

Series Y63, Y64, Y65, Y66, and Y69 Transformers

Installation Instructions

Part No. 24-8895-0, Rev. C
Issued May 30, 2014
Supersedes July 15, 2009

Application

The Series Y63, Y64, Y65, Y66, and Y69 Transformers provide 24 VAC power for loads of 40 VA through 300 VA. These transformers are designed for use on digital controllers, gas controls, ignition systems, motor actuators, staging controls, and most other 24 VAC Heating, Ventilation, Air Conditioning, and Refrigeration (HVACR) control systems.

The Y6x Series meets the requirements of UL 1585, UL 506, and CSA C22.2 No. 66, providing compliance in both the United States and Canada. The Y63, Y64, Y65, and Y66 transformers are listed as Class 2 transformers (UL 1585, CSA C22.2 No. 66). The Y69 is listed as a general purpose transformer (UL 506, CSA C22.2 No. 66).

Refer to *Series Y63, Y64, Y65, Y66, and Y69 Transformers Product Bulletin (LIT-125755)* for additional information and specifications on this series of 24 VAC output transformers.

Location Considerations

Consider the following when installing a transformer:

- Mount the transformer in an accessible location where it can be easily wired and examined.
- Make sure the selected transformer's base fits the mounting footprint and the application's other space requirements.
- Do not mount the transformer where it is exposed to water, condensation, high humidity, or corrosive or hazardous liquids and vapors.

Installation

You must complete the following tasks during installation. Failure to do so could damage the transformer or cause a hazardous condition.

- Check the electrical ratings and specifications on the product label to ensure the transformer matches the application requirements.
- After installation, follow the checkout procedures as described in these instructions. See *Checkout*.

Note: The Y6x Series Transformers must only be installed by experienced, trained, service technicians.

Wiring



WARNING: Risk of Electric Shock.

Disconnect the power supply before making electrical connections. Contact with components carrying hazardous voltage can cause electric shock and may result in severe personal injury or death.

AVERTISSEMENT : Risque de décharge électrique.

Débrancher l'alimentation avant de réaliser tout branchement électrique. Tout contact avec des composants conducteurs de tensions dangereuses risque d'entraîner une décharge électrique et de provoquer des blessures graves, voire mortelles..



CAUTION: Risk of Property Damage.

Do not apply power to the system before checking all wiring connections. Short circuited or improperly connected wires may result in permanent damage to the equipment.

MISE EN GARDE : Risque de dégâts matériels.

Ne pas mettre le système sous tension avant d'avoir vérifié tous les raccords de câblage. Des fils formant un court-circuit ou connectés de façon incorrecte risquent d'endommager irrémédiablement l'équipement.

IMPORTANT: Use copper conductors only. Make all wiring connections in accordance with local, national, and regional regulations. Do not exceed the Y6x Series Transformer's electrical ratings.

Follow these steps to wire a Y6x Series Transformer:

1. With the line-voltage supply power disconnected, wire the appropriate primary leads from the transformer to the line voltage power supply terminals or leads. See Figure 1, Figure 2, and Figure 3.
2. Connect the transformer secondary leads to the 24 VAC control system or load.

3. Properly insulate and secure all unused, exposed wire leads separately.

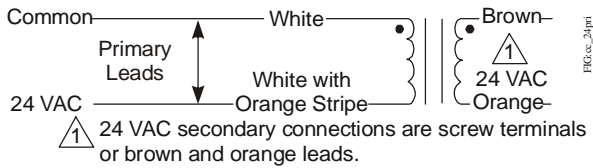


Figure 1: Wire Color Codes and Voltage for 24 VAC (Primary) Y6X Series Transformers

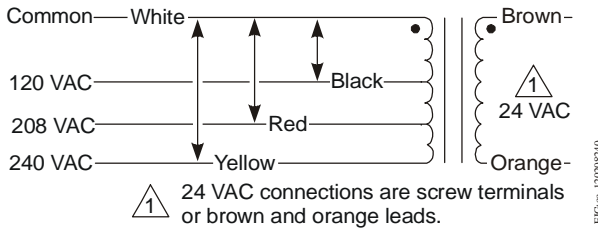


Figure 2: Wire Color Codes and Voltages for 120/208/240 Series Transformers

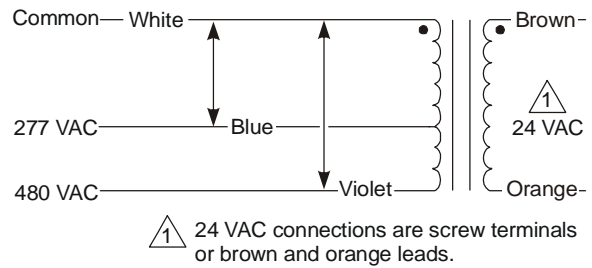


Figure 3: Wire Color Codes and Voltages for 277/480 VAC Y6X Series Transformers

Checkout

After installation is complete, reconnect the supply power. Operate and observe the controlled equipment through at least three complete cycles. Check voltages and ampere demand at the transformer. Verify the transformer and controlled equipment function as intended.

Repair Information

Do not make field repairs to the transformers. For a replacement transformer, contact the nearest Johnson Controls® distributor or sales representative.

Technical Specifications

Series Y63, Y64, Y65, Y66, and Y69 Transformers

Product	Series Y63, Y64, Y65, Y66, Y69 Transformers	
Input Power Requirements	24–480 VAC at 60 Hz	
Full Load Secondary Voltage	23.5 VAC (Nominal)	
Open Circuit Secondary Voltage (No Load)	27.0 VAC (Nominal)	
Full Load Secondary VA Rating	Series Y63 Y64 Y65 Y66 Y69	Volt-Amperes 50 VA 92 VA 40 VA 75 VA 300 VA
Finish	End bells, frame, feet, and mounting plates are corrosion resistant	
Ambient Operating Temperature	-40 to 104°F (-40 to 40°C)	
Ambient Storage Temperature	-40 to 140°F (-40 to 60°C)	
Shipping Weight	Y63 Y64 Y65 Y66 Y69	3.0 lb/1.4 kg 4.0 lb/1.8 kg 2.0 lb/0.9 kg 3.0 lb/1.4 kg 11.0 lb/5.0 kg
Agency Compliance	UL Listed Y63, Y64, Y65, Y66; File E95575, CCN's XOKV (US) and XOKV7 (Canada) UL Recognized Y63, Y64, Y65, Y66; File E95575, CCN's XOKV2 (US) and XOKV8 (Canada) UL Listed Y69; File E95138, CCN's XPTQ (US) and XPTQ7 (Canada) All transformers are Class 2 except the Y69 (300 VA), which is listed as a power transformer.	

The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the local Johnson Controls office or call 1-800-275-5676. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

Refer to Series Y63, Y64, Y65, Y66, and Y69 Transformers Product Bulletin (LIT-125755) for additional information and specifications on this series of 24 VAC output transformers.



Building Efficiency
507 E. Michigan Street, Milwaukee, WI 53202

*Metasys® and Johnson Controls® are registered trademarks of Johnson Controls, Inc.
All other marks herein are the marks of their respective owners. © 2014 Johnson Controls, Inc.*