

## 300W Magnetic Low Voltage Transformers



### Features

- Compatible with Non-Linear LED driver/lamp loads, and traditional incandescent loads
- Line dimming may be achieved with Magnetic Low Voltage (MLV) type dimmers.
- Optional boost tap included on 120Vac models raises output voltage by 10%
- Output short-circuit and overload protection (25A) with manual-reset.
- Auto-reset input circuit protection
- All stainless steel chassis construction
- 5-Year warranty

### Model Numbers & Specifications

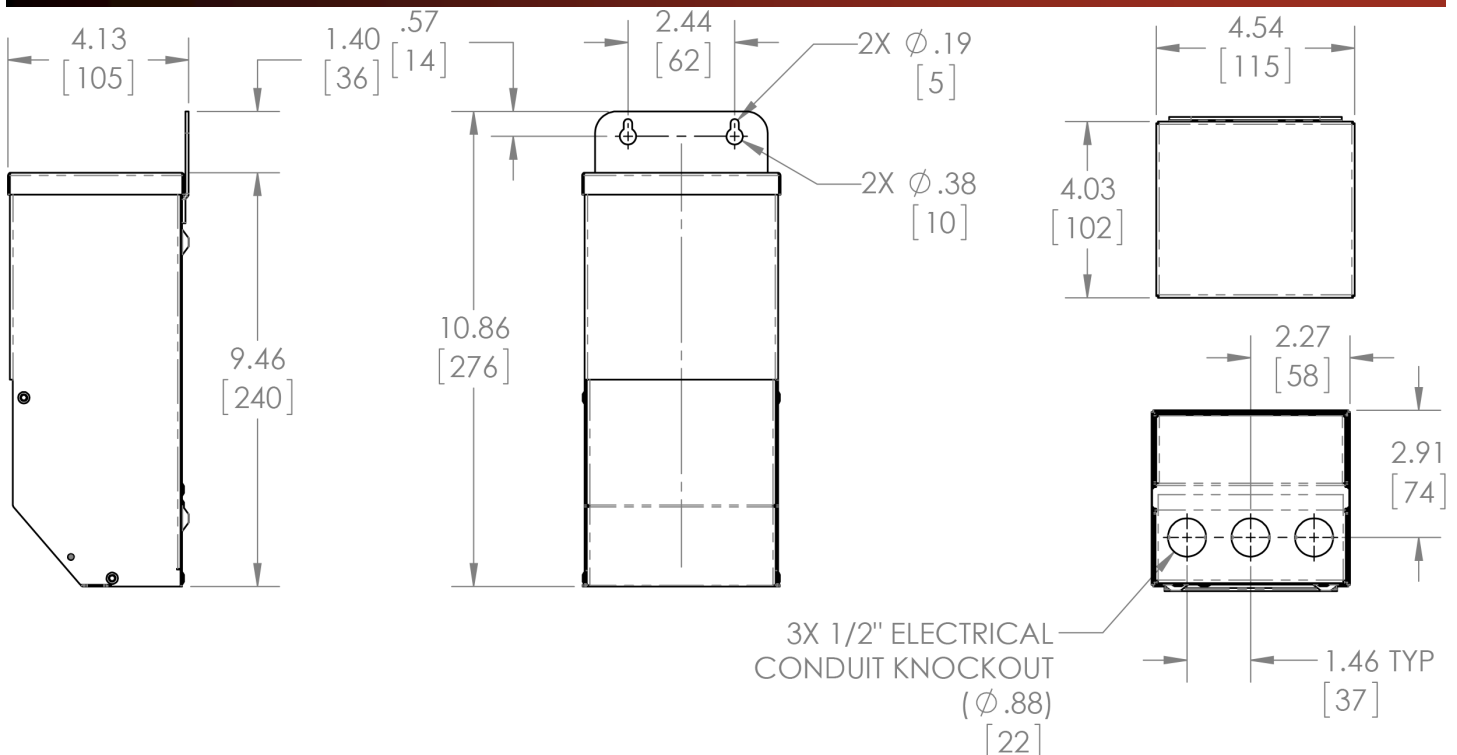
Model	Input Voltage 60Hz.	Output Voltage	Max. Output Current*	Max. Wattage	Mount Type
PS20B300M	120Vac	12Vac	25A	300W	Wall/Surface
PS20D300M	277Vac	12Vac	25A	300W	Wall/Surface

\* Transformers over 300-Watts will be configured with 2 or more breakers per N.E.C.

### Mechanical & Environmental

- Class B (130°C) Insulation system
- Operating Temperature -30°C to 105°C
- Input leads are UL1015 # 18 AWG, rated 105°C
- Output leads are UL1015 # 10 AWG, rated 105°C
- Epoxy encapsulated transformer
- NEMA 3R Stainless Steel enclosure
- Wiring compartment opens vertically with hinged door
- Wiring compartment (bottom) has three 3/4" knockouts
- UL Listed for the US and Canada, File E362033

### Enclosure Dimensions



# Installation Instructions

# POWERSELECT

For sales, technical assistance, or customer service:  
714-901-3900 / sales@powerselectinc.com  
Monday-Friday 8:30 a.m.—4:30 p.m. (PST)

## WARNING: Risk of Fire or Electrical Shock

- Install transformer outside only, mount vertically at least 12" from the ground. Do not lay on ground.
- Use transformer with 12Vac landscape lighting products only.
- Not for use within 10 feet of pools, ponds, or bodies of water. NOT for use with submersible fixtures.
- Do not submerge transformer.
- If hard-wiring the transformer; connect transformer to GFCI rated circuit breaker. If wiring transformer with a power cord (not included); plug transformer into GFCI protected outlet. Do not use extension cords.
- Do not connect two or more transformers in parallel.
- Keep a minimum of 10 feet between transformer and first fixture.
- Attach 1 or more low voltage cables with wire nuts or other suitable fasteners to the wires labeled 12VAC. There is no polarity.
- Use strain reliefs on all wires passing in to or out of the transformer. The transformer utilizes ½" trade size knock-outs. Strain reliefs are available in most home improvement stores.
- Do not coil excess cable around the transformer.
- Do not exceed the transformers rated wattage specification. Add all fixtures stated wattage together, not to exceed transformers rating on nameplate.
- If your electrical panel circuit breaker trips, verify all wiring and connections prior to resetting breaker.
- Voltage decreases the longer the distance fixtures are from the transformer. 12 or 10 AWG cable is recommended. Using larger cable as recommended will maximize light output.
- Bury low voltage cable in dirt or mulch to a depth of 6" to prevent damage to low voltage cabling.
- The transformer is protected from overload both thermally and with a secondary circuit breaker. Thermal overloads will reset automatically. If a thermal overload occurs, verify transformer mounted in accordance with instructions, and check obstructions around the transformer installation area such as dirt and landscape debris. If the secondary breaker trips, verify the total load is within transformer rated wattage specifications and check all wiring. Then reset circuit breaker.
- **120V MODELS ONLY:** If fixtures at the "end of the line" appear dim, verify the voltage at a far end fixture with a volt meter. If voltage is less than 11.6V, you may instead use the orange wire inside the transformer in place of the black. Remove the orange wire nut and place it on the black wire. The orange wire will now be used as the primary input wire, thereby increasing the output voltage by 10%. The black wire will not be used and will be capped with the orange wire nut.

### 1. Mount Transformer

Mount the transformer directly to the wall with the base of transformer at least 12 inches from the ground. Use screws appropriate for the wall type and anchors where solid backing is not available.

### 2. Prepare Secondary Wiring

Split the low voltage cabling while being careful NOT to expose copper wire under insulation. Strip the ends of each wire to 5/8—3/4 inch. Remove a knockout in base of transformer and apply strain-relief (not included) to one opening. Pass wire through strain relief and securely attach to transformer wiring labeled 12VAC with wire nuts or other suitable fastener. See transformer label for wire identification.

### 3. Place fixtures and cable

Lay the fixtures in your desired locations and route cable. Be sure total fixture wattage does not exceed the transformers nameplate rating. Follow the fixture manufacturers guidelines for attaching to low voltage cable and securing fixtures in your landscape. Protect or hide low voltage cabling with dirt or mulch.

### 4. Prepare Primary Wiring

Remove a knockout. Apply a strain relief to the knockout you removed and pass the power cord through strain relief. Remove outer insulation if needed. Strip ends of line, neutral, and ground conductors to 5/8 inch and twist wires together with transformer input wires matching line-line, neutral-neutral, and ground-ground. Secure the wires with wire nuts. Only apply power to the circuit once all connections have been reviewed. Power cords should be plugged in to GFCI outlets. The transformer may be hard wired with appropriate conduit and conductors. Follow the same wiring steps, no strain relief is required.

