QUICKTRONIC® MH Electronic Metal Halide Systems



Electronic Metal Halide

Professional Series

Lamp / Ballast Guide

QTP 2x20MH/UNV QTP 1x20MH/UNV SQ C156

QTP 1x39MH/UNV QTP 2x39MH/UNV QTP 1x39MH/UNV SQ M130; C130

QTP 1x70MH/UNV QTP 1x70MH/UNV SQ M98/M139. C98/C139/C143

QTP 1x100MH/UNV QTP 1x100MH/UNV SLIM M90, C90, C191

Key System Features

- Low frequency square wave
- · Suitable for both guartz and ceramic lamps
- Constant power regulation
- · Universal input voltage
- · High power factor
- · Low harmonic distortion
- · Small size and lightweight
- UL, FCC
- · End-of-lamp-life shut down
- Internal IDTP (Insulation Detection Thermal Protector)
- QUICK 60+® warranty
- · RoHS compliant Lead-free solder and manufacturing process

Application Information

SYLVANIA QUICKTRONIC MH

is ideally suited for:

- Track lighting
- Downlighting
- · Landscape lighting
- Retail
- Hospitality
- Institutional
- Commercial

SYLVANIA QUICKTRONIC QTP MH

electronic HID (eHID) ballasts feature a state-of-the-art design to deliver performance levels unattainable with standard magnetic lighting systems. These ballasts operate METALARC® and METALARC POWERBALL® Ceramic lamps with exceptional features and benefits, listed below:

Unmatched Energy Efficiency:

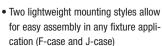
· Ballasts provides up to 92% efficiency allowing maximum energy savings when compared to magnetic ballasts

New Smaller cases:

- Mini Slim and Mini Square ballasts are 50% smaller than the standard sized can
- New smaller sizes allow more flexible fixture designs and applications while maintaining the features and system advantages of the standard size ballast

Simple Installation:

 Installation is simplified by a singlepiece ballasts that incorporate the ballast, capacitor, ignitor and mounting brackets of conventional systems



RoHS Compliant: QUICKTRONIC MH ballasts are RoHS compliant and feature lead-free solder and manufacturing process

QUICK 60+® Warranty: Setting the standard for quality, QUICKTRONIC MH ballasts are covered by a QUICK 60+ warranty, the first comprehensive system warranty in the industry



System Information

SYLVANIA QUICKTRONIC QTP MH

electronic HID (eHID) ballasts are perfectly matched with SYLVANIA METALARC® and METALARC POWERBALL® Ceramic lamps to provide optimal system performance. This electronically controlled system delivers several advantages over conventional systems, including improved lumen maintenance and extended photometric life.

Low frequency square-wave:

- Eliminates acoustic resonance issues typical with high-frequency waveforms (Acoustic resonance issues may cause visual flickering, lamp cycling, shortened lamp life, and in extreme cases may result in non-passive failure)
- Provides a robust approach with respect to acoustic stabilities and is immune to variation in lamp geometry, fill chemistry and mercury dose



Superior constant power regulation

- · Helps yield consistent light output and color throughout the life of the lamp
- Provides constant light output during periods of fluctuating supply voltage

End-of-lamp-life shutdown:

• Prevents continuous starting after lamps extinguish which may cause permanent damage to the ballast

Internal IDTP (Insulation Detection Thermal Protector):

- · Affords original equipment manufacturers (OEMs) to remove all external thermal protection devices
- · Reduces wiring complexity and installation time (to maximize the benefits of IDTPs, the ballast must be properly installed - See "installation notes" for details)



SPECIFICATION DATA

Date Catalog # Project Prepared by

Comments

Type



Performance Guide

Ballast shall be a metal halide SYLVANIA QUICKTRONIC MH electronic ballast with universal input voltage.

MH QUICKTRONIC®

Professional Series

Specifications

Voltage Range: ±10% of 120-277V

rated line (108-305V)

Input Frequency: 50/60 Hz Power Factor: >98% Low THD: <10%

Starting Temp: -22°F (-30°C) min. Lamp Frequency: 165 Hz Square Wave

UL Listed, Type 1, Outdoor Suitable for recessed use 80°C Max. Case Temperature, Thermally Protected FCC 47CFR Part 18 Non-Consumer Sound Rated A ANSI C62.41 Cat. A Transient Protection Remote Mounting capability3 Lamp current crest factor: <1.2 RoHS Compliant 4

- 3 Remote Mounting (max. wire length from ballast case to lampholder): Typically 6 ft but varies by application. For remote mounting distances up to 15 ft, use #18 AWG minimum 600Vrms/4kV pulse rated wire. Output wires should be enclosed in 1/2" metal conduit to minimize EMI (electromagnetic interference). Wire and ground ballast, fixture, conduit & lighting system per NEC (National Electrical Code)
- 4 Complies with European Union Restriction of Hazardous Substances Directive.

System Life / Warranty

QUICKTRONIC products are covered by the QUICK 60+® warranty, a comprehensive lamp and ballast system warranty. For additional details, refer to the QUICK 60+ warranty bulletin.

Max. Case Temp. Measured at

> Tc Point <75°C

Warranty Period 5 years

<80°C 3 years

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Electronic Metal Halide Systems (120-277V)

Item Number	OSRAM SYLVANIA Description ¹	Input Current (AMPS)	Lamp ANSI Code	Lamp*	Rated* Lumens (Im)	No. of Lamps	Ballast Factor (BF)	System Lumens	Inp Powe 120V	out er (W) 277V	System Efficacy (Im/W)
51969	QTP2x20MH UNV-J ²	0.38/0.16	M156/C156	20W T4.5	1700	2	1.0	3400	46	46	74
51910 51911	QTP1x39MH/UNV-F QTP1x39MH/UNV-J }	0.39/0.17	M130/C130	39W T6	3400	1	1.0	3400	44	44	77
51970 51971	QTP2x39MH UNV-F ² QTP2x39MH UNV-J ²	0.75/0.33	M130/C130	39W T6	3400	2	1.0	6800	89	89	76
51912 51913	QTP1x70MH/UNV-F QTP1x70MH/UNV-J]	0.67/0.29	M98/M139/ C98/C139	70W T6	7000	1	1.0	7000	79	79	89
51914	QTP1x100MH/UNV-F	0.96/0.41	M90/C90/C191	100W E17	10,000	1	1.0	10,000	110	110	91

1 Internal IDTP - Insulation Detection Thermal Protector (see system information for detail) 2 Ballast can operate 1 or 2 lamps, cap off unused leads individually for 1 lamp operation.

*Performance information based on ceramic equivalent "C"

Installation Notes

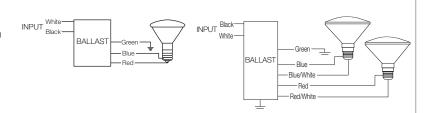
1. Proper ballast mounting must be followed to allow for maximum thermal dissipation:

- a. F can ballast should be mounted with the "feet" side placed tightly against the inside of the fixture.
- b. J can ballast should be mounted with the PEM Stud side placed tightly against the inside of the fixture.
- 2. Lamp holders and conductors:
 - a. Use minimum 4kV Pulse Rated Lamp holder.
 - b. Use minimum 600Vrms/4kV Pulse Rated Wire to lamp.
 - c. The red lead must be connected to center terminal of lamp.
 - d. Do not connect any lamp lead to neutral or ground.
- 3. Grounding:
 - a. The ballast case and fixture must always be grounded. The grounding helps assure safety, proper lamp starting, and acceptable EMI/RFI performance. Install ballast in accordance with national and local electrical codes.
- 4. Auto shut down function including end-of-lamp-life and thermal protection:
- a. Disconnect power when servicing. Cycle power to reset ballast after auto shutdown.
- 5. Control: Do not operate with dimmer or occupancy sensor.
- 6. If connecting the ballast input to 208V or 240V line with two "hot" leads, be sure to wire per NEC code: Re-Mark (re-identify) the ballast white neutral wire to another color (i.e. black). Be sure to simultaneously disconnect all ungrounded line conductors per NEC codes (i.e. switch both hot legs).

More installation considerations are in the QUICKANSWERS section of the Ballast Technology and Specification Guide.

Packaging: Quantity: 10 pieces per carton Weight: 6 lbs. per carton

(0.6 lbs each)



51910 QTP 1 x 39 MH / UNV F Case Type (Mounting Style) Item Number QUICKTRONIC PROFESSIONAL Line Voltage (120-277V) Metal Halide Number of Lamps (1) Primary Lamp Wattage

SPECIFICATION DATA Catalog # Date Type Project Prepared by

MH QUICKTRONIC®

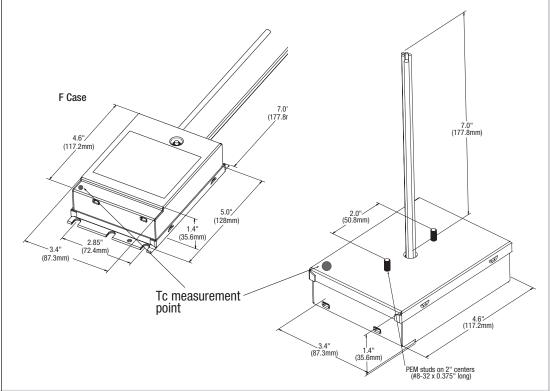
Professional Series

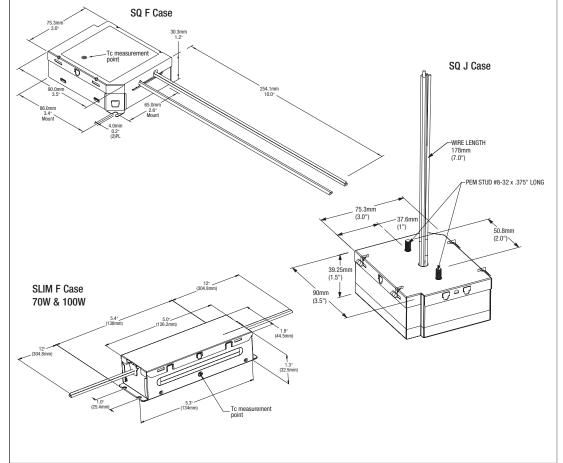
Performance Guide

Ballast shall be a metal halide SYLVANIA QUICKTRONIC MH electronic ballast with universal input voltage.

Electronic Metal Halide Systems Universal Voltage (120-277V)

Comments





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Performance Guide

Electronic Metal Halide Systems Mini Square and Mini Slim (120-277V)

Date

Prepared by



Item Number	OSRAM SYLVANIA Description ¹	Input Current (AMPS)	Lamp ANSI Code	Lamp* Type	Rated* Lumens (Im)	No. of Lamps	Ballast Factor (BF)	System Lumens	Input Power (W) 120V 277V		System Efficacy (Im/W)
51959 51956	QTP1x20MH UNV SQ F Formerly: QT1x20MH UNV SQ QTP1x20MH UNV SQ J	0.19/0.09	M156/C156	20W T4.5	1700	1	1.0	1700	23	23	74
51961 51957	QTP1x39MH UNV SQ F Formerly: QT1x39MH UNV SQ QTP1x39MH UNV SQ J	0.38/0.17	M130/C130	39W T6	3400	1	1.0	3400	44	44	77
51963	QTP1x70MH UNV SQ F Formerly: QT1x70MH 120V SQ	0.66/0.29	M98/M139/ M143/C98/ C139/C143	70W T6	7000	1	1.0	7000	79	79	89
51948 💿	QTP1x100MH UNV SLIM F	0.92/0.39	M90/M140/ C90/C191	100W E17	10,000	1	1.0	10,000	109	107	92/93

Type

- 1 Internal IDTP Insulation Detection Thermal Protector (see system information for detail).
- Performance information based on ceramic equivalent "C
- Preliminary specifications. Please contact OSRAM SYLVANIA for additional information.

Installation Notes

SPECIFICATION DATA

Catalog #

Comments

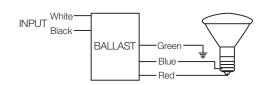
Project

- 1. Proper ballast mounting must be followed to allow for maximum thermal dissipation:
 - a. F can ballast should be mounted with the "feet" side placed tightly against the inside of the fixture.
 - b. J can ballast should be mounted with the PEM Stud side placed tightly against the inside of the fixture.
- 2. Lamp holders and conductors:
 - a. Use minimum 4kV Pulse Rated Lamp holder.
 - b. Use minimum 600Vrms/4kV Pulse Rated Wire to lamp.
 - c. The red lead must be connected to center terminal of lamp.
 - d. Do not connect any lamp lead to neutral or ground.
- 3. Grounding:
 - a. The ballast case and fixture must always be grounded. The grounding helps assure safety, proper lamp starting, and acceptable EMI/RFI performance. Install ballast in accordance with national and local electrical codes.
- 4. Auto shut down function including end-of-lamp-life and thermal protection:
 - a. Disconnect power when servicing. Cycle power to reset ballast after auto shutdown.
- 5. Control: Do not operate with dimmer or occupancy sensor.
- 6. If connecting the ballast input to 208V or 240V line with two "hot" leads, be sure to wire per NEC code: Re-Mark (re-identify) the ballast white neutral wire to another color (i.e. black). Be sure to simultaneously disconnect all ungrounded line conductors per NEC codes (i.e. switch both hot legs).

More installation considerations are in the QUICKANSWERS section of the Ballast Technology and Specification Guide.

Packaging:

Quantity: 40 pieces per carton Weight: 36 lbs. per carton (0.9 lbs each)



Item Number 51961 OTP 1 x 39 MH / UNV SO F Case Type (Mounting Style) QUICKTRONIC PROFESSIONAL Case Type Line Voltage (120-277V) Number of Lamps (1) Metal Halide Primary Lamp Wattage

Ballast shall be a metal halide

SYLVANIA QUICKTRONIC MH electronic ballast.

Specifications

Voltage Range: ±10% of 120-277V

rated line (108-305V)

Input Frequency: 50/60 Hz Power Factor: >98% Low THD: <10%

Starting Temp: -22°F (-30°C) min.

Lamp Frequency: 100W Mini-SLIM

200-240Hz Square Wave 20W/39W/70W Mini-Square 165-170Hz Square Wave

UL Listed, Type 1, Outdoor Suitable for recessed use 20W, 39W, 50W:

85°C Max. Case Temp.

70W, 100W:

90°C Max. Case Temp. Thermally Protected FCC 47CFR Part 18 Non-Consumer

Sound Rated A ANSI C62.41 Cat. A Transient Protection

Remote Mounting capability2 Lamp current crest factor: <1.2

2 Remote Mounting (max. wire length from ballast case to lampholder): Typically 6ft but varies by application. For remote mounting distances up to 15 ft. use #18 AWG minimum 600Vrms/4kV pulse rated wire. Output wires should be enclosed in 1/2" metal conduit to minimize EMI (electromagnetic interference). Wire and ground ballast, fixture, conduit & lighting system per NEC (National Electrical Code).

System Life / Warranty

QUICKTRONIC products are covered by the QUICK 60+® warranty, a comprehensive lamp and ballast system warranty. For additional details, refer to the QUICK 60+ warranty bulletin.

Max. Case Temp.

Measured at Tc Point

Warranty Period

70W, 100W: <90°C <80°C

3 years 5 years

20W, 39W, 50W:

<85°C 3 years <75°C 5 years

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Specifications subject to change without notice.