

480V to 277V Step-Down Autotransformers

For applications up to 375 Watts

GE ProLine® 480V to 277V Step-Down Autotransformers are designed specifically for lighting applications to step down 480V 3-phase power to 277V single-phase power in conjunction with 277V or universal voltage (120-277V) linear fluorescent or HID electronic ballasts.

480V is often considered a “dirty” voltage due to other high voltage devices that are typically on a 480V circuit such as machine motors, conveyor motors, arc welders, etc.. These loads generate transients when started or switched which can damage electronic ballasts. The GE step-down autotransformer helps to absorb transients before reaching electronic ballasts as well as stepping down the voltage to 277V where most electronic ballasts operate.

Many existing 480-volt installations are Delta 480V transformers. New installations are typically Wye 480V. High failure rates are common with electronic 480V ballasts particularly with Delta 480V systems.

GE ProLine® 480V to 277V Step-Down Autotransformers provide a easy, flexible and most importantly a reliable solution for use with electronic energy saving ballasts in 480V Wye and grounded Delta applications.

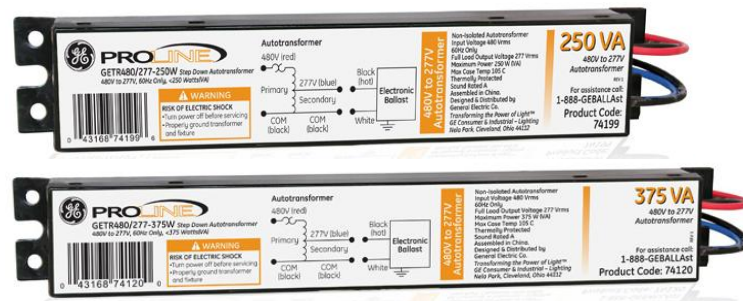
You can count on GE to answer your lamp and ballast questions at **1-888-GEBALLAST**.

Performance Features

- Non-Isolated Autotransformer
- Input Voltage 480 Vrms, 60 Hz
- Full Load Output Voltage 277 Vrms, 60 Hz
- Maximum Power 250W (VA) or 375 W (VA)
- Max Case Temp 105 C
- Thermally Protected
- Sound Rated A
- UL Listed – Does not require continuous updates to fixture UL files as opposed to UL Recognized transformers.
- Easy solution for retrofitting 480V applications with any electronic ballast up to 375 watts.
- T8 style ballast housing – same mounting as standard electronic T8 ballasts.
- Low-profile housing fits within standard fixtures
- Five-year limited warranty

Applications

- Industrial, warehousing, manufacturing



Benefits of using GE 480V to 277V Step-Down Transformers

Stocking Simplicity: Two transformers can be used with any T5, T8, CFL or HID electronic 277V ballast less than 375 watts

Flexibility: Available for use with any 277V instant or program start ballast & fits standard fixture channels

Reliability: High reliability with inherent transient voltage surge suppression on both Wye and properly grounded Delta systems 5 year system limited warranty

Cost: Lower field cost on replacements / lower cost in multi-ballast applications

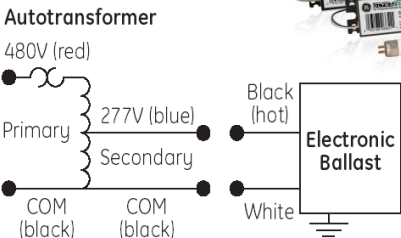
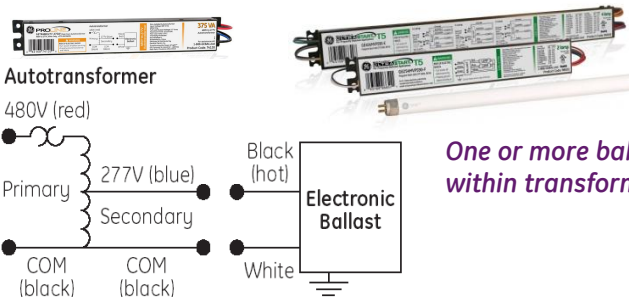
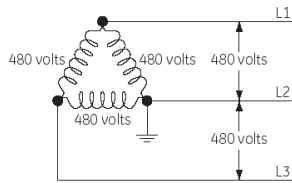
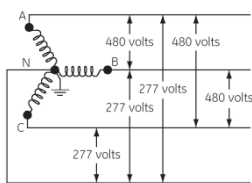
Fixture Simplicity: 480V solution that does not require a fixture OEM to test/submit for UL certification. The GE 480V step-down autotransformers are UL Listed and provide a field retrofit solution as well

Energy Savings: Allows retrofits of standard metal halide 480V systems to high performance fluorescent or eHID systems providing over 50% energy savings. High efficiency/low loss transformer design - 93%



How to Use

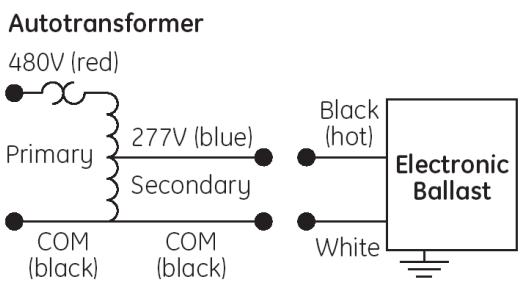
Wye 480V or Grounded Delta Power



One or more ballasts within transformer ratings

- Determine fixture system watts of electronic system**
 4 lamp T5 or 6 lamp T8 H typically less than 250VA
 6 lamp T5, 8 lamp T8 H, <350W eHID typically less than 375VA
**Watts approximately the same as VA with high power factor ballasts that operate typically at .98PF. Watts = Voltage x Amps x Power Factor*
- Select GE 480V to 277V Step-Down Autotransformer**
 74119 GETR480/277 → for system watts less than 250VA
 74120 GETR480/277 → for system watts less than 375VA
- Determine type of 480V Power Supply**
 Wye 480V, Delta 480V, grounded or ungrounded
- Wire transformer between power supply and electronic ballasts**
 Wye 480V - Connect any two phase wires to input of transformer
 Delta 480V - Special consideration, connect to ground referenced legs only
 Ungrounded - Not suitable for electronic systems & GE step down transformer
Autotransformer Output Wiring: Black lead to ballast white common lead (per NEC, add black tracer color stripe to ballast white wire)
 Blue lead to ballast black (hot) lead

Wiring Diagram



Packaging & Dimensions

GETR480/277-250W 6 pack 3.4lbs each							
Case Dimensions (Inches)			Mounting Dimensions (Inches)				
Length (L)	Width (W)	Height (H)	Bracket Length (BL)	Mount Length (M)	Mount Width (X)	Mount Slot (MS)	
9.5	1.7	1.2		8.89	1.13	0.312	

GETR480/277-375W 6 pack 4.7lbs each							
Case Dimensions (Inches)			Mounting Dimensions (Inches)				
Length (L)	Width (W)	Height (H)	Bracket Length (BL)	Mount Length (M)	Mount Width (X)	Mount Slot (MS)	
11.7	1.7	1.2		11.14	1.13	0.312	

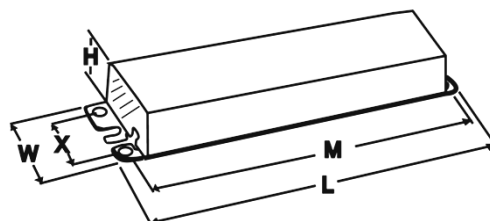
Order Codes

- 74119 GETR480/277-250W Autotransformer 480 to 277V, <250 Watts(VA), A can
- 74120 GETR480/277-375W Autotransformer 480 to 277V, <375 Watts (VA), F can

- ~93% electrical efficiency (ie, electronic system watts - 215 watts/93% = 231 total watts)

Application Notes:

- 2005 NEC 210.6 (D) requires that phase wires should not exceed 277V to ground for indoor electric discharge luminaire applications. This cannot be guaranteed by an inspector and therefore prohibits the use of lighting systems on 480V 2-wire Delta systems which are not grounded



The Power Behind the Power

GE ProLine® products are custom-manufactured to our demanding Six Sigma specifications for dependable performance with 100% inspection at the factory to ensure every ballast is ready to go on-site.

National Customer Service Center
1-888-GEBALLAST (432-2552)

For additional product and application information, please consult GE's Website: www.gelighting.com

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