control Gear For HPS, MH & Ceramic MH Lamps

See Also EAV255202, HDM255202 & HDN25520221 Above

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μF/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|-----|--------------|-------------------|-------------------|---------------------|------------|---------------------------------|-------------|----|-----|----------------|------------------------|----------|---------------------|----------|
| 250 | 3.0 | HSJ252222BD | 220/230 | 286 | 1.32 | 75/140 | 137 x 86 x 74/116-128 Note ③ | 3.2 | Y | 35 | 25/250 | PAE400255 PXE100255 | J1 J1 | MCI6-6 PCX400255 | H1 J1 |
| 250 | 3.0 | HSP252222BD | 220/230 | 286 | 1.32 | 75/140 | 127 x 86 x 73/108-118 Note ② | 2.8 | Y | 17 | 25/250 | PAE400255 PXE100255 | J1 J1 | MCI6-6 PCX400255 | H1 J1 |

50Hz Control Gear For MH Lamps

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μF/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|-----|--------------|---------------------------------------|-------------------|---------------------|------------|---------------------------------|-------------|----|-----|----------------|-------------------------------------|----------------|------------------------|---------|
| 250 | 2.1 | HMA25223221 | 230/240 | 283 | 1.28 | 70/140 | 127 x 87 x 72/109-119 Note ⑦ | 2.4 | Y | 17 | 20/250 | PAE400255 PH400K255 PXE100255 | Y B1 Y | MCI6 PCX400255 | X Y |
| 250 | 2.1 | HMJ25223221 | 230/240 | 283 | 1.28 | 70/140 | 117 x 86 x 74/96-108 Note ④ | 2.3 | Y | 35 | 20/250 | PAE400255 PH400K255 PXE100255 | Y B1 Y | MCI6 PCX400255 | X Y |
| 250 | 2.1 | HMP25223221 | 230/240 | 283 | 1.28 | 70/140 | 117 x 86 x 73/97-106 Note ② | 2.0 | Y | 17 | 20/250 | PAE400255 PH400K255 PXE100255 | Y B1 Y | MCI6 PCX400255 | X Y |
| 250 | 2.1 | HMZ25322245 | 220/230/240 | 282 | 1.28 | 75/140 | 158 x 66 x 46/52 x 115-126 | 2.2 | | 1 | 20/250 | PAE400255 PH400K255 PXE100255 | A K A | PCX400255 | A |
| 250 | 2.1 | JHV26322221 | 220/230/240/250 | 280 | 1.25 | 75/140 | 106 x 94 x 65/80 x 90 | 2.2 | Y | 3 | 20/250 | PAE400255 PB404K255 PXE100255 | N A1 N | PCX400255 PJ404K255 | N A1 |
| 250 | 2.1 | MM255K202 | 200/210/220/ 230/240/250 Note ⑤ | 269 | 1.18 | 50/130 | 166 x 107 x 109/146 x 76 | 4.8 | | 5 | 20/250 | PAE400255 PH400K255 PXE100255 | V1 A2 V1 | PCX400255 | V1 |
| 250 | 2.1 | MN255K192 | 190/200/210/ 220/230/240 Note ⑥ | 269 | 1.18 | 55/130 | 133 x 107 x 109/113 x 76 | 4.4 | | 5 | 20/250 | PAE400255 PH400K255 PXE100255 | T1 B2 T1 | PCX400255 | T1 |

60Hz Control Gear For HPS & MH Lamps

See Also MM255K202 & MN255K192 Above

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μF/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|-----|--------------|-------------------|-------------------|---------------------|------------|--------------------------------|-------------|----|-----|----------------|-------------------------------------|----------------|---------------------|----------|
| 250 | 2.1 | HMJ252222BD | 220/230 | 283 | 1.28 | 70/140 | 117 x 86 x 74/96-108 Note ④ | 2.2 | Y | 35 | 16/250 | PAE400255 PH400K255 PXE100255 | J1 D2 J1 | MCI6-6 PCX400255 | H1 J1 |
| 250 | 2.1 | HMP252222BD | 220/230 | 283 | 1.28 | 70/140 | 117 x 86 x 73/97-106 Note ② | 2.0 | Y | 17 | 16/250 | PAE400255 PH400K255 PXE100255 | J1 D2 J1 | MCI6-6 PCX400255 | H1 J1 |
| 250 | 2.1 | HMZ25322645 | 220/230/240 | 282 | 1.28 | 75/140 | 158 x 66 x 46/52 x 115-126 | 2.2 | | 1 | 16/250 | PAE400255 PH400K255 | A K | PCX400255 | A |

Notes

Note ① 220/230/240/250/260/270 for 60Hz Capacitor 25/TBA
Note ② Additional fixings 66 x 106 - 114 mm & side fixings 96 - 114 mm
Note ③ Additional fixings 70 x 116 - 125 mm side fixings 116 - 125 mm

Note ④ Additional fixings 70 x 112 - 118 mm side fixings 113 - 125 mm
Note ⑤ 220/230/240/250/260/270 for 60Hz Capacitor 16/TBA
Note ⑥ 210/220/230/240/250/260 for 60Hz Capacitor 16/TBA

Note ⑦ Additional fixings 70 x 104 - 117 mm and side fixings 96 - 114 mm
Note ⑧ Additional fixings 70 x 147 - 160 mm and side fixings 136 - 154 mm
Note ⑨ Additional fixings 70 x 130 - 143 mm and side fixings 119 - 137 mm

See page 40 for Figs

Ballasts

250W

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Control Gear for HPS, MH & Ceramic MH Lamps

400W

50Hz Control Gear For HPS, MH & Ceramic MH Lamps

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μf/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|-----|-----------------------|-----------------------------------|-------------------|---------------------|------------|-----------------------------------|-------------|----|-----|----------------|-------------------------------------|----------------|------------------------|----------|
| 400 | 4.5 | HAA40223221 | 230/240 | 445 | 2.13 | 75/140 | 150 x 108 x 91/135 x 76 Note ⑤ | 4.8 | Y | 35 | 40/250 | PAE400255 PXE100255 | Y Y | MCi6 PCX400255 | X Y |
| 400 | 4.5 | HSJ40223221 | 230/240 | 445 | 2.13 | 75/140 | 167 x 86 x 74/146-158 Note ④ | 4.8 | Y | 35 | 40/250 | PAE400255 PXE100255 | Y Y | MCi6 PCX400255 | X Y |
| 400 | 4.5 | HSP40223221 | 230/240 | 445 | 2.13 | 75/140 | 167 x 86 x 73/148-158 Note ② | 4 | Y | 17 | 40/250 | PAE400255 PXE100255 | Y Y | MCi6 PCX400255 | X Y |
| 400 | 4.5 | HSV41322221 | 220/230/240/250 | 445 | 2.13 | 75/140 | 150 x 98 x 81/135 x 76 | 4.2 | Y | 9 | 40/250 | PAE400255 PB404K255 PXE100255 | N A1 N | PCX400255 PJ404K255 | N A1 |
| 400 | 4.5 | JAV41322221 | 220/230/240/250 | 445 | 2.13 | 80/140 | 120 x 104 x 81/90 x 100 | 4.2 | Y | 3 | 40/250 | PAE400255 PB404K255 PXE100255 | N A1 N | PCX400255 PJ404K255 | N A1 |
| 400 | 4.5 | EAV405202 | 200/210/220/230/240/250 Note ① | 445 | 2.13 | 70/140 | 150 x 98 x 81/135 x 76 | 4.3 | | 9 | 40/250 | PAE400255 PB404K255 PXE100255 | V1 Z1 V1 | PCX400255 PJ404K255 | V1 Z1 |
| 400 | 4.5 | ASM40520221 | 200/210/220/230/240/250 Note ① | 445 | 2.13 | 55/130 | 166 x 107 x 109/146 x 76 | 5.9 | Y | 5 | 40/250 | PAE400255 PB404K255 PXE100255 | V1 Z1 V1 | PCX400255 PJ404K255 | V1 Z1 |
| 400 | 4.5 | HSM405202 | 200/210/220/230/240/250 Note ① | 445 | 2.13 | 50/130 | 166 x 107 x 109/146 x 76 | 5.9 | | 5 | 40/250 | PAE400255 PB404K255 PXE100255 | V1 Z1 V1 | PCX400255 PJ404K255 | V1 Z1 |
| 400 | 4.5 | HSN415202 | 200/210/220/230/240/250 Note ① | 445 | 2.13 | 65/130 | 133 x 107 x 109/113 x 76 | 5.9 | | 5 | 40/250 | PAE400255 PB404K255 PXE100255 | V1 Z1 V1 | PCX400255 PJ404K255 | V1 Z1 |
| 400 | 4.5 | HSN41322221 | 220/230/240/250 | 445 | 2.13 | 70/130 | 133 x 107 x 109/113 x 76 | 5.0 | Y | 5 | 40/250 | PAE400255 PB404K255 PXE100255 | N A1 N | PCX400255 PJ404K255 | N A1 |
| 400 | 4.5 | HSN415192 | 190/200/210/220/230/240 | 445 | 2.13 | 70/130 | 133 x 107 x 109/113 x 76 | 5.0 | | 5 | 40/250 | PAE400255 PB404K255 PXE100255 | T1 U1 T1 | PCX400255 PJ404K255 | T1 UI |
| 400/250 | 4.5 | AV254023221 Note ③ | 230/240 | 445 | 2.13 | 70/140 | 150 x 108 x 91/135 x 76 | 6.0 | Y | 8 | 40/250 | PAE400255 PXE100255 | X1 X1 | PCX400255 | X1 |

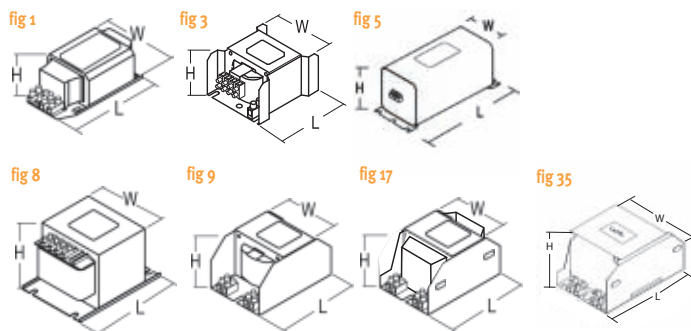
60Hz Control Gear For HPS, MH & Ceramic MH Lamps

See Also EAV405202, ASM40520221 & HSM405202 Above

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μf/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|-----|--------------|-------------------|-------------------|---------------------|------------|-----------------------------------|-------------|----|-----|----------------|------------------------|----------|---------------------|----------|
| 400 | 4.5 | HAA40222BD | 220/230 | 445 | 2.13 | 75/140 | 150 x 108 x 91/135 x 76 Note ⑤ | 4.6 | Y | 35 | 35/250 | PAE400255 PXE100255 | J1 J1 | MCi6-6 PCX400255 | H1 J1 |
| 400 | 4.5 | HSJ40222BD | 220/230 | 445 | 2.13 | 75/140 | 167 x 86 x 74/146-158 Note ④ | 4.8 | Y | 35 | 35/250 | PAE400255 PXE100255 | J1 J1 | MCi6-6 PCX400255 | H1 J1 |
| 400 | 4.5 | HSP40222BD | 220/230 | 445 | 2.13 | 75/140 | 167 x 86 x 73/148-158 Note ② | 4 | Y | 17 | 35/250 | PAE400255 PXE100255 | J1 J1 | MCi6-6 PCX400255 | H1 J1 |

NOTES

- Note ① 220/230/240/250/260/270 for 60Hz Capacitor 35/TBA
- Note ② Additional fixings 66 x 148 - 154 & side 139 - 151 mm
- Note ③ Suitable for step dimming to 250W
- Note ④ Additional fixings 70 x 146 - 155 mm side fixing 146 - 155 mm
- Note ⑤ Additional side fixings 131 - 139 mm



Control Gear for MH & Ceramic MH Lamps

350W 400W & 450W

Ballasts

350 - 450W

50Hz Control Gear For MH Lamps

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μf/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|--------------|---------------------|---------------------------------------|-------------------|---------------------|------------------|---------------------------------|-------------|----|-----|------------------|--|----------------------|------------------------|----------|
| 350 | 2.8 | HMA35223221 | 230/240 | 377 | 1.82 | 70/140 | 167 x 87 x 72/150-160 Note ⑦ | 3.2 | Y | 35 | 20/250 | PAE400255 PXE100255 | Y Y | MCi6 PCX400255 | X Y |
| 350 | 2.8 | HMJ35223221 | 230/240 | 377 | 1.82 | 70/140 | 137 x 86 x 74/116-128 Note ① | 3 | Y | 35 | 20/250 | PAE400255 PXE100255 | Y Y | MCi6 PCX400255 | X Y |
| 350 | 2.8 | HMP35223221 | 230/240 | 377 | 1.82 | 70/140 | 137 x 86 x 73/118-128 Note ⑤ | 2.7 | Y | 17 | 20/250 | PAE400255 PXE100255 | Y Y | MCi6 PCX400255 | X Y |
| 350 | 2.8 | JHV35322245 | 220/230/240 | 374 | 1.82 | 65/140 | 120 x 104 x 81/90 x 100 | 3.5 | | 3 | 20/250 | PAE400255 PXE100255 | N N | PCX400255 | N |
| 350/400 | 2.8/ 3.25 | JH3540235 Note ③ | 230 | 374/ 430 | 1.8/ 2.0 | 60/140 70/140 | 120 x 104 x 81/90 x 100 | TBA | | 3 | 20/250 25/250 | PAE400255 PXE100255 | E2 E2 | PCX400255 | E2 |
| 400 | 3.25 | HMA40223221 | 230/240 | 430 | 2.01 | 75/140 | 167 x 87 x 72/150-160 Note ⑦ | 3.4 | Y | 35 | 25/250 | PAE400255 PH400K255 PXE100255 | Y B1 Y | MCi6 PCX40025 | X Y |
| 400 | 3.25 | HMA402232CH | 230/240 | 430 | 2.01 | 75/140 | 150 x 86 x 72/132-142 Note ⑧ | 3.5 | Y | 35 | 25/250 | PAE400255 PH400K255 PXE100255 | Y B1 Y | MCi6 PCX40025 | X Y |
| 400 | 3.25 | HMJ40223221 | 230/240 | 430 | 2.01 | 75/140 | 137 x 86 x 74/116-128 Note ① | 3.1 | Y | 35 | 25/250 | PAE400255 PH400K255 PXE100255 | Y B1 Y | MCi6 PCX40025 | X Y |
| 400 | 3.25 | HMP40223221 | 230/240 | 430 | 2.01 | 75/140 | 137 x 86 x 73/118-128 Note ⑤ | 2.8 | Y | 17 | 25/250 | PAE400255 PH400K255 PXE100255 | Y B1 Y | MCi6 PCX40025 | X Y |
| 400 | 3.25 | HMZ40322245 | 220/230/240 | 430 | 2.01 | 70/140 | 198 x 66 x 46/52 x 155-166 | 3.1 | | 1 | 25/250 | PAE400255 PH400K255 PXE100255 | A K A | PCX400255 | A |
| 400 | 3.25 | JHV413222B3 | 220/230/240 | 430 | 2.03 | 80/140 | 120 x 104 x 81/90 x 100 | 3.8 | Y | 3 | 25/250 | PAE400255 PH400K255 PXE100255 | A K A | PCX400255 | A |
| 400 | 3.25 | EMV405202 | 200/210/220/ 230/240/250 Note ⑥ | 425 | 1.93 | 75/140 | 150 x 98 x 81/135 x 76 | 3.8 | | 9 | 25/250 | PAE400255 PB404K255 PH400K255 PXE100255 | V1 Z1 A2 V1 | PCX400255 PJ404K255 | V1 Z1 |
| 400 | 3.25 | MM405K202 | 200/210/220/ 230/240/250 Note ⑥ | 425 | 1.93 | 60/130 | 166 x 107 x 109/146 x 76 | 5.2 | | 5 | 25/250 | PAE400255 PH400K255 PXE100255 | V1 A2 V1 | PCX400255 | V1 |

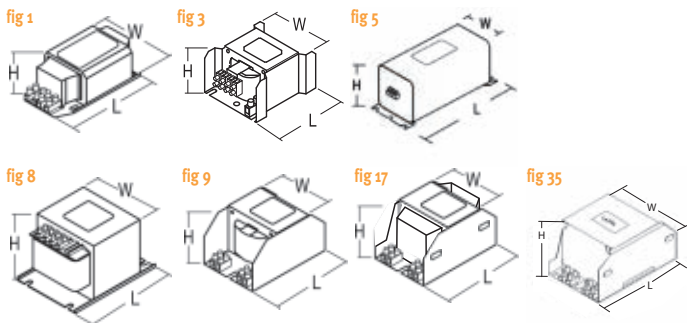
60Hz Control Gear For MH Lamps

See Also EMV405202 & MM405K202 Above

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μf/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|------|--------------|-------------------|-------------------|---------------------|------------|---------------------------------|-------------|----|-----|----------------|-------------------------------------|----------------|---------------------|----------|
| 400 | 3.25 | HMA402222BD | 220/230 | 430 | 2.01 | 75/140 | 167 x 87 x 72/150-160 Note ⑦ | 3 | Y | 35 | 20/250 | PAE400255 PH400K255 PXE100255 | J1 D2 J1 | MCi6-6 PCX400255 | H1 J1 |
| 400 | 3.25 | HMJ402222BD | 220/230 | 430 | 2.01 | 75/140 | 137 x 86 x 74/116-128 Note ① | 3.1 | Y | 35 | 20/250 | PAE400255 PH400K255 PXE100255 | J1 D2 J1 | MCi6-6 PCX400255 | H1 J1 |
| 400 | 3.25 | HMP402222BD | 220/230 | 430 | 2.01 | 75/140 | 137 x 86 x 73/118-128 Note ⑤ | 2.8 | Y | 17 | 20/250 | PAE400255 PH400K255 PXE100255 | J1 D2 J1 | MCi6-6 PCX400255 | H1 J1 |

50Hz Control Gear For MH Lamps

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μf/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|-----|--------------|-------------------|-------------------|---------------------|------------|-----------------------------------|-------------|----|-----|----------------|------------------------|---------|-------------------|---------|
| 450 | 3.7 | HAA40223221 | 230/240 | 477 | 2.28 | 75/140 | 150 x 108 x 91/135 x 76 Note ⑨ | 6.0 | Y | 35 | 25/250 | PAE400255 PXE100255 | Y Y | MCi6 PCX400255 | X Y |
| 450 | 3.7 | HSJ40223221 | 230/240 | 477 | 2.28 | 75/140 | 167 x 86 x 74/146 - 158 Note ④ | 4.8 | Y | 35 | 25/250 | PAE400255 PXE100255 | Y Y | MCi6 PCX400255 | X Y |
| 450 | 3.7 | HSP40223221 | 230/240 | 477 | 2.28 | 75/140 | 167 x 86 x 73/148-158 Note ② | 4.0 | Y | 17 | 25/250 | PAE400255 PXE100255 | Y Y | MCi6 PCX400255 | X Y |



NOTES

- Note ① Additional fixings 70 x 116 - 125 mm side fixings 116 - 125 mm
- Note ② Additional fixings 66 x 148 - 154 mm & side 139 - 151 mm
- Note ③ 350W ballast with additional tapping for 400W lamps
- Note ④ Additional fixings 70 x 146 - 155 mm side fixing 146 - 155 mm
- Note ⑤ Additional fixings 66 x 116 - 124 mm & side 106 - 124 mm
- Note ⑥ 220/230/240/250/260/270 for 60Hz Capacitor 20/TBA
- Note ⑦ Additional fixings 70 x 147 - 160 mm and side fixings 136 - 154 mm
- Note ⑧ Additional fixings 70 x 126 - 140 mm and side fixings 119 - 137 mm
- Note ⑨ Additional side fixings 131 - 139 mm

Control Gear for HPS, MH Lamps

600W 875W 1000W 1500W & 2000W

50Hz Control Gear For HPS & MH Lamps

| Lamp (W) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μF/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|--------------|-----------------------------------|-------------------|---------------------|------------|---|-------------|----|-----|-------------------|--|------------------|------------------------|----------|
| 600 | HAA60223221 | 230/240 | 655 | 2.89 | 80/140 | 177 x 108 x 92/156 x 162 | 7.0 | Y | 24 | 60/250 | PXE000255 | Y | MCI-600 PCX000255 | X Y |
| 600 | HAV60223221 | 230/240 | 655 | 2.89 | 80/140 | 150 x 108 x 91/135 x 76 Note ② | 6.0 | Y | 24 | 60/250 | PXE000255 | Y | MCI-600 PCX000255 | X Y |
| 600 | HAV603222B3 | 220/230/240 | 655 | 2.89 | 80/140 | 150 x 108 x 91/135 x 76 | 6.0 | Y | 8 | 60/250 | PXE000255 | A | PCX000255 | A |
| 600 | HAV602232 | 230/240 | 655 | 2.89 | 80/140 | 150 x 108 x 91/135 x 76 | 6.0 | | 24 | 60/250 | PXE000255 | Y | MCI-600 PCX000255 | X Y |
| 600 | HSM605202 | 200/210/220/230/240/250 Note ① | 655 | 3.1 | 75/130 | 166 x 107 x 109/146 x 76 | 7.6 | | 5 | 60/250 | PB600K255 PXE000255 | F2 V1 | PCX000255 PJ600K255 | V1 Z1 |
| 875 | SHQ877232 | 230/240 | 970 | 4.5 | 90/140 | 121 x 108 x 100/111 x 98 | - | | - | 26/500 | BVS-020 | See Datasheet | | |
| 875/1000 | HMP803383 | 380/400/415 | 915/1100 | 2.5/3.0 | 75/140 | 190 x 120 x 105/166 x 103 | 10 | | 6 | 15/440 | PXE150485 | See Datasheet | | |
| 1000 | HDP002232 | 230/240 | 1105 | 5.0 | 80/140 | 190 x 120 x 102/103 x 155 - 177 Note ⑤ | 9.4 | | 6 | 2 x 50/250 | PXE000255 | Q | PCX000255 MCI-1000 | Q Z |
| 1000 | HDP003212 | 210/220/230/240 | 1105 | 5.0 | 80/140 | 190 x 120 x 102/103 x 155 - 177 Note ⑤ | 9.4 | | 6 | 2 x 50/250 | PXE000255 | Q | PCX000255 | Q |
| 1000 | HDV003212 | 210/220/230/240 | 1105 | 5.0 | 80/140 | 177 x 150 x 126/138 x 125 | 10.8 | | 6 | 2 x 50/250 | PB000K255 PXE000255 | R Q | PCX000255 PJ000K255 | Q S |
| 1000 | HSV003222 | 220/230/240/250 | 1090 | 5.2 | 60/140 | 215 x 150 x 126/180 x 125 | 15.5 | | 6 | 2 x 50/250 | PB000K255 PXE000255 | J2 N | PCX000255 PJ000K255 | N A1 |
| 1000 | HDF00322245 | 220/230/240 | 1105 | 5.0 | 65/130 | 200 x 160 x 140/180 x 125 | 14.0 | | 22 | 2 x 50/250 | PXE000255 | A | PCX000255 | A |
| 1000 | HSV043383 | 380/400/415 | 1090 | 3 | 60/140 | 215 x 150 x 126/180 x 125 | 16.5 | | 6 | 30/440 | PB500K445 PXE150485 | T B | N/A | |
| 1000 | HSV043384 | 380/415/440 | 1090 | 3 | 60/140 | 215 x 150 x 126/180 x 125 | 16.5 | | 6 | 30/440 | PB500K445 PXE150485 | L2 M2 | N/A | |
| 1000 | HSV042405AD | 400 Note ③ | 1090 | 3 | 60/140 | 215 x 150 x 126/180 x 125 | 16.5 | | 6 | 30/440 | PXE150485 | K2 | N/A | |
| 1000 | HIB00322245 | 220/230/240 | 1080 | 5.1 | 65/130 | 223 x 110 x 112/203 x 76 | 11.0 | | 5 | 2 x 35/250 | PH400K255 PXE000255 | K A | N/A | |
| 1000 | HQV002224 | 220/240 | 1080 | 5.1 | 65/140 | 177 x 150 x 126/138 x 125 | 10.8 | | 6 | 2 x 35/250 | PB000K255 PH400K255 PXE000255 | G2 H2 F1 | PJ000K255 | G1 |
| 1000 | HMM043383 | 380/400/415 | 1035 | 2.7 | 70/130 | 166 x 107 x 109/146 x 76 | 7.6 | | 5 | 15/440 | PBA200485 PB500K445 PT150K445 PXE150485 | L T B B | PCT150485 | D1 |
| 1000 | YHB04024521 | 240 | 1090 | 5.15 | 75/130 | 330 x 110 x 112/310 x 76 | 15.0 | Y | 5 | 15/440V Note ④ | PBA200485 PT150K445 | V M | PCT150485 | D1 |
| 1500 | HMV022383 | 380/400/415 | 1580 | 4.77 | 60/140 | 215 x 150 x 126/180 x 125 | 15.0 | | 6 | 30/440 | PBA200485 PT150K445 | L B | PCT150485 | D1 |
| 2000 | HMV913222 | 220/230/240/250 | 2105 | 9.9 | 75/140 | 215 x 150 x 126/180 x 125 | 16.5 | | 6 | 2 x 50/250 | PH400K255 PBE900245 | N2 N | N/A | |
| 2000 | HMV943383 | 380/400/415 | 2085 | 5.6 | 65/140 | 215 x 150 x 126/180 x 125 | 16.5 | | 6 | 40/440 | PBA200485 PB500K445 PXE150485 | L T B | PCX150485 | B |
| 2000 | HZP944384V2 | 380/400/415/430 | 2105 | 6 | 75/140 | 277 x 124 x 103/250 - 262 Note ⑤ | 15.8 | | 33 | 45/440 | PB500K445 PT150K445 PXE150485 | C1 D1 D1 | PCX150485 PCT150485 | B D1 |
| 2000 | HZV943383 | 380/400/415 | 2105 | 6 | 75/140 | 215 x 150 x 126/180 x 125 | 16.5 | | 6 | 45/440 | PB500K445 PT150K445 PXE150485 | T B B | PCX150485 PCT150485 | B D1 |
| 2000 | HZV944384V2 | 380/400/415/430 | 2105 | 6 | 75/140 | 215 x 150 x 126/180 x 125 | 16.5 | | 6 | 45/440 | PB500K445 PT150K445 PXE150485 | C1 D1 D1 | PCX150485 PCT150485 | B D1 |

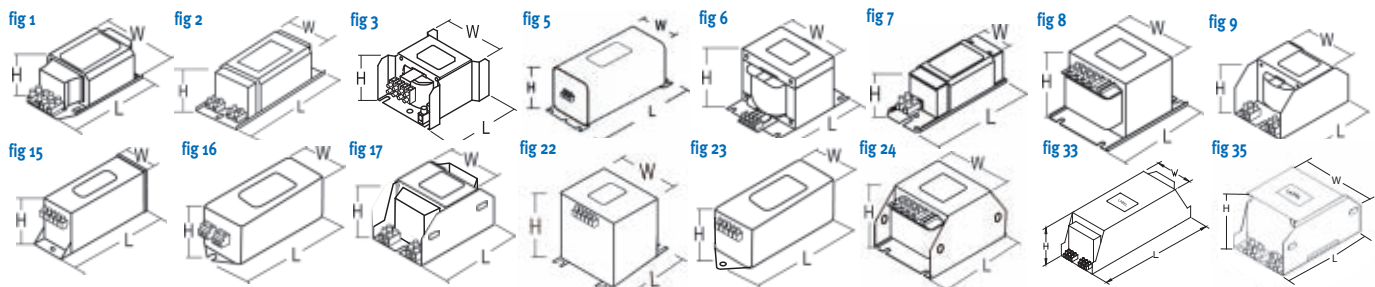
60Hz Control Gear For HPS & MH Lamps

See Also HSM605202 & HSV042405AD Above

| Lamp (W) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μF/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|--------------|-------------------|-------------------|---------------------|------------|-----------------------------------|-------------|----|-----|----------------|------------------------|----------|---------------|---------|
| 600 | HAV602222BD | 220/230 | 655 | 2.89 | 80/140 | 150 x 108 x 91/135 x 76 Note ② | 6.0 | Y | 24 | 50/250 | PXE000255 | J1 | MCI6-6 | H1 |
| 1000 | HDV00322645 | 220/230/240 | 1105 | 5.0 | 80/140 | 177 x 150 x 126/138 x 125 | 10.8 | | 6 | 2 x 40/250 | PXE000255 | A | N/A | |
| 2000 | HMV913222E6 | 220/230/240/250 | 2105 | 9.9 | 75/140 | 215 x 150 x 126/180 x 125 | 16.5 | | 6 | 2 x 40/250 | PH400K255 PBE900255 | N2 N | N/A | |
| 2000 | HZV940446 | 440 | 2105 | 6 | 75/140 | 215 x 150 x 126/180 x 125 | 16.5 | | 6 | 40/440 | PT150K445 PXE150485 | P2 P2 | PCT150485 | D1 |

Notes

Note ① 220/230/240/250/260/270 for 60Hz Capacitor 50/TBA Note ② Additional side fixings 131 - 139 mm Note ③ 480V 60Hz Capacitor 25/TBA Note ④ Essential Capacitor Note ⑤ Additional fixings 103 x 243 - 261 mm



Control Gear for Mercury Lamps /SOX Lamps

50W - 1000W /35W - 135W

50Hz Control Gear For Mercury Lamps

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μf/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|------|--------------|-----------------------------------|-------------------|---------------------|------------|---------------------------------|-------------|----|-----|----------------|------------------|---------|---------------|---------|
| 50 | 0.62 | MP052K232 | 230/240 | 63 | 0.29 | 65/140 | 106 x 65 x 52/52 x 86-98 | 0.7 | | 2 | 6/250 | N/A | Z | N/A | |
| 50 | 0.62 | MGO53K22245 | 220/230/240 | 63 | 0.30 | 65/140 | 173 x 53 x 46/150-165 | 0.9 | | 7 | 6/250 | N/A | G | N/A | |
| 50 | 0.62 | MZ053K22245 | 220/230/240 | 63 | 0.29 | 60/140 | 100 x 66 x 46/52 x 57-68 | 0.9 | | 1 | 6/250 | N/A | G | N/A | |
| 80 | 0.8 | MP082K232 | 230/240 | 95 | 0.43 | 65/130 | 106 x 65 x 52/52 x 86 - 98 | 1.0 | | 2 | 8/250 | N/A | Z | N/A | |
| 80 | 0.8 | MGO83K22245 | 220/230/240 | 96 | 0.43 | 75/140 | 173 x 53 x 46/150-165 | 1.0 | | 7 | 8/250 | N/A | G | N/A | |
| 80 | 0.8 | MZ083K22245 | 220/230/240 | 94 | 0.43 | 55/140 | 100 x 66 x 46/52 x 57-68 | 1.0 | | 1 | 8/250 | N/A | G | N/A | |
| 125 | 1.15 | MP127K232 | 230/240 | 144 | 0.65 | 70/140 | 106 x 65 x 52/52 x 86-98 | 1.1 | | 2 | 10/250 | N/A | Z | N/A | |
| 125 | 1.15 | MG128B22245 | 220/230/240 | 145 | 0.66 | 75/140 | 153 x 53 x 46/131-146 | 1.2 | | 7 | 10/250 | N/A | G | N/A | |
| 125 | 1.15 | MZ128K22245 | 220/230/240 | 143 | 0.65 | 60/140 | 118 x 66 x 46/52 x 75-86 | 1.4 | | 1 | 10/250 | N/A | G | N/A | |
| 250 | 2.1 | HMJ25223221 | 230/240 | 283 | 1.28 | 70/140 | 117 x 86 x 74/96-108 Note ⑦ | 2.3 | Y | 35 | 20/250 | N/A | Z | N/A | |
| 250 | 2.1 | HMP25223221 | 230/240 | 283 | 1.28 | 70/140 | 117 x 86 x 73/97-106 Note ② | 2.0 | Y | 2 | 20/250 | N/A | Z | N/A | |
| 250 | 2.1 | HMZ25322245 | 220/230/240 | 282 | 1.28 | 75/140 | 158 x 66 x 46/52 x 115-126 | 2.2 | | 1 | 20/250 | N/A | G | N/A | |
| 250 | 2.1 | JHV26322221 | 220/230/240/250 | 280 | 1.25 | 75/140 | 106 x 94 x 65/80 x 90 | 2.2 | Y | 3 | 20/250 | N/A | W | N/A | |
| 250 | 2.1 | MM255K202 | 200/210/220/230/240/250 Note ① | 269 | 1.18 | 50/130 | 166 x 107 x 109/146 x 76 | 4.8 | | 5 | 20/250 | N/A | Q2 | N/A | |
| 250 | 2.1 | MN255K192 | 190/200/210/220/230/240 Note ③ | 269 | 1.18 | 55/130 | 133 x 107 x 109/113 x 76 | 4.4 | | 5 | 20/250 | N/A | S2 | N/A | |
| 400 | 3.25 | HMJ40223221 | 230/240 | 430 | 2.01 | 75/140 | 137 x 86 x 74/116-128 Note ⑧ | 3.1 | Y | 35 | 25/250 | N/A | Z | N/A | |
| 400 | 3.25 | HMP40223221 | 230/240 | 430 | 2.01 | 75/140 | 137 x 86 x 73/118-128 Note ④ | 2.8 | Y | 17 | 25/250 | N/A | Z | N/A | |
| 400 | 3.25 | HMZ40322245 | 220/230/240 | 430 | 2.01 | 70/140 | 198 x 66 x 46/52 x 155-166 | 3.1 | | 1 | 25/250 | N/A | G | N/A | |
| 400 | 3.25 | JHV413222B3 | 220/230/240 | 430 | 2.03 | 80/140 | 120 x 104 x 81/90 x 100 | 3.8 | Y | 3 | 25/250 | N/A | G | N/A | |
| 400 | 3.25 | EMV405202 | 200/210/220/230/240/250 Note ⑤ | 425 | 1.93 | 75/140 | 150 x 98 x 81/135 x 76 | 3.8 | | 9 | 25/250 | N/A | Q2 | N/A | |
| 400 | 3.25 | MM405K202 | 200/210/220/230/240/250 Note ⑤ | 425 | 1.93 | 60/130 | 166 x 107 x 109/146 x 76 | 5.2 | | 5 | 25/250 | N/A | Q2 | N/A | |
| 1000 | 7.5 | MM003K222 | 220/230/240/250 | 1040 | 5.0 | 75/130 | 166 x 107 x 109/146 x 76 | 7.6 | | 5 | 50/250 | N/A | U | N/A | |
| 1000 | 4.1 | HMM043383 | 380/400/415 | 1035 | 2.7 | 70/130 | 166 x 107 x 109/146 x 76 | 7.6 | | 5 | 15/440 | N/A | H | N/A | |

Control Gear For Sox lamps

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μf/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|-----------|--------------|-------------------|-------------------|---------------------|------------|---------------------------|-------------|----|-----|------------------|------------------|-----------|---------------|---------|
| 35 | 0.6 | RSM035245 | 240 | 50 | 0.23 | 45 ta | 165 x 60 x 48/152 | 1.8 | | 16 | 8/250 | Integral | E | N/A | N/A |
| 35/55 | 0.6/0.59 | SZ355K245 | 240 | 48/68 | 0.22/0.31 | 70/140 | 118 x 66 x 46/52 x 75-86 | 1.0 | | 1 | 8/250 6/250 | PB035K245 | C | PB055K245 | C |
| 35/55 | 0.6/0.59 | SG355B245 | 240 | 50/69 | 0.23/0.32 | 60/140 | 153 x 53 x 46/131-146 | 0.8 | | 7 | 8/250 6/250 | PB035K245 | C | PB055K245 | C |
| 35/55 | 0.6/0.59 | RSD355245 | 240 | 50/69 | 0.23/0.32 | 50 ta | 144 x 65 x 51/130 | 1.3 | | 23 | 8/250 6/250 | N/A | Integral | Integral | S1 |
| 35/55 | 0.6/0.59 | RSF355245 | 240 | 50/69 | 0.23/0.32 | 70 tc | 159 x 50 x 67/146 | 1.8 | | 15 | 8/250 6/250 | N/A | Integral | Integral | D |
| 35/55 | 0.6/0.59 | RSL355245 | 240 | 50/69 | 0.23/0.32 | 45 tc | 165 x 76 x 54/152 | 2.0 | | 16 | 8/250 6/250 | N/A | Integral | Integral | E |
| 90 | 0.94 | SZ090K245 | 240 | 104 | 0.48 | 65/140 | 118 x 66 x 46/52 x 75-86 | 1.3 | | 1 | 8/250 | N/A | PB090K245 | PB090K245 | C |
| 90 | 0.94 | SG090B245 | 240 | 105 | 0.49 | 65/140 | 153 x 53 x 46/131-146 | 1.3 | | 7 | 8/250 | N/A | PB090K245 | PB090K245 | C |
| 90 | 0.94 | RSL090245 | 240 | 106 | 0.49 | 45 ta | 165 x 76 x 54/152 | 2.2 | | 16 | 8/250 | N/A | Integral | Integral | E |
| 90 | 0.94 | SL093K222 | 220/230/240/250 | 125 | 0.58 | 65/130 | 178 x 99 x 74/162 | 4.8 | | 16 | 25/250 | N/A | R1 | N/A | |
| 135 | 0.95 | RSA135245 | 240 | 175 | 0.88 | 35 ta | 224 x 76 x 59/210 | 3.9 | | 16 | 20/250 | Integral | E | N/A | |
| 135/180 | 0.95/0.91 | SM138K222 | 220/230/240/250 | 175/225 | 0.84/1.04 | 70/130 | 166 x 107 x 109/146 x 76 | 7.4 | | 5 | 15/440 Note ⑥ | N/A | F | N/A | |

See page 44 for Figs

Notes

- Note ① 220/230/240/250/260/270 for 60Hz Capacitor 16/TBA
- Note ② Additional fixings 66 x 106 - 114 mm & side 96 - 114 mm
- Note ③ 210/220/230/240/250/260 for 60Hz Capacitor 16/TBA
- Note ④ Additional fixings 66 x 116 - 124 & side 106 - 124 mm
- Note ⑤ 220/230/240/250/260/270 for 60Hz Capacitor 20/TBA
- Note ⑥ Essential Capacitor
- Note ⑦ Additional fixings 52 x 112 - 118 mm side fixings 113 - 125 mm
- Note ⑧ Additional fixings 70 x 116 - 125 mm side fixings 116 - 125 mm
- (ta) Maximum Ambient temperature
- (tc) Maximum Case temperature

Control Gear for CWA ,MH, Other Lamps, Lamp Detecting Device & Auto transformers

Control Gear For CWA MH Lamps

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μF/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|------|--------------|-------------------|-------------------|---------------------|------------|------------------------------|-------------|----|-----|------------------|------------------------|---------------|---------------|---------|
| 175 | 1.5 | HMZ17822245 | 220/230/240 | 197 | 0.91 | 55/140 | 137 x 66 x 46/52 x 118 - 126 | 2.2 | | 1 | 20/250 | PAE400255 PH400K255 | A K | PCX400255 | A |
| 250 | 2.1 | SHQ250115 | 110 | 289 | 2.9 | 80/140 | 150 x 94 x 130/62 x 135 | 3-75 | | 4 | 17.5/450 | N/A | See Datasheet | | |
| 400 | 3.25 | SHQ400115 | 110 | 455 | 4-35 | 80/140 | 150 x 100 x 130/77 x 135 | 4-75 | | 4 | 28/450 | N/A | See Datasheet | | |
| 400 | 3.25 | SHW40322245 | 220/230/240 | 465 | 2.0 | 85/140 | 159 x 118 x 93/135 x 99 | 7-5 | | 4 | 25/440 Note ④ | N/A | J | N/A | |

Special Control Gear for IWASAKI Lamps & Cold Cathode Lamps

| Lamp (W) | (A) | Ballast Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions LxWxH/Fix (mm) | Weight (kg) | TC | Fig | Capacitor μF/V | Standard Ignitor | Circuit | Timed Ignitor | Circuit |
|----------|------|---------------------|-------------------|-------------------|---------------------|------------|------------------------------|-------------|----|-----|------------------|------------------|---------|---------------|---------|
| 100 | 1.5 | AIZ100205 Note ① | 200 | 116 | 1.02 | 65/140 | 128 x 66 x 46/52 x 85-96 | 1.6 | | 1 | 20/250 Note ④ | PIE150205 | N1 | N/A | |
| 100 | 1.5 | YAZ10024521 | 240 | 120 | 0.4 | 60/140 | 198 x 66 x 46/52 x 155 - 166 | 2.1 | Y | 18 | 20/250 Note ④ | PIE150205 | P | N/A | |
| 150 | 1.9 | AIZ150205 Note ② | 200 | 166 | 1.02 | 75/140 | 137 x 66 x 46/52 x 115 - 126 | 1.8 | | 1 | 25/250 Note ④ | PIE150205 | C2 | N/A | |
| 150 | 1.9 | YAZ15024521 | 240 | 173 | 0.78 | 70/140 | 215 x 66 x 46/52 x 155-166 | 2.4 | Y | 18 | 25/250 Note ④ | PIE150205 | P | N/A | |
| N/A | 0.45 | CGN450850 | 240 | N/A | N/A | N/A | 185 x 103 x 78/165 x 76 | 5 | | 5 | - | N/A | R2 | N/A | |

Lamp Detecting Device

| Auxiliary Lamp (W) | (A max) | Product Code | Input Voltage (V) | Circuit Watts (W) | Running Current (A) | Δt/tw (°C) | Dimensions Ø x L/Fix (mm) | Weight (kg) | TC | Fig | Max Ignition Pulse (kV) | Internal Temperature (°C) | Circuit |
|--------------------|---------|--------------|-------------------|-------------------|---------------------|------------|---------------------------|-------------|----|-----|-------------------------|---------------------------|--------------|
| 50-500 | 2.1 | LDD500255 | 240 | - | - | 85tc | 45 x 102/ M8 x 10 | 0.25 | - | 26 | 5.0 | 25 | T2 Note ⑤ |

Auto Transformers

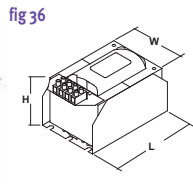
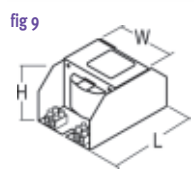
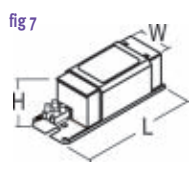
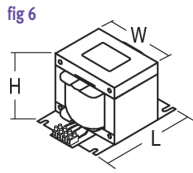
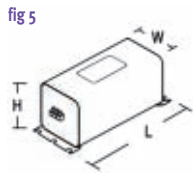
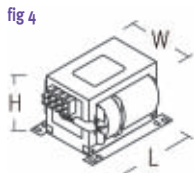
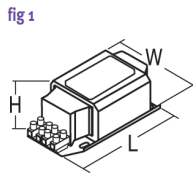
| VA | Product Code | Voltage Input - Output (V) | Dimension LxWxH/Fix (mm) | Weight (kg) | Thermal Cut-out | Fig |
|------|--------------|----------------------------|---------------------------|-------------|-----------------|-----|
| 120 | XNG220240J8 | 220/230 - 240 | 92 x 53 x 46/76 x 86 | 0.5 | | 7 |
| 120 | XNZ220200M1 | 220/230/ 240 - 200 | 100 x 66 x 46/52 x 57-68 | 0.4 | Y | 1 |
| 200 | XCG100240 | 100 - 240 | 173 x 53 x 46/150-165 | 1.45 | | 7 |
| 200 | XCZ23020021 | 230 - 200 | 100 x 66 x 46/52 x 57-68 | 0.45 | Y | 1 |
| 500 | XEM11024021 | 110 - 240 | 166 x 107 x 109/146 x 76 | 5.2 | Y | 5 |
| 500 | XEM120240 | 120 - 240 | 166 x 107 x 109/146 x 76 | 5.2 | | 5 |
| 500 | XEN38024022 | 380/480 - 240 | 133 x 107 x 109/113 x 76 | 4.8 | Y | 5 |
| 500 | XEV110220AR | 110 - 220 | 150 x 98 x 81/135 x 76 | 3.6 | Y Note ③ | 9 |
| 500 | XEV110240 | 110 - 240 | 150 x 98 x 81/135 x 76 | 3.6 | | 9 |
| 500 | XEV12022021 | 120 - 220 | 150 x 98 x 81/135 x 76 | 3.6 | | 9 |
| 1250 | XFM110240 | 110 - 240 | 166 x 107 x 109/146 x 76 | 9.5 | | 5 |
| 1250 | XFM24041521 | 240 - 415 | 166 x 107 x 109/146 x 76 | 7.5 | | 5 |
| 1250 | XFV110220AR | 110 - 220 | 158 x 98 x 112/135 x 76 | 8.3 | Y Note ③ | 36 |
| 1500 | XGV480240 | 480 - 240 | 215 x 150 x 126/180 x 125 | 15.5 | | 6 |

All transformers are designed to operate with suitable power factor correction capacitors in circuit

Notes

- Note ① For use with XNZ220200M1 Transformer
- Note ② For use with XCZ23020021 Transformer
- Note ③ Non resetting thermal cutout fitted
- Note ④ Essential Capacitor
- Note ⑤ Other Circuits on Request

(tc) Maximum Case temperature



High Power Factor Conversion Kits

200w Resin Filled with Ignitor and Capacitor

| Part No | Fitting Type | Kit Description | Ballast | Ignitor | Capacitor | Lamp | Fig |
|----------------------|----------------|---------------------------------|-------------|---------|-----------|-------|-----|
| IBM-200WCONKIT-00247 | Open rated | HIPT 200W/H75/UVS/T52/PS/4K KIT | IBM200245CU | INT | INT | 00247 | 38 |
| IBM-200WCONKIT-00285 | Enclosed rated | HIT 200W/H75/PS/4K KIT | IBM200245CU | INT | INT | 00285 | 38 |
| IBM-200WCONKIT-10058 | Enclosed rated | HIE 200W/C/U/PS/4K KIT | IBM200245CU | INT | INT | 10058 | 38 |
| IBM-200WCONKIT-10059 | Open rated | HIPE 200W/C/V/UVS/PS/4K KIT | IBM200245CU | INT | INT | 10059 | 38 |
| IMB-200WCONKIT-10067 | Open rated | HIPE 200W/V/PS/4K KIT | IBM200245CU | INT | INT | 10067 | 38 |
| IBM-200WCONKIT-88247 | Enclosed rated | HIE 200W/U/PS/4K KIT | IBM200245CU | INT | INT | 88247 | 38 |

200w Magnetic Loose Gear

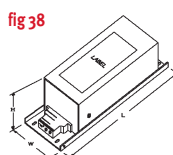
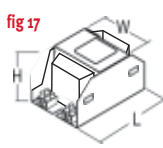
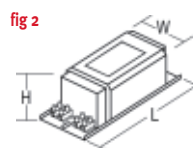
| Part No | Fitting Type | Kit Description | Ballast | Ignitor | Capacitor | Lamp | Fig |
|------------------|----------------|---------------------------------|-------------|---------|---------------|-------|-----|
| 200WCONKIT-00247 | Open rated | HIPT 200W/H75/UVS/T52/PS/4K KIT | HMP20223221 | MCI6 | R1008HP120P25 | 00247 | 2 |
| 200WCONKIT-00285 | Enclosed rated | HIT 200W/H75/PS/4K KIT | HMP20223221 | MCI6 | R1008HP120P25 | 00285 | 2 |
| 200WCONKIT-10058 | Enclosed rated | HIE 200W/C/U/PS/4K KIT | HMP20223221 | MCI6 | R1008HP120P25 | 10058 | 2 |
| 200WCONKIT-10059 | Open rated | HIPE 200W/C/V/UVS/PS/4K KIT | HMP20223221 | MCI6 | R1008HP120P25 | 10059 | 2 |
| 200WCONKIT-10067 | Open rated | HIPE 200W/V/PS/4K KIT | HMP20223221 | MCI6 | R1008HP120P25 | 10067 | 2 |
| 200WCONKIT-88247 | Enclosed rated | HIE 200W/U/PS/4K KIT | HMP20223221 | MCI6 | R1008HP120P25 | 88247 | 2 |

350w Resin Filled with Internal Ignitor and Capacitor

| Part No | Fitting Type | Kit Description | Ballast | Ignitor | Capacitor | Lamp | Fig |
|----------------------|----------------|---------------------------------|-------------|---------|-----------|-------|-----|
| IBM-350WCONKIT-00248 | Open rated | HIPT 350W/H75/UVS/T52/PS/4K KIT | IBM350245CU | INT | INT | 00248 | 38 |
| IBM-350WCONKIT-00283 | Enclosed rated | HIT 350W/H75/PS/4K KIT | IBM350245CU | INT | INT | 00283 | 38 |
| IBM-350WCONKIT-10056 | Enclosed rated | HIE 350W/C/V/PS/4K KIT | IBM350245CU | INT | INT | 10056 | 38 |
| IBM-350WCONKIT-10057 | Open rated | HIPE 350W/C/V/UVS/PS/4K KIT | IBM350245CU | INT | INT | 10057 | 38 |
| IBM-350WCONKIT-10068 | Open rated | HIPE 350W/V/PS/4K KIT | IBM350245CU | INT | INT | 10068 | 38 |
| IBM-350WCONKIT-96307 | Enclosed rated | HIE 350W/H75/PS/4K KIT | IBM350245CU | INT | INT | 96307 | 38 |
| IBM-350WCONKIT-20138 | Enclosed rated | HIE 350W/V/PS/4K KIT | IBM350245CU | INT | INT | 20138 | 38 |

350w Magnetic Loose Gear

| Part No | Fitting Type | Kit Description | Ballast | Ignitor | Capacitor | Lamp | Fig |
|------------------|----------------|---------------------------------|-------------|---------|----------------|-------|-----|
| 350WCONKIT-00248 | Open rated | HIPT 350W/H75/UVS/T52/PS/4K KIT | HMP35223221 | MCI6 | R1008HP200P25M | 00248 | 17 |
| 350WCONKIT-00283 | Enclosed rated | HIT 350W/H75/PS/4K KIT | HMP35223221 | MCI6 | R1008HP200P25M | 00283 | 17 |
| 350WCONKIT-10056 | Enclosed rated | HIE 350W/C/V/PS/4K KIT | HMP35223221 | MCI6 | R1008HP200P25M | 10056 | 17 |
| 350WCONKIT-10057 | Open rated | HIPE 350W/C/V/PS/4K KIT | HMP35223221 | MCI6 | R1008HP200P25M | 10057 | 17 |
| 350WCONKIT-10068 | Open rated | HIPE 350W/V/PS/4K KIT | HMP35223221 | MCI6 | R1008HP200P25M | 10068 | 17 |
| 350WCONKIT-96307 | Enclosed rated | HIE 350W/H75/PS/4K KIT | HMP35223221 | MCI6 | R1008HP200P25M | 96307 | 17 |
| 350WCONKIT-20138 | Enclosed rated | HIE 350W/V/PS/4K KIT | HMP35223221 | MCI6 | R1008HP200P25M | 20138 | 17 |



Ignitors

| Wattage (W) | Ignitor Code | Timed | Ignitor Type | Max Lamp Current | Pulse Magnitude (A) | Dimensions Ø/LxWxH (kV) | Fixing (mm) | Weight (kg) | Max. Lead Capacitance | Max Case Temp (pF) | Internal Temp (°C) | Fig (°C) |
|---|--------------|-------|-----------------|------------------|---------------------|-------------------------|-------------|-------------|-----------------------|--------------------|--------------------|----------|
| MCI Series Ignitors 220/240V ±10% 50Hz | | | | | | | | | | | | |
| 35-600 | MCI6 | Y | Semi-Parallel | N/A | 3.0-4.5 | 50 x 25 x 17 | M8 x 10 | 0.08 | 1000 Note ② | 105 | N/A | 14 |
| 50/70 | MCI57 | Y | Semi-Parallel | N/A | 1.8-2.5 | 50 x 25 x 17 | M8 x 10 | 0.08 | 100 | 105 | N/A | 14 |
| 600 | MCI-600 | Y | Semi-Parallel | N/A | 4.0-5.0 | 50 x 25 x 17 | M8 x 10 | 0.08 | 1000 | 105 | N/A | 14 |
| 1000 | MCI-1000 | Y | Semi-Parallel | N/A | 3.0-5.0 | 39 x 71 | M8 x 10 | 0.14 | 10000 | 105 | N/A | 11 |
| MCI Series Ignitors 220/240V ±10% 60Hz | | | | | | | | | | | | |
| 35-600 | MCI6-6 | Y | Semi-Parallel | N/A | 3.0-4.5 | 50 x 25 x 17 | M8 x 10 | 0.08 | 1000 | 105 | N/A | 14 |
| Standard Ignitors 220/240V ±10% 50/60Hz | | | | | | | | | | | | |
| 35-70 | PXE070255 | N | Superimposed | 2 | 1.8-2.3 | 71 x 33 x 31 | M8 x 10 | 0.18 | 200 | 90 | 20 | 10 |
| 35-450 | PXE100255 | N | Superimposed | 5 | 3.5-4.5 | 71 x 33 x 31 | M8 x 10 | 0.18 | 100 | 105 | 30 | 10 |
| 35-450 | PAE400255 | N | Superimposed | 5 | 3.5-4.5 | 39 x 71 | M8 x 10 | 0.18 | 100 | 105 | 30 | 11 |
| 35-450 | PLE400255 | N | Superimposed | 5 | 3.0-4.5 | 127 x 50 | M8 x 10 | 0.25 | 1000 | 90 | 30 | 11 |
| 600-1000 | PXE000255 | N | Superimposed | 11 | 3.5-5.0 | 90 x 49 x 50 | M8 x 10 | 0.45 | 100 | 105 | 25 | 10 |
| 2000 | PBE900245 | N | Superimposed | 18 | 3.0-4.5 | 62 x 142 | M12 x 13 | 0.93 | 200 | 90 | 20 | 11 |
| 50-70 | PB070K255 | N | Impulser | N/A | 1.8-2.3 | 39 x 71 | M8 x 10 | 0.14 | 2500 | 85 | N/A | 11 |
| 150 | PB019K255 | N | Impulser | N/A | 3.0-4.5 | 39 x 71 | M8 x 10 | 0.14 | 3000 | 85 | N/A | 11 |
| 250-400 | PB404K255 | N | Impulser | N/A | 3.0-4.5 | 39 x 71 | M8 x 10 | 0.14 | 3000 | 85 | N/A | 11 |
| 600 | PB600K255 | N | Impulser | N/A | 3.0-4.5 | 52 x 115 | M8 x 10 | 0.38 | 3000 | 85 | N/A | 11 |
| 1000 | PB000K255 | N | Impulser | N/A | 3.0-4.5 | 52 x 115 | M8 x 10 | 0.38 | 5000 | 85 | N/A | 11 |
| 250-2000 | PH400K255 | N | 2 Wire Parallel | N/A | 0.75-0.9 | 30 x 65 | M8 x 10 | 0.08 | 20000 | 85 | N/A | 13 |
| Standard Ignitors 380/440V ±10% 50/60Hz | | | | | | | | | | | | |
| 1000-2000 | PT150K445 | N | Superimposed | 12 | 5.0-6.0 | 51 x 110 | M8 x 10 | 0.45 | 200 | 90 | 25 | 11 |
| 600-2000 | PXE150485 | N | Superimposed | 11 | 4.0-5.0 | 90 x 49 x 50 | M8 x 10 | 0.45 | 150 | 90 | 25 | 10 |
| 3500 | PBE350485 | N | Superimposed | 18 | 4.0-5.0 | 62 x 142 | M12 x 13 | 0.96 | 200 | 90 | 20 | 11 |
| 600-2000 | PB500K445 | N | Impulser | N/A | 3.0-5.0 | 52 x 115 | M8 x 10 | 0.38 | 5000 | 85 | N/A | 11 |
| 1000-2000 | PBA200485 | N | 2 Wire Parallel | N/A | 1.0-1.5 | 51 x 110 | M8 x 10 | 0.34 | 10000 | 85 | N/A | 13 |
| Timed Ignitors 220/240V ±10% 50/60Hz | | | | | | | | | | | | |
| 35-70 | PCX070255 | Y | Superimposed | 2 | 1.8-2.3 | 40 x 75 | M8 x 10 | 0.18 | 200 | 105 | 20 | 11 |
| 35-450 | PCX400255 | Y | Superimposed | 5 | 3.5-4.5 | 40 x 75 | M8 x 10 | 0.18 | 100 | 105 | 30 | 11 |
| 600-1000 | PCX000255 | Y | Superimposed | 12 | 3.5-5.0 | 60 x 93 | M12 x 13 | 0.51 | 100 | 105 | 30 | 11 |
| 70 | PJ070K255 | Y | Impulser | N/A | 1.8-2.3 | 39 x 71 | M8 x 10 | 0.14 | 2500 | 90 | N/A | 11 |
| 150 | PJ019K255 | Y | Impulser | N/A | 3.0-4.5 | 39 x 71 | M8 x 10 | 0.14 | 3000 | 90 | N/A | 11 |
| 250-400 | PJ404K255 | Y | Impulser | N/A | 3.0-4.5 | 39 x 71 | M8 x 10 | 0.14 | 3000 | 90 | N/A | 11 |
| 600 | PJ600K255 | Y | Impulser | N/A | 3.0-4.5 | 39 x 71 | M8 x 10 | 0.14 | 2500 | 90 | N/A | 11 |
| 1000 | PJ000K255 | Y | Impulser | N/A | 3.0-4.5 | 39 x 71 | M8 x 10 | 0.14 | 2500 | 90 | N/A | 11 |
| Timed Ignitors 380/440V ±10% 50/60Hz | | | | | | | | | | | | |
| 1000-2000 | PCT150445 | Y | Superimposed | 11 | 5.0-6.0 | 60 x 93 | M12 x 13 | 0.51 | 100 | 90 | 25 | 11 |
| ATEX Approved Ignitors 220/240V ±10% 50/60Hz | | | | | | | | | | | | |
| 35-70 | PXA070255 | N | Superimposed | 2 | 1.8-2.3 | 78 x 39 x 36 | M8 x 10 | 0.14 | 200 | 90 | 20 | 10 |
| 35-150 | PXA100255 | N | Superimposed | 5 | 3.5-4.0 | 78 x 39 x 36 | M8 x 10 | 0.14 | 100 | 105 | 15 | 10 |
| 70-400 | PXA400255 | N | Superimposed | 5 | 3.5-4.5 | 45 x 95 | M8 x 10 | 0.25 | 100 | 90 | 30 | 11 |
| 600-1000 | PXA000255 | N | Superimposed | 11 | 3.5-5.0 | 90 x 49 x 50 | M8 x 10 | 0.45 | 100 | 105 | 25 | 10 |
| 35-70 | PCA070255 | Y | Superimposed | 2 | 1.8-2.3 | 102 x 46 x 40 | M8 x 10 | 0.25 | 200 | 90 | 20 | 10 |
| 35-150 | PCA100255 | Y | Superimposed | 2 | 3.5-4.0 | 102 x 46 x 40 | M8 x 10 | 0.25 | 100 | 90 | 20 | 10 |
| 70-400 | PCA400255 | Y | Superimposed | 5 | 3.5-4.5 | 102 x 46 x 40 | M8 x 10 | 0.25 | 100 | 90 | 30 | 10 |
| Ignitors 240V ±6% 50/60Hz for SOX lamps | | | | | | | | | | | | |
| 35 | PB035K245 | N | 2 Wire Parallel | N/A | 0.7-0.9 | 30 x 65 | M8 x 10 | 0.08 | 5000 | 85 | N/A | 13 |
| 35-55 | PB055K245 | Y | 2 Wire Parallel | N/A | 0.7-1.0 | 45 x 75 | M8 x 10 | 0.2 | 5000 | 85 | N/A | 13 |
| 90 | PB090K245 | Y | 2 Wire Parallel | N/A | 0.7-1.0 | 45 x 75 | M8 x 10 | 0.2 | 5000 | 85 | N/A | 13 |
| Ignitor 200V ±6% 50/60Hz for SDX lamps | | | | | | | | | | | | |
| 70-150 | PIE150205 | N | Superimposed | 2 | 1.8-2.5 | 71 x 33 x 31 | M8 x 10 | 0.15 | 200 | 90 | 20 | 11 |

fig 10

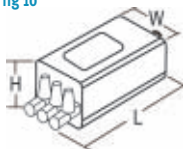


fig 11

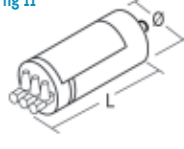


fig 13

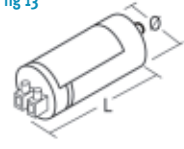
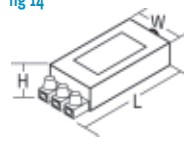


fig 14



Notes

- Note ① Suitable for 220V
- Note ② For 600W HPS maximum lead capacitance 100pF

Capacitors

250V Grip Wire Plastic Case M8 x 12 stud fixing

| Value (uF) | Tolerance | Product Type | Dimensions | Fig | Order Code Dia x L. (mm) | Box | Quantity |
|------------|-----------|--------------|------------|-----|-----------------------------|-----|----------|
| 4.0 | ±10% | 4/250 | 25 x 52 | 28 | R1008CR040P25 | 165 | |
| 5.0 | ±10% | 5/250 | 25 x 52 | 28 | R1008CR050P26 | 110 | |
| 6.0 | ±10% | 6/250 | 25 x 70 | 28 | R1008CR060P25 | 165 | |
| 8.0 | ±10% | 8/250 | 30 x 74 | 28 | R1008CR080P25 | 110 | |
| 10.0 | ±10% | 10/250 | 30 x 74 | 28 | R1008CR100P25 | 110 | |
| 12.0 | ±10% | 12/250 | 30 x 74 | 28 | R1008CR120P25 | 110 | |
| 16.0 | ±10% | 16/250 | 35 x 74 | 28 | R1008CR160P25 | 85 | |
| 20.0 | ±10% | 20/250 | 40 x 70 | 28 | R1008CR200P25 | 85 | |
| 25.0 | ±10% | 25/250 | 35 x 98 | 28 | R1008CR250P25 | 85 | |
| 30.0 | ±10% | 30/250 | 40 x 94 | 28 | R1008CR300P25 | 65 | |
| 40.0 | ±10% | 40/250 | 50 x 98 | 28 | R1008CR400P25 | 65 | |

250V Grip Wire Plastic Case Snap-in fixing

| Value (uF) | Tolerance | Product Type | Dimensions | Fig | Order Code Dia x L. (mm) | Box | Quantity |
|------------|-----------|--------------|------------|-----|-----------------------------|-----|----------|
| 4.0 | ±10% | 4/250 | 25 x 52 | 30 | R1FRLCR040P25 | 140 | |
| 6.0 | ±10% | 6/250 | 25 x 70 | 30 | R1FRLCR060P25 | 140 | |
| 8.0 | ±10% | 8/250 | 30 x 74 | 30 | R1FRLCR080P25 | 110 | |
| 12.0 | ±10% | 12/250 | 30 x 74 | 30 | R1FRLCR120P25 | 110 | |

250V Grip Wire Alluminium Case M8 x 12 stud fixing

| Value (uF) | Tolerance | Product Type | Dimensions | Fig | Order Code Dia x L. (mm) | Box | Quantity |
|------------|-----------|--------------|------------|-----|-----------------------------|-----|----------|
| 2.0 | ±10% | 2/250 | 25 x 58 | 27 | R1008CR020A25 | 165 | |
| 4.0 | ±10% | 4/250 | 25 x 58 | 27 | R1008CR040A25 | 165 | |
| 6.0 | ±10% | 6/250 | 25 x 76 | 27 | R1008CR060A25 | 165 | |
| 8.0 | ±10% | 8/250 | 30 x 76 | 27 | R1008CR080A25 | 110 | |
| 10.0 | ±10% | 10/250 | 30 x 76 | 27 | R1008CR100A25 | 110 | |
| 12.0 | ±10% | 12/250 | 30 x 76 | 27 | R1008CR200A25 | 85 | |
| 30.0 | ±10% | 30/250 | 40 x 100 | 27 | R1008CR300A25 | 65 | |
| 40.0 | ±10% | 40/250 | 50 x 100 | 27 | R1008CR400A25 | 65 | |

250V 300mm Leads Plastic Case M8 x 12 stud fixing

| Value (uF) | Tolerance | Product Type | Dimensions | Fig | Order Code Dia x L. (mm) | Box | Quantity |
|------------|-----------|--------------|------------|-----|-----------------------------|-----|----------|
| 1.5 | ±10% | 1.5/250 | 25 x 52 | 27 | R1008HP015P25 | 165 | |
| 2.0 | ±10% | 2.0/250 | 25 x 52 | 27 | R1008HP020P25 | 165 | |
| 3.0 | ±10% | 3.0/250 | 25 x 52 | 27 | R1008HP030P25 | 165 | |
| 4.0 | ±10% | 4.0/250 | 25 x 52 | 27 | R1008HP040P25 | 165 | |
| 5.0 | ±10% | 5.0/250 | 25 x 70 | 27 | R1008HP050P25 | 165 | |
| 5.5 | ±10% | 5.5/250 | 25 x 70 | 27 | R1008HP055P25 | 165 | |
| 6.0 | ±10% | 6.0/250 | 25 x 70 | 27 | R1008HP060P25 | 165 | |
| 7.0 | ±10% | 7.0/250 | 25 x 70 | 27 | R1008HP070P25 | 165 | |
| 7.2 | ±10% | 7.2/250 | 30 x 74 | 27 | R1008HP072P25 | 165 | |
| 8.0 | ±10% | 8.0/250 | 30 x 74 | 27 | R1008HP080P25 | 110 | |
| 8.4 | ±10% | 8.4/250 | 30 x 74 | 27 | R1008HP084P25 | 110 | |
| 10.0 | ±10% | 10./250 | 30 x 74 | 27 | R1008HP100P25M | 110 | |
| 12.0 | ±10% | 12/250 | 30 x 74 | 27 | R1008HP120P25 | 110 | |
| 14.0 | ±10% | 14/250 | 35 x 74 | 27 | R1008HP140P25 | 85 | |
| 15.0 | ±10% | 15/250 | 35 x 74 | 27 | R1008HP150P25 | 85 | |
| 16.0 | ±10% | 16/250 | 35 x 74 | 27 | R1008HP160P25 | 85 | |
| 18.0 | ±10% | 18/250 | 35 x 74 | 27 | R1008HP180P25 | 85 | |
| 20.0 | ±10% | 20/250 | 35 x 98 | 27 | R1008HP200P25M | 65 | |
| 25.0 | ±10% | 25/250 | 35 x 98 | 27 | R1008HP250P25 | 85 | |
| 30.0 | ±10% | 30/250 | 40 x 94 | 27 | R1008HP300P25M | 65 | |
| 35.0 | ±10% | 35/250 | 40 x 94 | 27 | R1008HP350P25 | 65 | |
| 40.0 | ±10% | 40/250 | 50 x 98 | 27 | R1008HP400P25 | 65 | |
| 45.0 | ±10% | 45/250 | 50 x 98 | 27 | R1008HP450P25 | 40 | |
| 50.0 | ±10% | 50/250 | 50 x 98 | 27 | R1008HP500P25 | 40 | |
| 55.0 | ±10% | 55/250 | 50 x 98 | 27 | R1008HP550P25 | 35 | |
| 60.0 | ±10% | 60/250 | 50 x 98 | 27 | R1008HP600P25 | 40 | |

Continued on page 50

fig 27



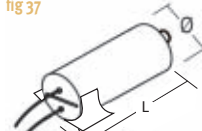
fig 28



fig 30



fig 37



Capacitors

250V 300mm Leads Plastic Case Snap-in fixing

| Value (uF) | Tolerance | Product Type | Dimensions | Fig | Order Code Dia x L. (mm) | Box | Quantity |
|-------------|-----------|---------------|------------|-----|-----------------------------|-----|----------|
| 4.0 | ±10% | 4/250 | 25 x 52 | 37 | RIFRLHP040P25 | 165 | |
| 6.0 | ±10% | 6/250 | 25 x 70 | 37 | RIFRLHP060P25 | 140 | |
| 8.0 | ±10% | 8/250 | 30 x 74 | 37 | RIFRLHP080P25 | 110 | |
| 12.0 | ±10% | 12/250 | 30 x 74 | 37 | RIFRLHP120P25 | 110 | |

250V 300mm Leads Aluminium Case M8 x 12 stud fixing

| Value (uF) | Tolerance | Product Type | Dimensions | Fig | Order Code Dia x L. (mm) | Box | Quantity |
|-------------|-----------|---------------|------------|-----|-----------------------------|-----|----------|
| 2.0 | ±10% | 2/250 | 25 x 58 | 27 | R1008HP020A25 | 165 | |
| 4.0 | ±10% | 4/250 | 25 x 58 | 27 | R1008HP040A25 | 165 | |
| 6.0 | ±10% | 6/250 | 25 x 76 | 27 | R1008HP060A25 | 165 | |
| 8.0 | ±10% | 8/250 | 30 x 76 | 27 | R1008HP080A25 | 110 | |
| 10.0 | ±10% | 10/250 | 30 x 76 | 27 | R1008HP100A25 | 110 | |
| 20.0 | ±10% | 12/250 | 36 x 76 | 27 | R1008HP200A25 | 65 | |
| 30.0 | ±10% | 30/250 | 40 x 100 | 27 | R1008HP300A25 | 65 | |
| 40.0 | ±10% | 40/250 | 50 x 100 | 27 | R1008HP400A25 | 65 | |

450V 300mm Leads Plastic Case M8 x 12 stud fixing

| Value (uF) | Tolerance | Product Type | Dimensions | Fig | Order Code Dia x L. (mm) | Box | Quantity |
|-------------|-----------|----------------|------------|-----|-----------------------------|-----|----------|
| 6.8 | ±10% | 6.8/450 | 30 x 74 | 27 | R1008HP068P45 | 85 | |
| 7.2 | ±10% | 7.2/450 | 35 x 74 | 27 | R1008HP072P45 | 85 | |
| 8.4 | ±10% | 8.4/450 | 35 x 74 | 27 | R1008HP084P45 | 85 | |
| 12.0 | ±10% | 12/450 | 35 x 98 | 27 | R1008HP120P45 | 85 | |
| 15.0 | ±10% | 15/450 | 40 x 94 | 27 | R1008HP150P45 | 85 | |
| 18.0 | ±10% | 18/450 | 40 x 94 | 27 | R1008HP180P44RE | 85 | |
| 20.0 | ±10% | 20/450 | 50 x 98 | 27 | R1008HP200P45 | 65 | |
| 25.0 | ±10% | 25/450 | 50 x 98 | 27 | R1008HP250P45 | 65 | |
| 30.0 | ±10% | 30/450 | 50 x 98 | 27 | R1008HP300P45 | 40 | |
| 40.0 | ±10% | 40/450 | 55 x 120 | 27 | R1008HP400P40 | 30 | |
| 45.0 | ±10% | 45/450 | 50 x 98 | 27 | R1008HP450P44N3 | 30 | |

450V Grip Wire Plastic Case M8 x 12 stud fixing

| Value (uF) | Tolerance | Product Type | Dimensions | Fig | Order Code Dia x L. (mm) | Box | Quantity |
|------------|-----------|--------------|------------|-----|-----------------------------|-----|----------|
| 5.0 | ±10% | 5/450 | 30 x 74 | 28 | R1008CR050P44 | 110 | |

Additional Capacitors on page 49

fig 27



fig 28



fig 30

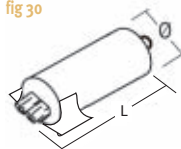
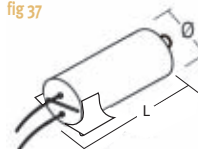
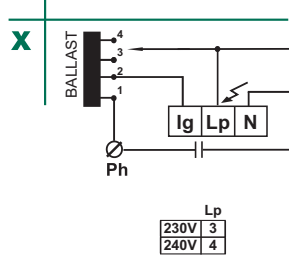
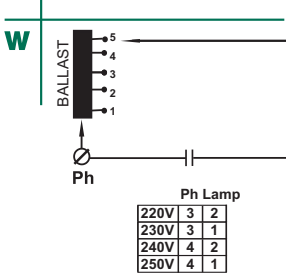
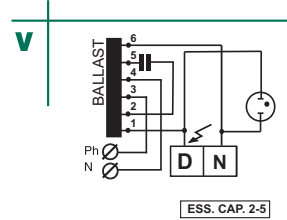
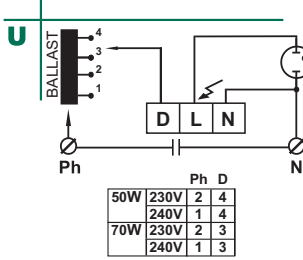
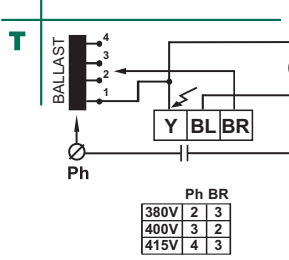
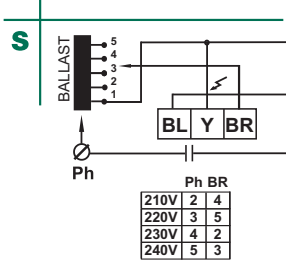
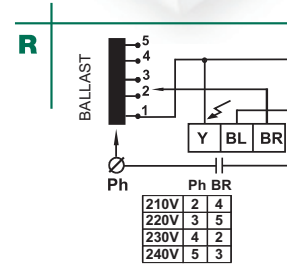
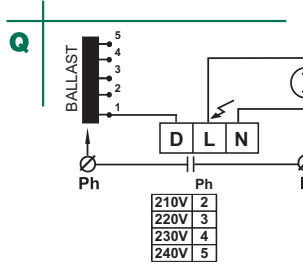
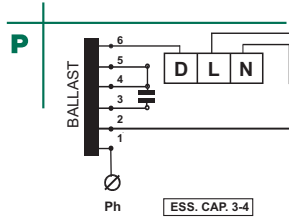
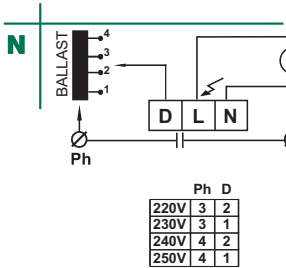
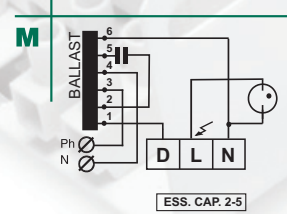
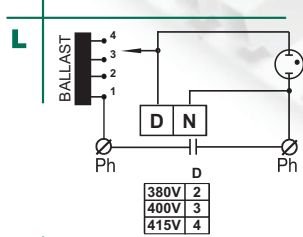
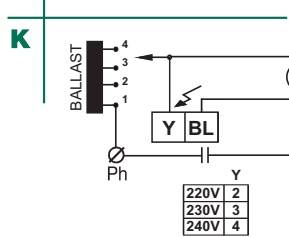
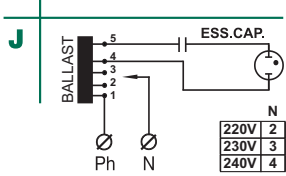
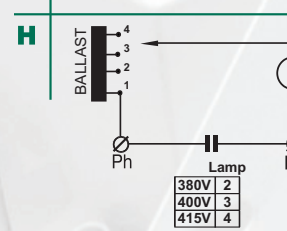
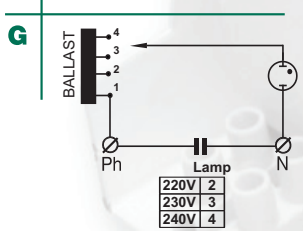
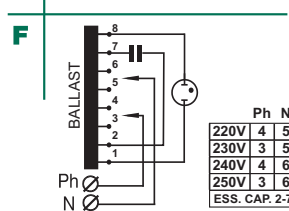
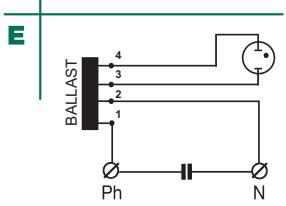
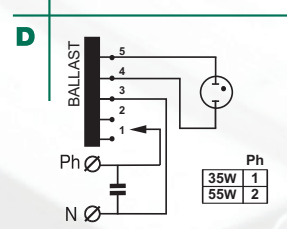
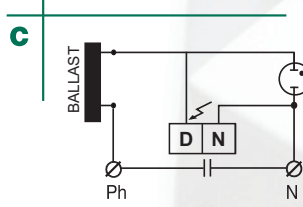
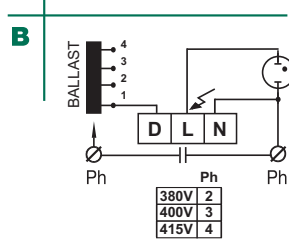
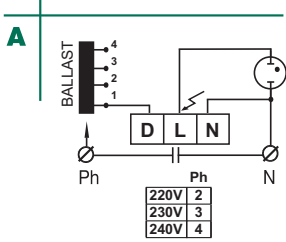


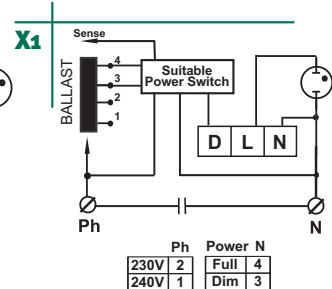
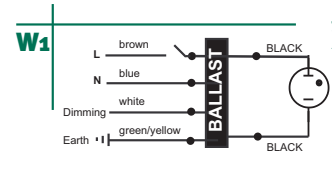
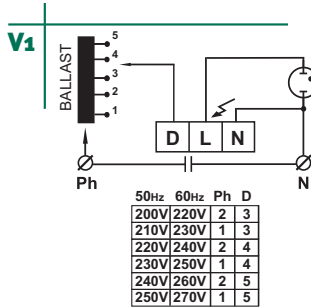
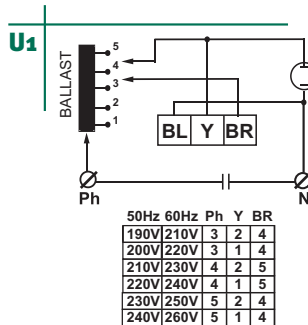
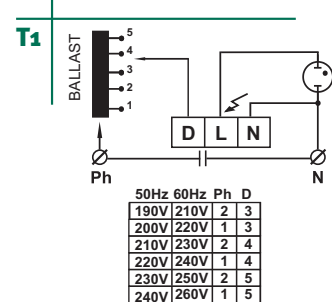
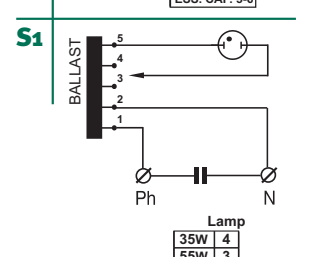
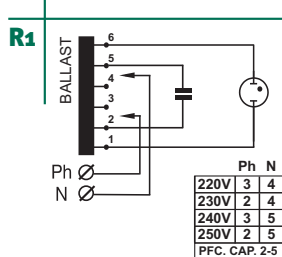
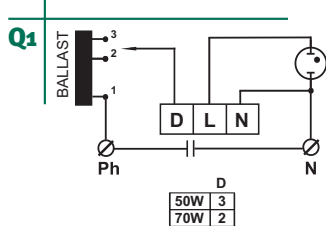
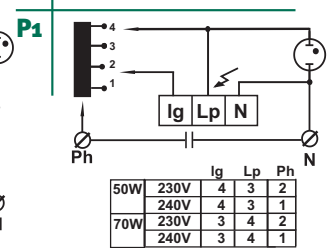
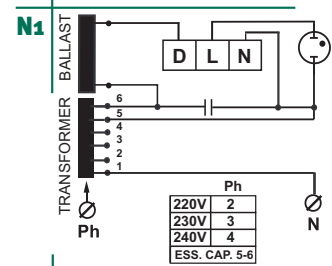
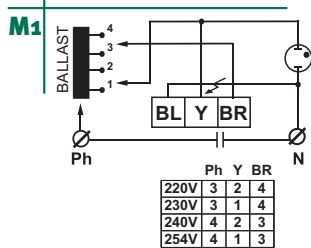
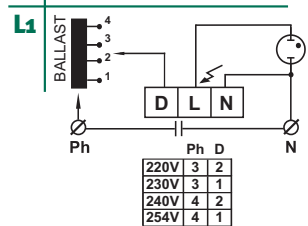
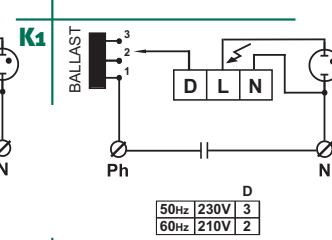
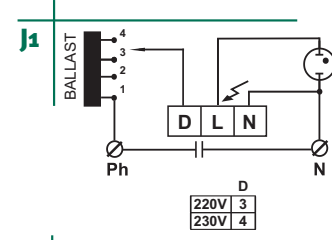
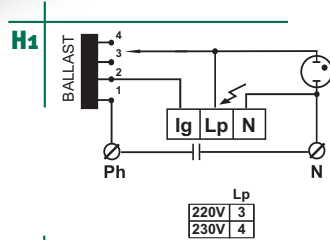
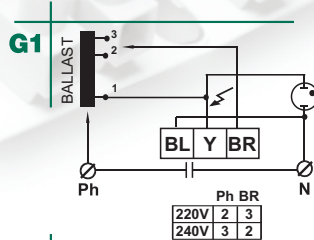
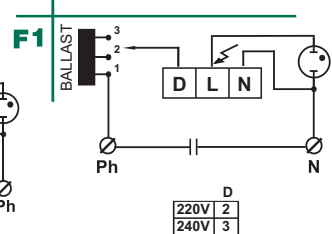
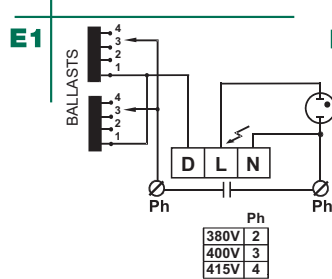
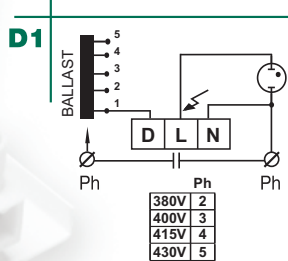
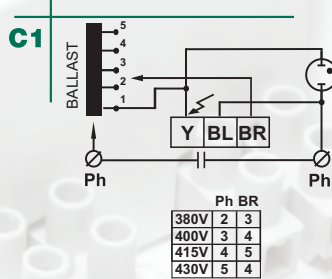
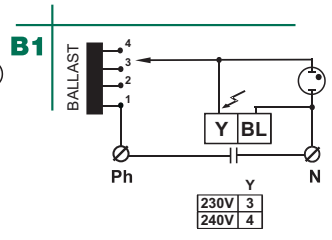
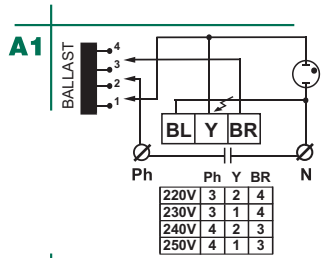
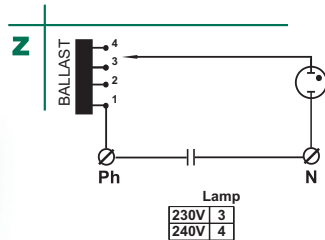
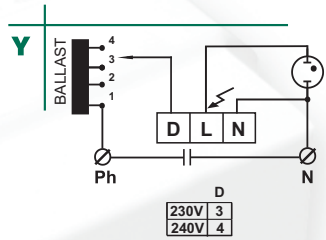
fig 37



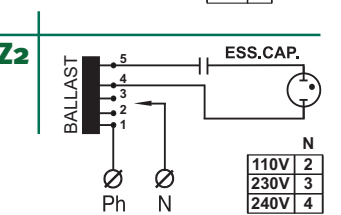
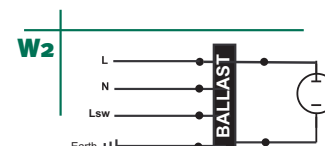
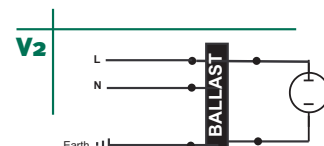
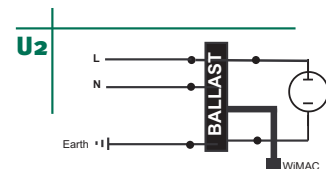
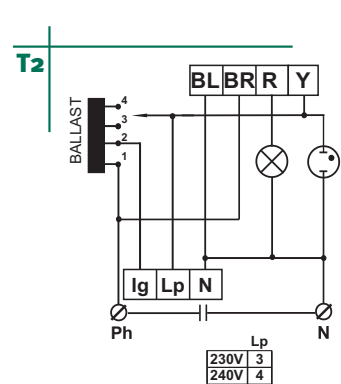
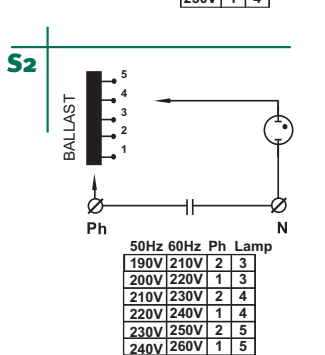
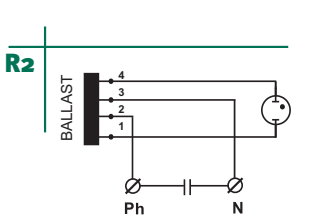
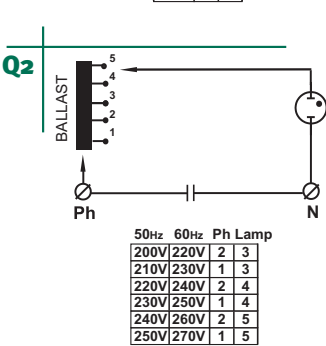
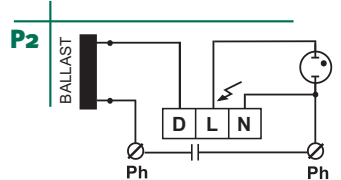
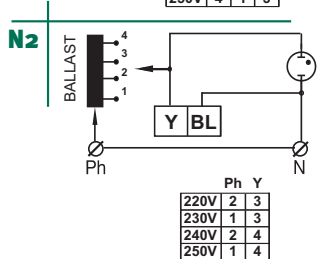
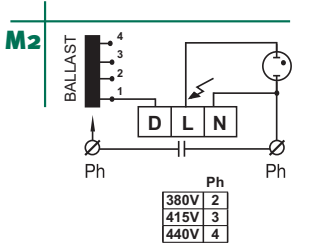
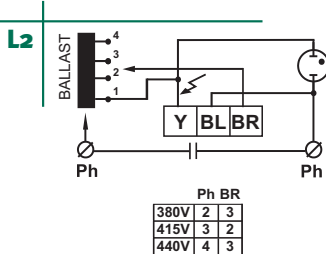
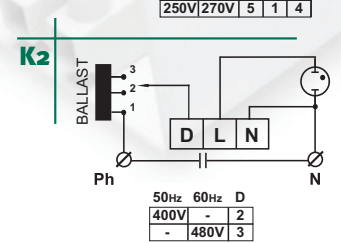
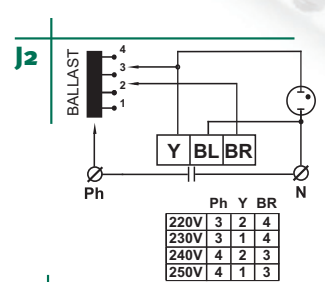
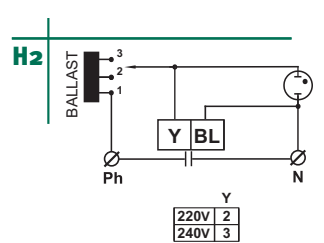
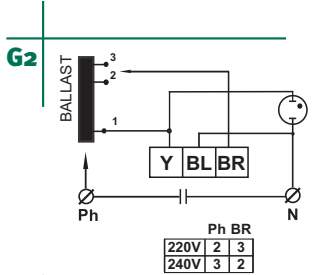
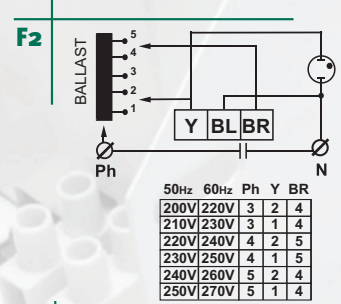
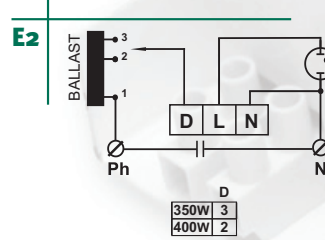
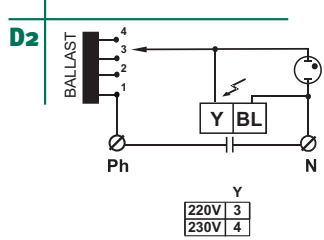
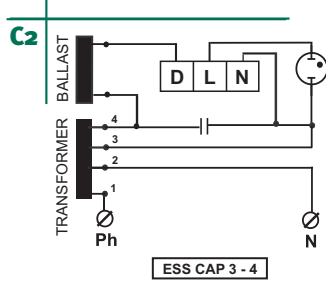
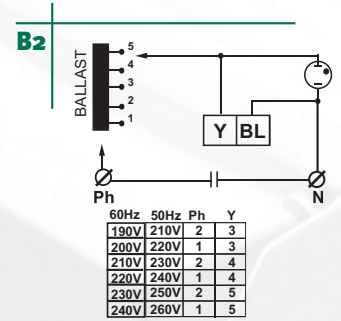
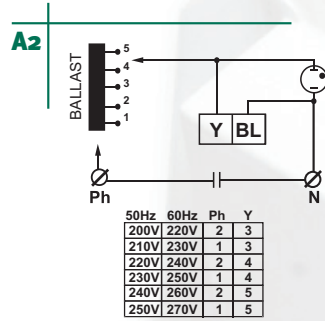
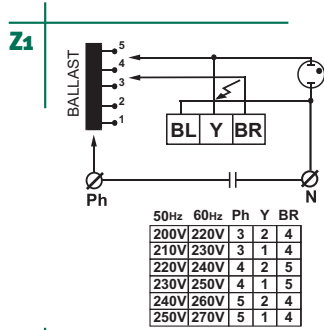
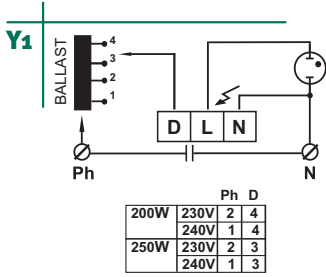
Circuit Diagrams



Circuit Diagrams



Circuit Diagrams



Glossary of Terms

Arc Tube: A completely sealed quartz or ceramic tube where the electrical discharge (arc) occurs and generates light

Auxiliary Light: Back-up light source to the HID light; typically a quartz halogen type

Ballast: A device that, by means of resistance, inductance, capacitance or electronic elements, singly or in combination, controls the current, voltage and waveform to the required values for proper lamp starting and operation for a HID ballast operating at a given supply voltage

Ballast Characteristic Curve: The curve of lamp wattage vs. lamp voltage over a range of normal lamp voltages, when a HID ballast operates at a given supply voltage

Ballast Factor: Typically associated with fluorescent systems; metal halide ballasts are designed to operate lamps at rated watts, whereas some fluorescent systems are designed to operate at a fraction of rated watts

Burning Position: The position in which lamps are designed to operate

Cold Start Time: The amount of time from the application of ballast voltage to ignition of the arc discharge

Colour Rendering Index (Ra): A measure of a light source's ability to render colours relative to a standard

Constant Wattage Autotransformer (CWA)

Control Gear: An autotransformer lead ballast circuit incorporating a capacitor in series with the lamp; compared to other ballasts, the CWA regulates over a wider input voltage range, holding lamp wattage to a narrow range by controlling lamp current

Correlated Colour Temperature (CCT): The perceived "colour" of the light emitted by a lamp expressed in Kelvin (K units)

Current Crest Factor: The ratio of the peak to the rms value of lamp current; metal halide values range from 1.5 to 1.8

Economic Life: The number of hours a group of lamps will burn before it is economically and aesthetically advisable to group relamp (typically 60% to 75% of rated life)

Efficacy (Lamp): A ratio of lumens to watts; often calculated with either lamp watts

or system watts; measured in lumens per watt (LPW)

Formed Body Arc Tube: Precisely reproducible ellipsoidal arc tube formed by Venture's quartz sculpting process; has 2/3 less quartz mass than standard arc tubes for equivalent lumens; has no starter electrode

HID: High Intensity Discharge lamps; includes metal halide, mercury vapor and high pressure sodium

Hot Restart or Restrike Time: The amount of time from return of power after an interruption to the point of lamp ignition

Ignitor: An electronic device which provides, by itself or in combination with other circuit components, the appropriate electrical conditions to start a discharge lamp

Ignitor CWA Control Gear: CWA control gear using an ignitor to start the lamp

Initial Lumens: The light output of a lamp, based on photometry results, at rated wattage after 100 hours of operation

Input Voltage at Lamp Dropout (Extinction Voltage): The rms value of supply voltage at which a reference lamp extinguishes when the supply voltage is uniformly reduced from rated value at 2% to 3% of rated voltage per second

Input Watts: The power measured on the input terminals of a ballast which is operating a reference lamp

Lag Ballast: A ballast exhibiting primarily inductive electrical characteristics, including a lagging lamp current with respect to line voltage and lagging or corrected line power factor.

Lamp Voltage: The voltage at which lamps operate when they are fully warmed up

Lamp Wattage: The power consumed by a lamp after warm-up

Light Center Length (LCL): The distance from the center of the arc discharge to the end contact of the base

Lumens: A measurement of light output; takes into account the human eye sensitivity curve so that more weight is given to the yellow-green part of the light spectrum

Lumen Maintenance: The lumen output provided by a lamp at a given point in or percentage of its life

Lumens Per Watt (LPW): A ratio of lumens to watts; often calculated with either lamp watts or system watts; measured in lumens per watt (LPW)

Luminaire Requirements: The type of luminaire a lamp requires; i.e., enclosed or open rated

Maximum Overall Length (MOL): The maximum allowable distance from the top of the glass bulb to the end contact of the base

Normal (Low) Power Factor Ballast: A ballast of the multiple-supply type that does not have a means for correcting the input power factor

Occupancy Sensor: Control device that dims or turns lights off after the space becomes unoccupied; may be ultrasonic or infrared-actuated

Open Circuit Current (Line): The RMS current measured through the input terminals of a ballast with lamp removed or inoperative

Open Circuit Voltage, Ballast (OCV): The voltage across the output terminals of a ballast when no load is connected (RMS, unless otherwise stated)

Open Rated Lamp (E27): Designed for open luminaires; has a narrower neck than standard E27 base lamps. Lamp arc tube is surrounded by a protective quartz shroud.

Open Rated Lamp (E40): Designed for open luminaires. Lamp arc tube is surrounded by a protective quartz shroud.

Operating Current (Line): The power factor corrected current measured through the input terminals of a ballast which is operating a reference lamp

Operating Voltage: The voltage at which lamps operate when they are fully warmed up

Peak Lead Ballast: A ballast that produces a highly peaked open circuit voltage wave shape and has a capacitor in series with the lamp

Position Oriented Mogul Base (POMB, EP39, EP40): Used with horizontal burning lamps; has an aligning pin embedded in the base for proper lamp orientation when it is screwed

Arc Tube: A completely sealed quartz or ceramic tube where the electrical discharge (arc) occurs and generates light

Auxiliary Light: Back-up light source to the HID light; typically a quartz halogen type

Ballast: A device that, by means of resistance, inductance, capacitance or electronic elements, singly or in combination, controls the current, voltage and waveform to the required values for proper lamp starting and operation for a HID ballast operating at a given supply voltage

Ballast Characteristic Curve: The curve of lamp wattage vs. lamp voltage over a range of normal lamp voltages, when a HID ballast operates at a given supply voltage

Ballast Factor: Typically associated with fluorescent systems; metal halide ballasts are designed to operate lamps at rated watts, whereas some fluorescent systems are designed to operate at a fraction of rated watts

Burning Position: The position in which lamps are designed to operate

Cold Start Time: The amount of time from the application of ballast voltage to ignition of the arc discharge

Colour Rendering Index (Ra): A measure of a light source's ability to render colours relative to a standard

Constant Wattage Autotransformer (CWA)

Control Gear: An autotransformer lead ballast circuit incorporating a capacitor in series with the lamp; compared to other ballasts, the CWA regulates over a wider input voltage range, holding lamp wattage to a narrow range by controlling lamp current

Correlated Colour Temperature (CCT):

The perceived "colour" of the light emitted by a lamp expressed in Kelvin (K units)

Current Crest Factor: The ratio of the peak to the rms value of lamp current; metal halide values range from 1.5 to 1.8

Economic Life: The number of hours a group of lamps will burn before it is economically and aesthetically advisable to group relamp (typically 60% to 75% of rated life)

Efficacy (Lamp): A ratio of lumens to watts; often calculated with either lamp watts

or system watts; measured in lumens per watt (LPW)

Formed Body Arc Tube: Precisely reproducible ellipsoidal arc tube formed by Venture's quartz sculpting process; has 2/3 less quartz mass than standard arc tubes for equivalent lumens; has no starter electrode

HID: High Intensity Discharge lamps; includes metal halide, mercury vapor and high pressure sodium

Hot Restart or Restrike Time: The amount of time from return of power after an interruption to the point of lamp ignition

Ignitor: An electronic device which provides, by itself or in combination with other circuit components, the appropriate electrical conditions to start a discharge lamp

Ignitor CWA Control Gear: CWA control gear using an ignitor to start the lamp

Initial Lumens: The light output of a lamp, based on photometry results, at rated wattage after 100 hours of operation

Input Voltage at Lamp Dropout (Extinction Voltage): The rms value of supply voltage at which a reference lamp extinguishes when the supply voltage is uniformly reduced from rated value at 2% to 3% of rated voltage per second

Input Watts: The power measured on the input terminals of a ballast which is operating a reference lamp

Lag Ballast: A ballast exhibiting primarily inductive electrical characteristics, including a lagging lamp current with respect to line voltage and lagging or corrected line power factor.

Lamp Voltage: The voltage at which lamps operate when they are fully warmed up

Lamp Wattage: The power consumed by a lamp after warm-up

Light Center Length (LCL): The distance from the center of the arc discharge to the end contact of the base

Lumens: A measurement of light output; takes into account the human eye sensitivity curve so that more weight is given to the yellow-green part of the light spectrum

Lumen Maintenance: The lumen output provided by a lamp at a given point in or percentage of its life

Lumens Per Watt (LPW): A ratio of lumens to watts; often calculated with either lamp watts or system watts; measured in lumens per watt (LPW)

Luminaire Requirements: The type of luminaire a lamp requires; i.e., enclosed or open rated

Maximum Overall Length (MOL): The maximum allowable distance from the top of the glass bulb to the end contact of the base

Normal (Low) Power Factor Ballast: A ballast of the multiple-supply type that does not have a means for correcting the input power factor

Occupancy Sensor: Control device that dims or turns lights off after the space becomes unoccupied; may be ultrasonic or infrared-actuated

Open Circuit Current (Line): The RMS current measured through the input terminals of a ballast with lamp removed or inoperative

Open Circuit Voltage, Ballast (OCV): The voltage across the output terminals of a ballast when no load is connected (RMS, unless otherwise stated)

Open Rated Lamp (E27): Designed for open luminaires; has a narrower neck than standard E27 base lamps. Lamp arc tube is surrounded by a protective quartz shroud.

Open Rated Lamp (E40): Designed for open luminaires. Lamp arc tube is surrounded by a protective quartz shroud.

Operating Current (Line): The power factor corrected current measured through the input terminals of a ballast which is operating a reference lamp

Operating Voltage: The voltage at which lamps operate when they are fully warmed up

Peak Lead Ballast: A ballast that produces a highly peaked open circuit voltage wave shape and has a capacitor in series with the lamp

Position Oriented Mogul Base (POMB, EP39, EP40): Used with horizontal burning lamps; has an aligning pin embedded in the base for proper lamp orientation when it is screwed into its socket; should only be used in yellow

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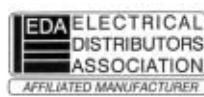
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