



# QOM-PH

Constant Voltage Electronic Power Supply compatible with a variety of third-party forward or reverse phase dimming modules. Available in 24VDC from 80-160W. It is indoor and outdoor-rated with an additional option to be used in Pool & Spa Applications. This surface mountable power supply comes standard in black and is also available in Stainless Steel. It is UL and Class II Listed.

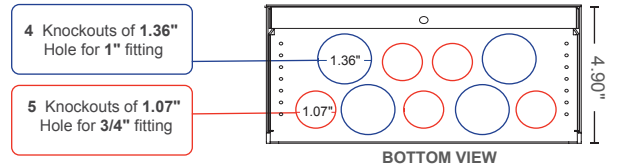
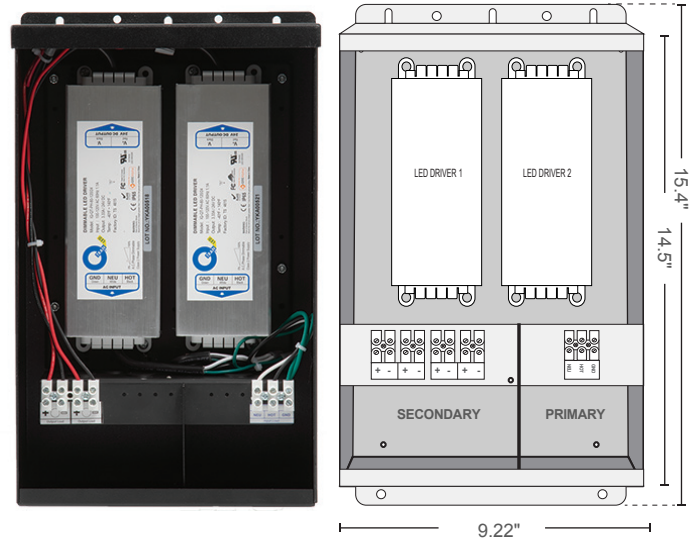
## HOUSING

- 18 gauge Welded Steel Enclosure: 9.22"W x 15.4"H x 4.90"D
- Door: 9.27"W x 14.5"H
- Knockouts: 9
- Built-in support bracket incorporated to secure housing for surface mounting

## FEATURES

- Suitable for dry, damp and wet locations
- Suitable for Indoor or Outdoor Use
- Suitable for Pool and Spa Application
- Fits up to (2): 80W 24VDC Drivers
- Forward Phase and Reverse Phase Dimmer control - compatibility chart on Page 4
- Integral wiring compartments for reduced installation costs
- Active Power Factor Correction, PF>0.9
- Built-in protection: SCP ( Short Circuit Protection ), OTP ( Over Temperature Protection ), OVP ( Over Voltage Protection ), OCP ( Over Current Protection )
- Completely potted design, no venting required Operating temperature Range: -40° to +140 °F
- Constant Voltage
- 5 year warranty
- CSA #239924

Non Pool & Spa model shown



## CLASSIFICATIONS

### Low Voltage Lighting Systems

- CSA Class 3425-15 and Class 3425-95
- CSA Standard C22.2 No. 250.0-08 - Luminaires
- ANSI/ UL Standard 2108 - Low Voltage Lighting Systems
- ANSI/ UL Standard 8750 - Light Emitting Diode (LED) Equipment for Use in Lighting Products
- CSA Std C22.2 No 250.13-14 - Light Emitting Diode (LED) Equipment for Lighting Applications

### LED Landscape Lighting Systems

- CSA Class 3402-15 and Class 3402-95
- CSA Standard C22.2 No. 250.7-07 - Extra-Low-Voltage Landscape Lighting Systems
- ANSI/ UL Standard 1838 - Low Voltage Landscape Lighting Systems
- ANSI/ UL Standard 8750 - Light Emitting Diode (LED) Equipment for Use in Lighting Products
- CSA Std C22.2 No 250.13-14 - Light Emitting Diode (LED) Equipment for Lighting Applications

### Hydromassage (Pool and Spa)

- CSA Class 3425-46 and class 3425-96
- UL Standard 379 - Power Unit for Fountain, Swimming Pool and Spa Luminaires
- CSA STD C22.2 NO.89-15-Swimming Pool Luminaire, Submersible Luminaires and Accessories

ORDERING GUIDE					
Model	1. Size	2. Prim. V	3. Sec. V	4. Housing	5. Opts
QOM-PH	-	120	/	24	-
<b>1. Size</b>		Max Load (Watts)	Secondary Voltage (12/24VDC)		
80W		1x80W	24VDC		
160W		2x80W	24VDC		
<b>2. Primary Voltage</b>		<b>4. Housing</b>			
120V		<b>BK</b> Black Powder Coat Finish (Standard) <b>SS</b> 316 Marine Grade Stainless Steel			
<b>3. Secondary Voltage</b>		<b>5. Options</b>			
24VDC		<b>PS</b> Pool & Spa			
Ordering Example					
<b>QOM-PH-80-120/24-SS-PS</b>					



20180823-V1

PROJECT NAME	DATE	COMPANY	TYPE	NOTE



# QOM-PH SPECIFICATIONS

## WIRE LENGTH TABLE

VDC	WATTS (W)	TOTAL LENGTH								
		10 AWG (5.6mm <sup>2</sup> )	12 AWG (3.3mm <sup>2</sup> )	14 AWG (2.0mm <sup>2</sup> )	16 AWG (1.3mm <sup>2</sup> )	18 AWG (0.78mm <sup>2</sup> )	20 AWG (0.50mm <sup>2</sup> )	22 AWG (0.33mm <sup>2</sup> )	24 AWG (0.20mm <sup>2</sup> )	26 AWG (0.13mm <sup>2</sup> )
24	17	940'	591'	372	234'	147'	92'	58'	37'	23'
	25	629'	396'	249	157	98'	62'	39'	24'	15'
	40	384'	242'	152	96'	60'	38'	24'	15'	9'
	80	180'	113'	71	45'	28'	18'	11	7'	4'

\*Distances are based on a 5% Voltage drop max.

- This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.



## SPECIFICATIONS

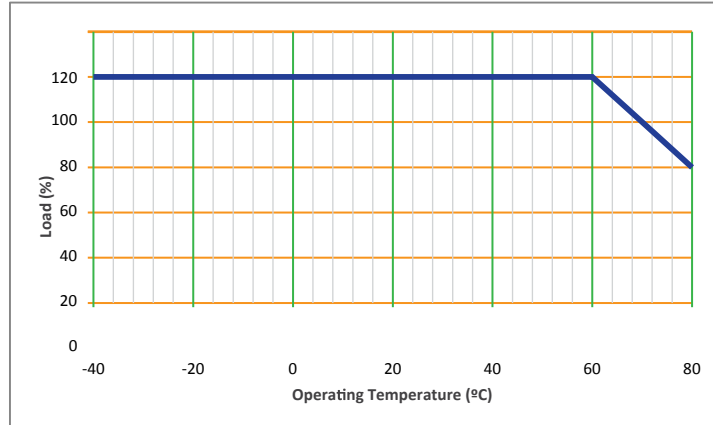
<b>Input</b> <ul style="list-style-type: none"> <li>Voltage ( RMS )</li> <li>Frequency ( Hz )</li> <li>Power Factor</li> </ul>	<table border="1"> <thead> <tr> <th>Min</th> <th>Nom</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>100</td> <td>120</td> <td>130</td> </tr> <tr> <td>47</td> <td>50/60</td> <td>63</td> </tr> <tr> <td>0.9</td> <td>----</td> <td>----</td> </tr> </tbody> </table>	Min	Nom	Max	100	120	130	47	50/60	63	0.9	----	----	<b>Expected Lifetime</b> <table border="1"> <thead> <tr> <th>Lifetime</th> </tr> </thead> <tbody> <tr> <td>65°C : 50,000</td> </tr> <tr> <td>75°C : 30,000</td> </tr> </tbody> </table>	Lifetime	65°C : 50,000	75°C : 30,000
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<b>Output</b> <ul style="list-style-type: none"> <li>Line Regulation ( % )</li> <li>Load Regulation ( % )</li> </ul>	<table border="1"> <tbody> <tr> <td>-10</td> <td>----</td> <td>10</td> </tr> <tr> <td>----</td> <td>----</td> <td>5</td> </tr> </tbody> </table>	-10	----	10	----	----	5	<b>Compliance / Safety</b> <ul style="list-style-type: none"> <li>EMI / RFI : CISPR-22 Class B : FCC part 15 Class B : EN55015, EMC</li> <li>Safety : CSA Certified : UL-2108 : UL-1838 : UL-8750 : UL-379 : CSA C22.2 No. 250.7-07 : CSA C22.2 No. 250.0-08 : CSA C22.2 No. 250.13-14 : CSA C22.2 No. 89-15 : CE(IEC/EN61347-1, IEC/EN61347-2-13)</li> </ul>									
-10	----	10															
----	----	5															
<b>Environmental</b> <ul style="list-style-type: none"> <li>Storage Temperature ( °C )</li> <li>Operating Temperature ( °C )</li> <li>Relative Humidity ( % )</li> <li>MTBF ( Hours @ 25°C ( 77°F ), Full Load )</li> </ul>	<table border="1"> <tbody> <tr> <td>-40</td> <td>----</td> <td>85</td> </tr> <tr> <td>-40</td> <td>----</td> <td>60</td> </tr> <tr> <td>5</td> <td>----</td> <td>95</td> </tr> <tr> <td>80,000</td> <td>----</td> <td>----</td> </tr> </tbody> </table>	-40	----	85	-40	----	60	5	----	95	80,000	----	----				
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80,000	----	----															
<b>Protections</b> <ul style="list-style-type: none"> <li>Short Circuit Protection ( SCP ) : Hiccup-Mode, Auto-Recovery upon removal of short</li> <li>Over Voltage Protection ( OVP ) : 105% of Voltage (typ) Min</li> <li>Over Current Protection ( OCP ) : Hiccup-Mode</li> <li>Over Temperature Protection ( OTP ) : Shutdown with Auto-Recovery</li> </ul>																	



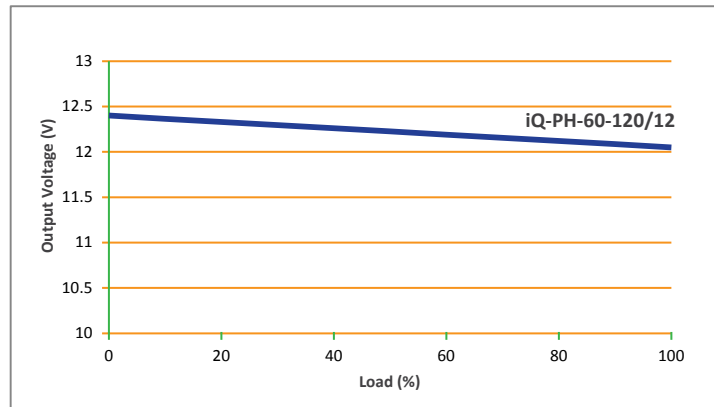
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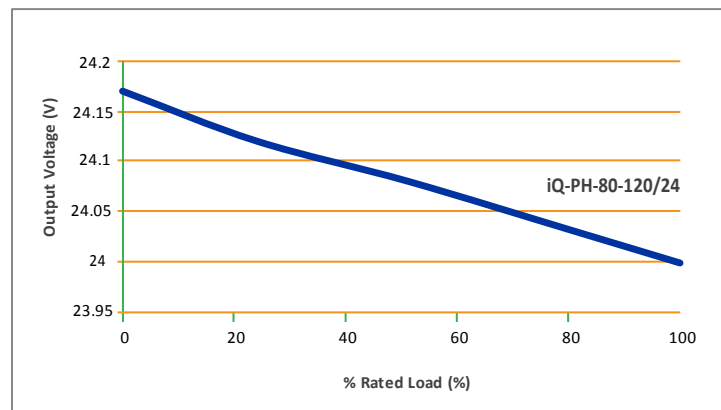
## DERATING CURVE



## OUTPUT VOLTAGE vs. LOAD



## OUTPUT VOLTAGE vs. LOAD





# SUPPORTED DIMMER LIST

90~120V AC ELV (Reverse phase) & Triac (Forward phase) Dimmer

Brand	Model	Dimmer Rating Power (max)	LED Flicker Free Test*
Lutron	DVCL-153PL (C/L)	600W	Pass
Lutron	TGCL-153P (C/L)	600W	Pass
Lutron	AB-600M-WH (Abella)	600W	Pass (##)
Lutron	D-600RH-DK (Rotary)	600W	Pass
Lutron	D-600R-WH (Rotary)	600W	Pass
Lutron	D-603PG-WH (Rotary)	600W	Pass
Lutron	GL-603PH-DK (GLYDER-3-way)	600W	Pass
Lutron	GL-600-WH (Glyder)	600W	Pass (##)
Lutron	MA-600GH-WH (Ecodim Digital with indicator leds)	500W	Pass (##)
Lutron	MIR-600THW-WH (RC Digital Fade Dimmer)	600W	Pass
Lutron	MS-VP600GHW-WH (Vacancy Sensor w/eco-dim Dimmer)	600W	Pass (##)
Lutron	S-600PH-WH (SKYLARK))	600W	Pass
Lutron	SELV-300PH-WH (SKYLARK-Single Pole)	300W	Pass
Lutron	TG-600PH-WH (Toggler)	600W	Pass
Lutron	TG-603PFH-WH (Toggler-eco-dim)	600W	Pass
Lutron	TT-300NLH-BL	600W	Pass
Cooper Wiring Devices	RI061-A (Rotary Dimmer w/ Non-Present)	600W	Pass
Cooper Wiring Devices	6001	600W	Pass
Cooper Wiring Devices	SLC03P (C/L)	600W	Pass
Cooper Wiring Devices	SI06P (non C/L)	600W	Pass
GE	DI61-271	600W	Pass
GE	DIB61-71	600W	Pass
GE	DIT61-71	600W	Pass
GE	DIT61-S71	600W	Pass
Legrand	V8051	600W	Pass

- NOTE:**
- ## -5-100% dimming range.
  - Flicker tests were carried out to ensure full range, flicker-free dimming from min to full load.
  - This is a representative list of dimmers only. Q-Tran makes no specific recommendation on product selection and there are no warranties of performance or compatibility implied. Refer to dimmer manufacturers for further information on LED compatibility. Lutron and their product brand names are registered brand names are registered trademarks.