

# QOM Power Supply Installation Instructions

Must be installed by licensed electrician.



E247732

 **US LISTED**  
LANDSCAPE POWER  
SUPPLY 16HW

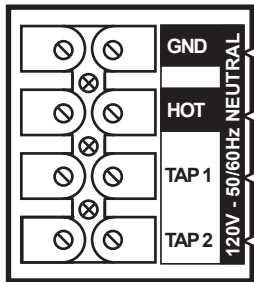
  
C US  
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ENLIGHTENEDTHINKING®

## QOM Single Series 60W-750W

Primary Line Voltage

1 Control Zone



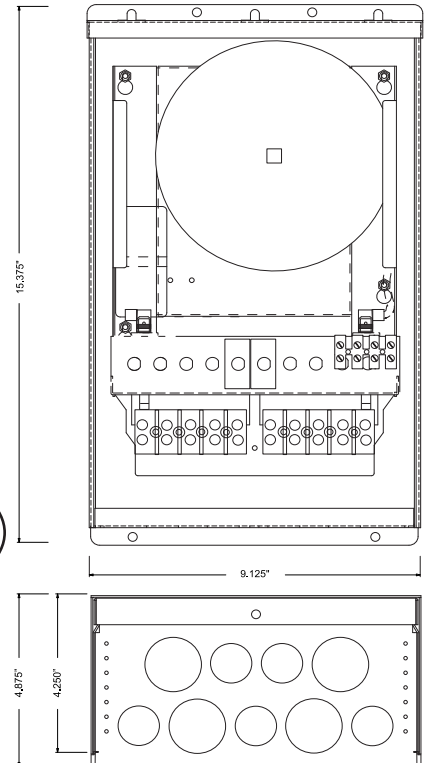
Land Ground

Land Hot

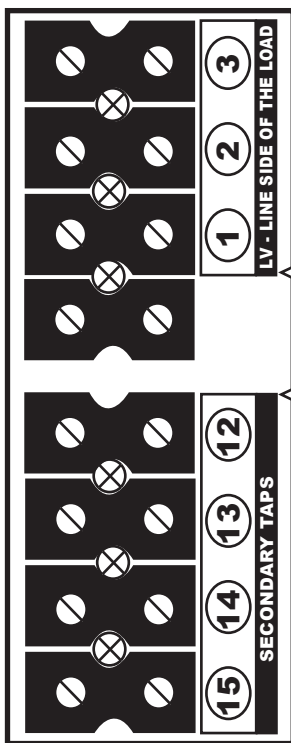
Land Neutral

Chose either tap 1 (switch) or 2 (dimmer; long primary run or low input voltage (115V or less))

Must test all voltage readings with a True RMS Voltage Meter when controlled by a dimmer. Do not exceed secondary voltage!



Secondary Low Voltage



For longer runs you may need to go to a higher tap & or larger wire gauge on secondary side.

**Step 1.**  
Connect line side or "hot" side of the low voltage connection. Start with position # 1.

**Step 2.**  
Connect common side to one of the low voltage terminal blocks.

\* Repeat step 1 & 2 for every new lead connection.

	L.V. Secondary feeds go to a 85 AMP rated terminal block.	6 #14
	Each terminal is UL listed to have the following capacity:	4 #12
		4 #10
		2 #8

### Ordering and Specification Guide

Model	Prim. V	Sec. V	No.	Amp.	Choke	Options	Options 2
$\boxed{1} - \boxed{2} / \boxed{3} - \boxed{4} \times \boxed{5} + \boxed{6} + \boxed{7} + \boxed{7}$							
<b>1 Model</b>	Max Lamp Load Watts <sup>1</sup>	PSC Efficiency	Max Energy Watts <sup>2</sup>	Max PSC Load VA	Max Prim. Amps@120V	Max Prim. Amps@277V	
QOM - 60ST	60 W	.92	65 W	79 VA	.66 A	.28 A	
QOM - 100ST	100 W	.92	108 W	135 VA	1.1 A	.48 A	
QOM - 150ST	150 W	.92	163 W	200 VA	1.7 A	0.7 A	
QOM - 300ST	300 W	.93	322 W	400 VA	3.4 A	1.5 A	
QOM - 500ST	500 W	.93	538 W	670 VA	5.6 A	2.4 A	
QOM - 600ST	600 W	.95	632 W	800 VA	6.7 A	2.9 A	
QOM - 750ST	750 W	.95	789 W	1000 VA	8.4 A	3.6 A	
<b>2 Primary Voltage</b>							
120 (60Hz)		230 (50/60Hz) *		277 (60Hz) *		240 (50/60)	
<b>3 Transformer Secondary Voltage</b>							
12		24					
<b>4 Number of Secondary Breakers</b>							
1 to 5		One to Five Secondary Circuit Breakers can be used					
<b>5 Secondary Breaker Amperage</b>							
Amps	Max 12V Load			Max 24V Load			
5	60W			120W			
10	120W			240W			
12.5	150W			300W			
15	180W			360W			
20	240W			480W			
25	300W			600W			
<b>6 Choke</b>							
CK-S	60W-300W Choke - Suggested with Dimming						
CK-L	500W-750W Choke - Suggested with Dimming						
XX	No Choke Required						
<b>7 Options</b>							
BK	Black Powder Coat Standard						
SS *	316L Satin Stainless Steel Housing and Door						
CP *	Cord & Plug						
SP	Switch Plate						
DP	Dimmer Plate						
TC	Time Clock						
<b>Ordering Example</b>							
QOM - 600ST - 120/12 - 2x25 + CK-L							

\* NOT STANDARD, CALL FACTORY FOR PRICING



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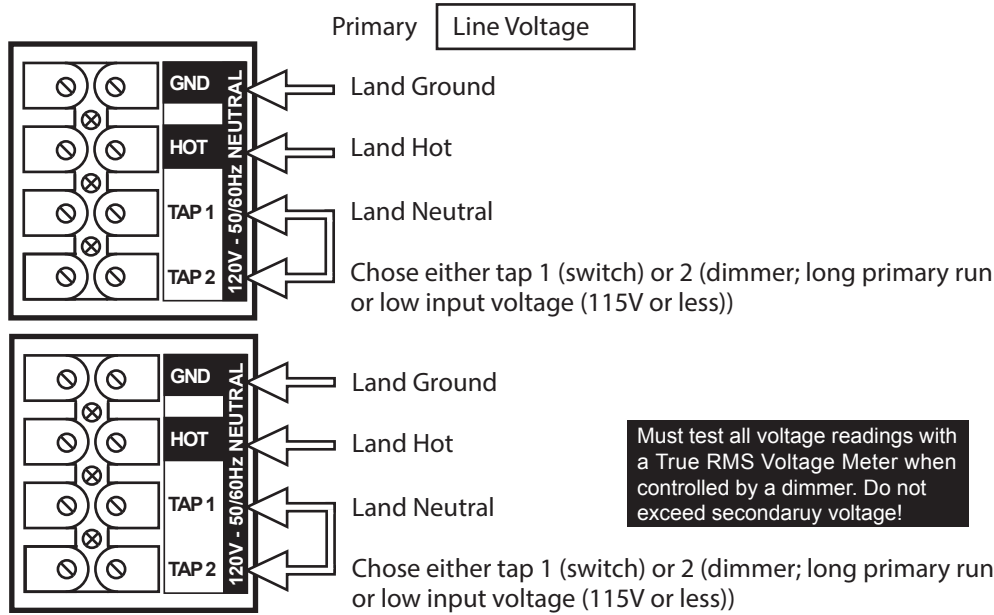
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# QOM Design Guide & Installation Instructions

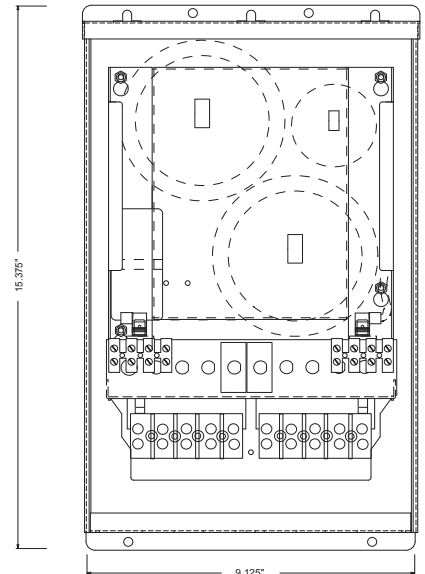
## QOM Duo Series 60W-120W



ENLIGHTENED THINKING

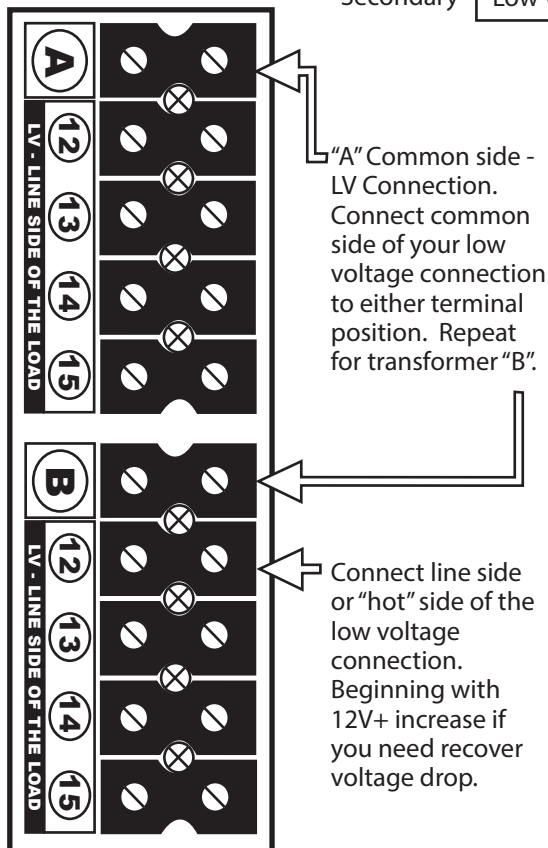


2 Control Zones

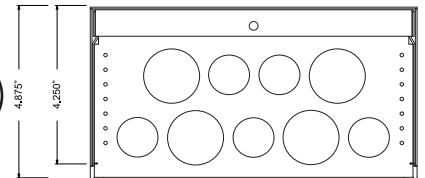


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**Secondary Low Voltage**



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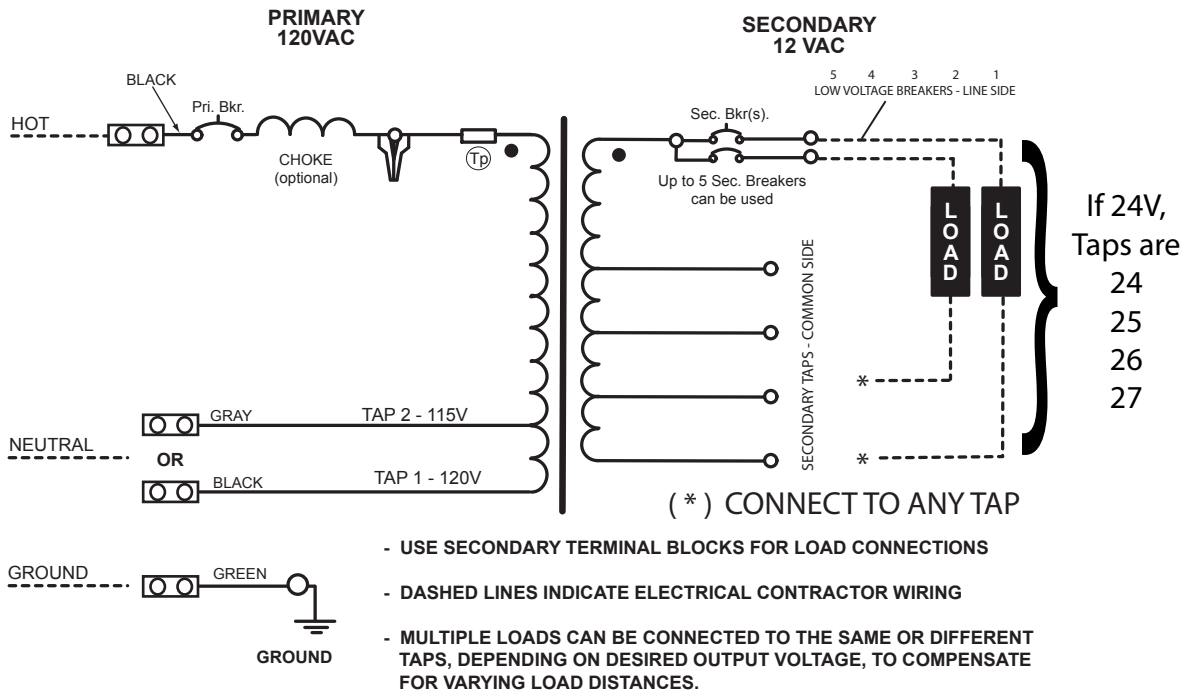
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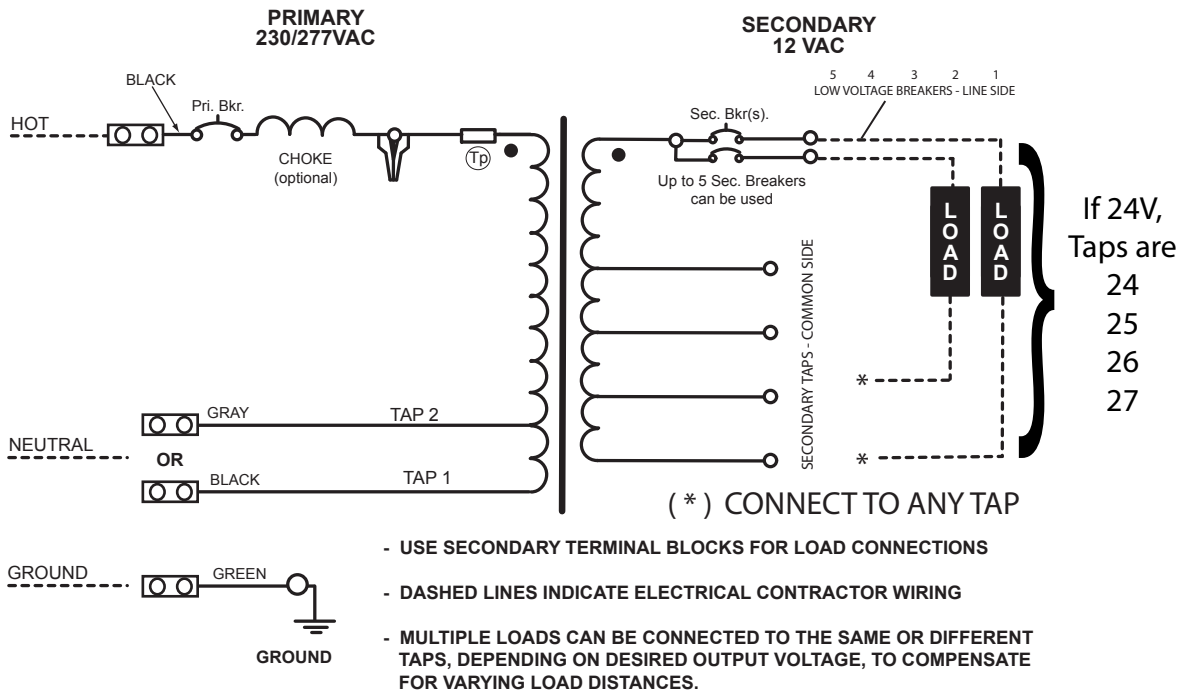
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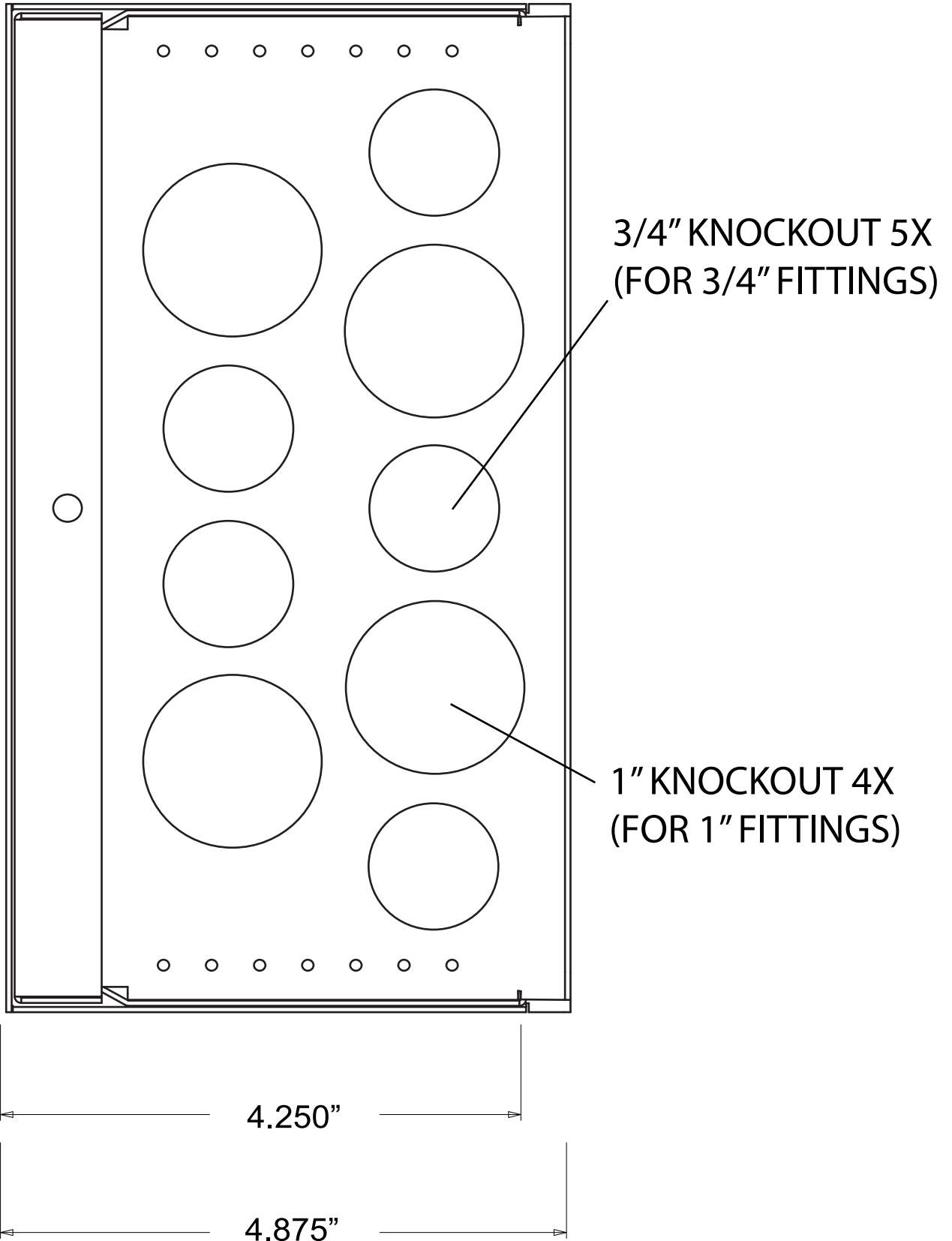
### 120V (60Hz) - 12/24V



### 230V (50Hz) - 12/24V- $\epsilon$ 277V (60Hz) - 12/24V

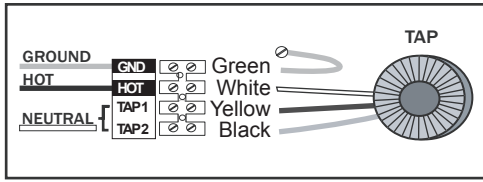


## QOM Knockout Layout



## Selecting the Right Tap

### Get The Tap Right!

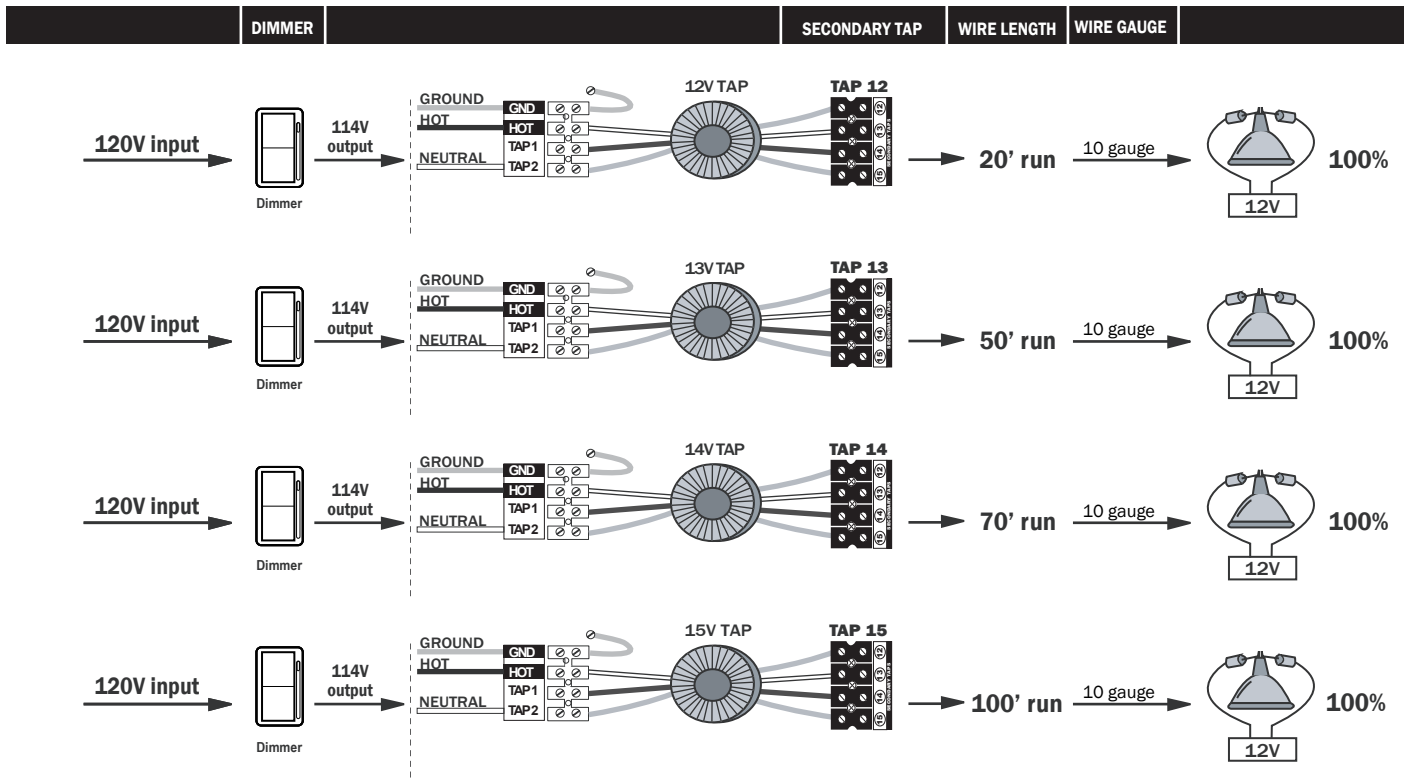


**Conclusion:**  
With a simple field adjustment, the contractor was able to recover his voltage drop and light output by switching from Tap 12 to Tap 15.

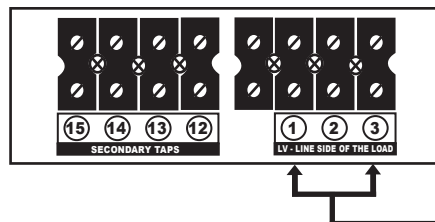
A 12V Lamp Operating at 10V = 50 % Light Output!

Rating	Excellent	Good	Poor	Bad	Very Bad
Light Output	100%	85%	69%	57%	47%
Lamp Volts	24.0V	22.8V	21.6V	20.4V	19.2V
Voltage Drop	0%	-5%	-10%	-15%	-20%
Lamp Volts	12.0V	11.4V	10.8V	10.2V	9.6V
Light Output	100%	85%	69%	57%	47%
Rating	Excellent	Good	Poor	Bad	Very Bad

The Impact of Voltage Drop on Light Output



\* Use a True RMS Volt Meter when a dimmer is used.  
(RMS = Root Mean Squared)



The "line side" of the load is connected to secondary circuit breakers.  
[4 AMP - 25 AMP]



## WARNINGS

### FOR CONDUIT CONNECTION

“WARNING - RISK OF ELECTRIC SHOCK. Install power unit 5 feet (1.5 m) or more from the pool or spa and 10 feet (3.05 m) or more from a fountain. Where the power unit is installed within 10 feet (3.05 m) of a pool or spa, connect unit to GFCI protected branch circuit.”

### FOR POWER SUPPLY CORD CONNECTION

“WARNING - RISK OF ELECTRIC SHOCK. Install power unit 5 feet (1.5 m) or more from the pool, spa, or fountain. Where the power unit is installed (a) indoors within 10 feet (3.05 m) of a pool, spa, or fountain or (b) outdoors, connect power unit to a receptacle protected by a GFCI.”

“WARNING - RISK OF FIRE. If installation requires running wire through a building structure, special wiring methods are needed. Contact a qualified electrician.

“WARNING - Outdoor Cord - connected unit shall be connected to a GFCI protected hooded flush type cover plate receptacle marked “Wet Location”.

“WARNING - Do not use extension chords.

The main Secondary Wiring is intended for shallow burial - less than 6 inches (152 mm)

For Supply connections use wire rated for at least 60C.

**LISTED** **5F78**

**LOW VOLTAGE LIGHTING  
POWER SUPPLY CENTER**

- LANDSCAPE LIGHTING POWER UNIT
- SUITABLE FOR WET LOCATION
- SUITABLE FOR INDOOR/OUTDOOR USE
- UL 1838 & 2108 LISTED
- ISOLATION TOROIDAL TRANSFORMER
- USE DIMMERS RATED FOR MAGNETIC LOW VOLTAGE LOADS
- 50/60 CYCLE
- MADE IN THE U.S.A.

### For model series:

**QOM-60, QOM-100, QOM-150, QOM-300, QOM-500, QOM-600, QOM-750, QOM-2X150, QOM-2X300 and QOM-150/300, all field installed conductors, both primary and secondary, shall have insulation suitable for the highest voltage potential of the equipment.**

WIRE TYPE	PRI. WIRE COLOR	BREAKER	MINIMUM AWG	12V
HOT	BLACK	5A	14	60W
NEU (TAP 1)	RED	10A	14	120W
NEU (TAP 2)	ORANGE	15A	14	180W
GROUND	GREEN	20A	12	240W
		25A	10	300W

QOM Model	120VAC		230VAC		277VAC		12V		24V	
	Input Voltage (V)	Input Current (A)	Frequency	Nominal Output Voltage (VDC)	Max Output Wattage (W)					
QOM-60	120 / 277	.56 / .25	50/60	12/24	60					
QOM-60X2	120 / 277	1.12 / .49	50/60	12/24	60X2					
QOM-60/100	120 / 277	1.48 / .64	50/60	12/24	60/100					
QOM-60/150	120 / 277	1.93 / .84	50/60	12/24	60/150					
QOM-60/300	120 / 277	3.28 / 1.42	50/60	12/24	60/300					
QOM-100	120 / 277	.92 / .40	50/60	12/24	100					
QOM-100X2	120 / 277	1.84 / .80	50/60	12/24	100X2					
QOM-100/150	120 / 277	2.29 / .99	50/60	12/24	100/150					
QOM-100/300	120 / 277	3.64 / 1.58	50/60	12/24	100/300					
QOM-150	120 / 277	1.37 / .59	50/60	12/24	150					
QOM-150X2	120 / 277	2.74 / 1.19	50/60	12/24	150X2					
QOM-150/300	120 / 277	4.09 / 1.77	50/60	12/24	150/300					
QOM-300	120 / 277	2.72 / 1.18	50/60	12/24	300					
QOM-300X2	120 / 277	5.44 / 2.36	50/60	12/24	300X2					
QOM-500	120 / 277	4.48 / 1.94	50/60	12/24	500					
QOM-600	120 / 277	5.32 / 2.30	50/60	12/24	600					
QOM-750	120 / 277	6.58 / 2.85	50/60	12/24	750					

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.

CAUTION: USE ONLY WITH MAXIMUM OUTPUT LOAD PER ABOVE TABLE.

- |  |  |  |
|--|--|--|
| <ul style="list-style-type: none"> <li>• SUITABLE FOR USE WITH SUBMERSIBLE LUMINAIRES OR SUBMERSIBLE PUMPS</li> <li>• SUITABLE FOR WET LOCATIONS</li> <li>• WALL MOUNT ONLY</li> <li>• FOR SUPPLY CONNECTIONS USE WIRE RATED FOR AT LEAST 60 C.</li> </ul> | <ul style="list-style-type: none"> <li>• SUITABLE FOR INDOOR OR OUTDOOR USE</li> <li>• SUITABLE FOR MOUNTING WITHIN 1.2m (4 ft.) OF THE GROUND</li> <li>• ISOLATION TOROIDAL TRANSFORMER</li> <li>• DIMMER, IF USED, MUST BE A MAGNETIC LOW-VOLTAGE DIMMER.</li> </ul> | <ul style="list-style-type: none"> <li>• 50/60 CYCLE A.C. ONLY</li> <li>• MADE IN THE U.S.A.</li> <li>• KEEP ENCLOSURE COVER CLOSED</li> <li>• READ INSTALLATION INSTRUCTIONS BEFORE WIRING</li> </ul> |
|--|--|--|

LOW VOLTAGE  
LUMINAIRE POWER  
SUPPLY CENTER

QOM Series tested to:  
UL-2108, UL-1838  
CSA C22.2 NO. 250.0-08  
CSA C22.2 NO. 250.7-07



**Q-TRAN, INC.**  
MILFORD, CT U.S.A.  
(203) 367-8777  
WWW.Q-TRAN.COM

**WARNING:** RISK OF FIRE. IF INSTALLATION INVOLVES RUNNING WIRE THROUGH A BUILDING STRUCTURE, SPECIAL WIRING METHODS ARE NEEDED. CONSULT A QUALIFIED ELECTRICIAN.