

KIMLIGHTING[®]

revision 8/14/19 • kl_12vtransformer_spec.pdf

Type: Job:		Approvals:
Transformer Catalog number:	Transformer Options:	
Transformer	Ordered Separately from Transformer	Date: Page: 1 of 4

Specifications

Enclosure: Stainless steel outdoor rated NEMA 3R. Removable hinge door and lockable latch (padlock by others) on right side of unit. Box has aple knockouts, one on the right side and three on bottom. Side knockout can be used for accessory photocell mounting. A 1.75" plugged hole is also located at the bottom of the unit provided for hardwiring.

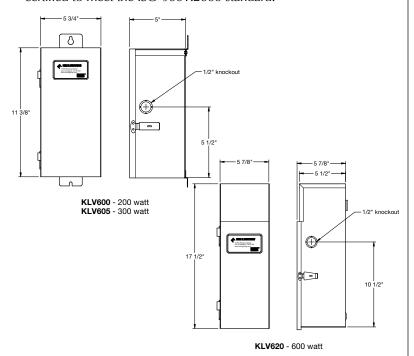
Transformer: Core and coil type fully epoxy encapsulated. Output is multi-tap 12V / 13V / 14V / 15V. The 200 and 300-watt units have single circuit output, the 600-watt unit has two circuits for output. Variable taps provide flexibility in system design with the 12 volt tap for fixtures near the transformer location and higher voltages for more remote fixtures.

Terminal Block: 80-amp terminal block.

Circuit Breaker: 25 amp magnetic circuit breaker (1) per circuit.

Cord: Six foot, heavy duty outdoor power cord is provided and installed.

Certification: ETL Listed to U.S. and Canadian safety standards for wet locations. Manufacturer shall employ a quality program that is certified to meet the ISO 9001:2000 standard.





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HUBBELL



Above Grade Transformers

ORDERING INFORMATION

Cat. No.	Description	Input	Cord
☐ KLV600	200 watt (1) circuit	120V	#18-2 SJTW
□ KLV605	300 watt (1) circuit	120V	#18-2 SJTW
□ KLV620	600 watt (2) circuits	120V	#18-2 SJTW
□ No Ontic	nn .		-

NOTE: Output wattage is not to exceed 25 amps on each circuit. Weather conditions must be considered when determining load on transformers, hot weather areas should reduce the output wattage to prevent heat build-up on circuit breakers. The voltage at each fixture must not exceed 12 volt. Load and distance must be considered when determining which voltage tap to use. A good maintenanceprogramis required to replace lamps as they burn out to preventover-voltage of remaining lamps.

Above-Grade

Transformer Accessories (Ordered separately from fixture)

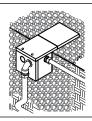
Cat. No.	Description	
☐ KLV-TC24	Plug-in Time Clock, receptacle provided in enclosure.	



revision 11/03/17 • kl_12vtransformer_spec.pdf

Type:

Job: Page: 2 of 4



In-grade Transformers

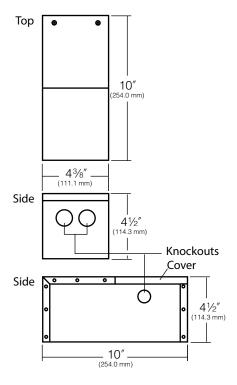
Specifications

Enclosure: Epoxy encapsulated in a stainless-steel burial enclosure.

KLV640 300W toroidal transformer has 120Volt (only) input and a 12V / 13V / 14V / 15V multi-tap output. KLV660 300W toroidal transformer has a 277V input and a single 12V output. KLV645 600W toroidal transformer has a 120V (only) input and a dual 300W 12V / 13V / 14V / 15V multi-tap output. **KLV665** 600W toroidal transformer has a 277V input and a dual 12V output. Variable taps provide flexibility in system design with the 12 volt tap for fixtures

near the transformer location and higher voltages for more remote fixtures.

Certification: UL Listed to U.S. and Canadian safety standards for wet locations.

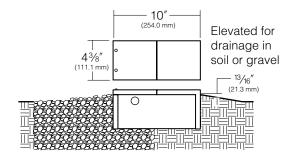


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ORDERING INFORMATION				
Cat. No.	Description	Input		
☐ KLV640	300 watt (1) circuit	120V		
□ KLV660	300 watt (1) circuit	277V		
☐ KLV645	600 watt (2) circuits	120V		
☐ KLV665	600 watt (2) circuits	277V		
☐ No Option				

NOTE: Output wattage is not to exceed 25 amps on each circuit. Weather conditions must be considered when determining load on transformers, hot weather areas should reduce the output wattage to prevent heat build-up on circuit breakers. The voltage at each fixture must not exceed 12 volt. Load and distance must be considered when determining which voltage tap to use. A good maintenance program is required to replace lamps as they burn out to prevent over-voltage of remaining lamps.



Above-Grade and In-GradeTransformers



revision 11/03/17 • kl_12vtransformer_spec.pdf

Type:	Approvals:
Job:	
Cable Catalog number:	
Cable	Page: 3 of 4

Specifications

The greatest benefit of installing a low voltage lighting system is the ability to conceal the flexible electrical cable directly under as little as 6" of soil cover, without the need for conduits or raceways.

Voltage drop for KLV600 series transformers is a function of cable size, circuit length and connected fixture wattage. In order to attain good lumen output, it is recommended that each fixture be provided a minimum of 10 volts. Use the chart below to estimate the cable size required and maximum circuit distance allowable to maintain 10 volts to the farthest connected fixture on a cable run.

Copper stranded landscape cable, black, UL recognized.

200 WATT TRANSFORMER

Total Fixture Watts	Cable Size	50 watt	100 watt	150 watt
Max.	#8-2	300′	200′	125′
Circuit Distance	#12-2	175′	90′	60′

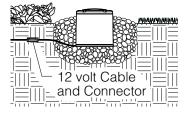
300 Watt / 600 WATT1/ 900 WATT2 / TRANSFORMERS

Total Fixture Watts	Cable Size	100 watt	150 watt	200 watt	250 watt
Max.	#8-2	300′	200′	125′	100′
Circuit Distance	#12-2	100′	75′	60′	50′

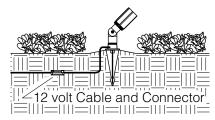
¹600 watt transformer consists of (2) 250 watt branches, requiring a minimum of (2) branch circuit cable runs.

²900 watt transformer consists of (4) 250 watt branches, requiring a minimum of (4) branch circuit cable runs.

Cable Installed In-grade In-grade Mount



Cable Installed In-grade Kim Accent or Path Light



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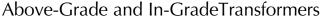
ORDERING INFORMATION

Cat. No.	Description
☐ KLV427	500' – #12-2 12 Volt Cable
□ KLV432	500' – #8-2 12 Volt Cable
☐ No Option	on





NOTE: See pages 3 - 4 for Variable Voltage Transformers which provide a 12 volt tap for fixtures near the transformer, and higher voltages for more remote fixtures.





revision 11/03/17 • kl_12vtransformer_spec.pdf

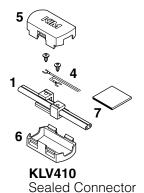
Type: Job:	Approvals:
Connector Catalog number:	
Connector	Page: 4 of 4

Specifications

Connectors may be buried, installed at grade, or surface mounted. They are designed to eliminate the common problem of corrosion and oxidation of the connections, which can cause power interruption. Injection molded in black Valox*, the two-piece connectors have stainless steel screws.

The standard sealed connector, **KLV410**, is for connecting one fixture to the cable. The standard connector employs piercing screws, and the branch connector utilizes compression type connectors and brass bussbars.

All connections are totally sealed and waterproofed with the dielectric mastic provided. Maximum design flexibility is assured since fixtures can be easily added or relocated by installing a new sealed connector.



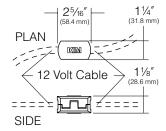
- **1.** Main 12 volt cable #8 or #12
- **2.** Brass buss bars
- **3.** Branch cables
- **4.** Fixture cable with fork connectors
- **5.** Connector top
- **6.** Connector bottom
- 7. Dielectric mastic

ORDERING INFORMATION

Cat. No. Description

☐ **KLV410** Sealed Connector

☐ No Option



KLV410 Sealed Connector