

QUICKTRONIC® MH Electronic Metal Halide Systems



Electronic Metal Halide

Professional Series

Lamp / Ballast Guide

QTP 2x20MH/UNV

QTP 1x20MH/UNV SQ
M156*; C156

QTP 1x39MH/UNV

QTP 2x39MH/UNV

QTP 1x39MH/UNV SQ
M130*; C130

QTP 1x50MH/UNV SQ

M110/C110

QTP 1x70MH/UNV

QTP 1x70MH/UNV SQ

QTP 1x70MH/UNV SLIM

M98/M139*/M143; C98/C139/C143

QTP 1x100MH/UNV

QTP 1x100MH/UNV SLIM

M90/M140*; C90, C191

*earlier reference obsolete

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 single-piece ballasts that incorporate the ballast, capacitor, ignitor and mounting brackets of conventional systems



- Two lightweight mounting styles allow for easy assembly in any fixture application (F-case and J-case)

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

QUICK60+® Warranty: Setting the standard for quality, QUICKTRONIC MH ballasts are covered by a QUICK60+® warranty, the first comprehensive system warranty in the industry

Key System Features

- Low frequency square wave
- Suitable for both quartz 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

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 design:

- 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)

Application Information

SYLVANIA QUICKTRONIC MH

is ideally suited for:

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

SPECIFICATION DATA

Catalog #	Date	Type
Project	Prepared by	
Comments		

Electronic Metal Halide Systems (120-277V)



Item Number	OSRAM SYLVANIA Description ¹	Input Current (AMPS)		Lamp ANSI Code	Lamp* Type	Rated* Lumens (lm)	No. of Lamps	Ballast Factor (BF)	System Lumens	Input Power (W)		System Efficacy (lm/W)
		120V	277V							120V	277V	
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/M143/ C98/C139/C143	70W T6	7000	1	1.0	7000	79	79	89
51914 51915	QTP1x100MH/UNV-F QTP1x100MH/UNV-J	0.96/0.41		M90/M140/ 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.

**MH QUICKTRONIC®
SYSTEMS**

Professional Series

Performance Guide

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

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: 165Hz 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 Compliant⁴

3 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 Electric Code).

4 Complies with European Union Restriction of Hazardous Substances Directive.

QTP MH

Installation Notes

- Proper ballast mounting must be followed to allow for maximum thermal dissipation:
 - F can ballast should be mounted with the "feet" side placed tightly against the inside of the fixture.
 - J can ballast should be mounted with the PEM Stud side placed tightly against the inside of the fixture.
- Lamp holders and conductors:
 - Use minimum 4kV Pulse Rated Lamp holder.
 - Use minimum 600Vrms/4kV Pulse Rated Wire to lamp.
 - The red lead must be connected to center terminal of lamp.
 - Do not connect any lamp lead to neutral or ground.
- Grounding:
 - 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.
- Auto shut down function including end-of-lamp-life and thermal protection:
 - Disconnect power when servicing. Cycle power to reset ballast after auto shutdown.
- Control: Do not operate with dimmer or occupancy sensor.
- 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 QUICKANSWER section of the Ballast Technology and Specification Guide.

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.

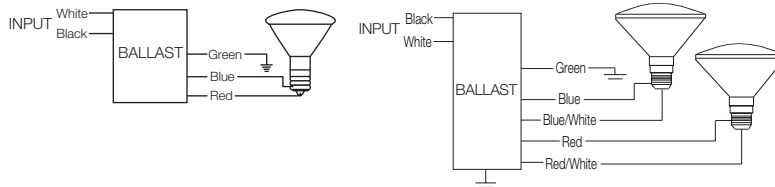
Measured at	Warranty Period
Tc Point	
<75°C	5 years
<80°C	3 years

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National Customer
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 1-800-LIGHTBULB
 (1-800-544-4828)
 www.sylvania.com

Specifications subject to change without notice.

Packaging:

Quantity: 10 pieces per carton
 Weight: 6 lbs. per carton
 (0.6 lbs each)



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

SEE THE WORLD IN A NEW LIGHT

SYLVANIA



SPECIFICATION DATA

Catalog #	Date	Type
Project	Prepared by	
Comments		

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



Item Number	OSRAM SYLVANIA Description ¹	Input Current (AMPS)	Lamp ANSI Code	Lamp* Type	Rated* Lumens (lm)	No. of Lamps	Ballast Factor (BF)	System Lumens	Input Power (W) 120V 277V	System Efficacy (lm/W)
51959	QTP1x20MH UNV SQ F <i>Formerly: QT1x20MH UNV SQ</i>	0.19/0.09	M156/C156	20W T4.5	1700	1	1.0	1700	23 23	74
51956	QTP1x20MH UNV SQ J									
51961	QTP1x39MH UNV SQ F <i>Formerly: QT1x39MH UNV SQ</i>	0.38/0.17	M130/C130	39W T6	3400	1	1.0	3400	44 44	77
51957	QTP1x39MH UNV SQ J									
51966	QTP1x50MH UNV SQ F	0.48/0.22	M110/C110	50W E17	4100	1	1.0	4100	55 54	75/76
51963	QTP1x70MH UNV SQ F <i>Formerly: QT1x70MH 120V SQ</i>	0.66/0.29	M98/M139/ M143/C98/ C139/C143	70W T6	7000	1	1.0	7000	79 79	89
51964	QTP1x70MH UNV SQ J									
51947	QTP1x70MH UNV SLIM J	0.64/0.27	M139/M98/ C139/C98	70W T6	7000	1	1.0	7000	76 75	92/93
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
51949	QTP1x100MH UNV SLIM J									

¹: Internal IDTP - Insulation Detection Thermal Protector (see system information for detail).
^{*} Performance information based on ceramic equivalent "C".
[⊗] Preliminary specification. Please contact OSRAM SYLVANIA for additional information.

Installation Notes

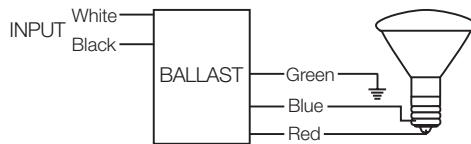
1. Proper ballast mounting must be followed to allow for maximum thermal dissipation:

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

MH QUICKTRONIC®

Professional Series

Performance Guide

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:

Mini-SLIM & 50W Mini-Square

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 capability³

Lamp current crest factor: <1.2

³ 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 Electric Code).

System Life / Warranty

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Max. Case Temp.

Measured at

Tc Point	Warranty Period
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70W, 100W:

<90°C	3 years
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<80°C	5 years
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20W, 39W, 50W:

<85°C	3 years
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<75°C	5 years
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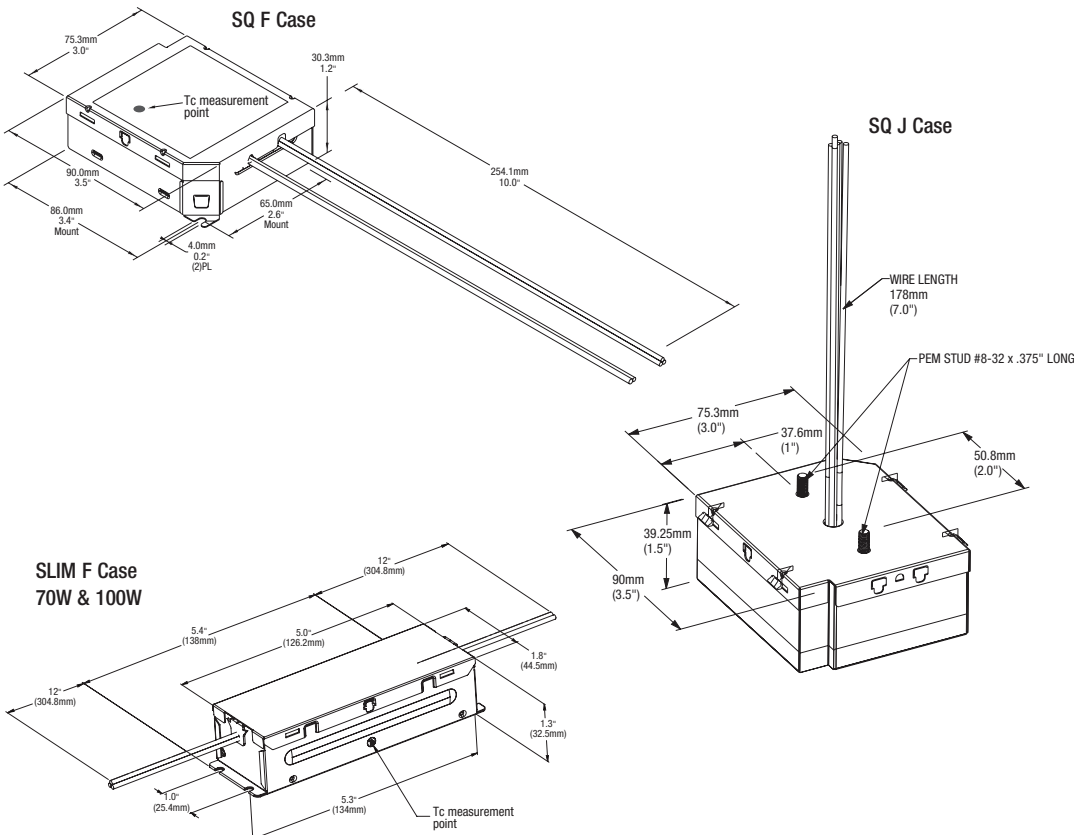
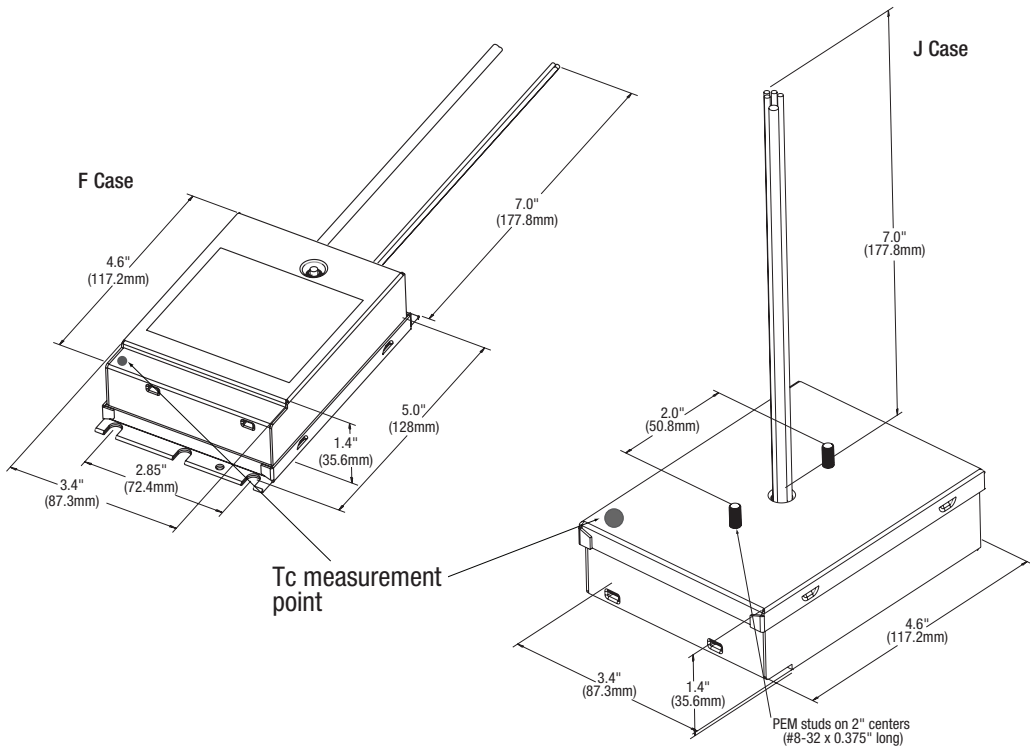
Electronic Metal Halide Systems Universal Voltage (120-277V)

MH QUICKTRONIC®

Professional Series

Performance Guide

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



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QTP MH