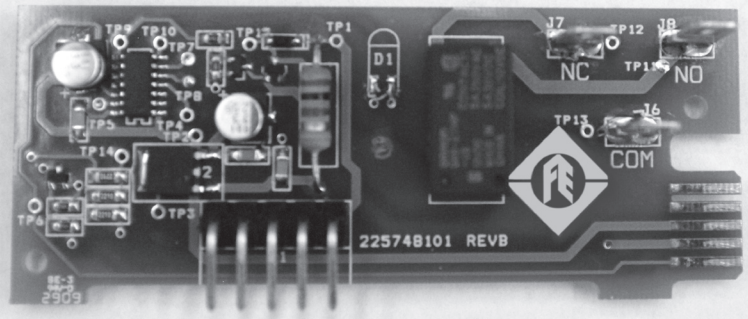
Auxiliary Relay Board

225755901 Installation Manual



Franklin Electric

⚠ WARNING

Serious or fatal electric shock may result from failure to remove electrical power from the SubDrive prior to installing the Auxiliary Relay Board. Disconnect power before working on the system. Capacitors inside the SubDrive can still hold a lethal voltage for some time after power has been removed, so allow 10 minutes after removing supply power for dangerous internal voltage to discharge.

CAUTION

This accessory should only be used with Franklin Electric SubDrive NEMA 4 controllers. This product is **not** intended to be used with the SubDrive300.

ATTENTION

This accessory is intended for installation by technically qualified personnel. Failure to install it in compliance with national and local electrical codes and within Franklin Electric's recommendations may result in electrical shock or fire hazard, unsatisfactory performance, and equipment failure.

Tools and Hardware Required

A Philips screwdriver is required to remove the SubDrive access panel. A crimp tool may be required for the ¼" quick connects.

Underwriters Laboratories Inc. Information

This Auxiliary Relay Board Interface is a UL-Listed accessory.

Manufacturer: Franklin Electric Co, Inc.

Model#: 225755901

Output Contacts: 5A, 250VAC General Purpose

Suitable For Use On:

5870203114 - MonoDrive NEMA 4

5870204114 - MonoDriveXT NEMA 4

5870203384 - SubDrive75 NEMA 4

5870204104 - SubDrive100 NEMA 4

5870204154 - SubDrive150 NEMA 4

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POWER CONVERSION EQUIPMENT 4S73
E184902

NOTE: The Auxiliary Relay Board is only compatible on SubDrives with date codes after 09J45. Please consult factory for SubDrives built prior to date code.

Purpose

The Auxiliary Relay Board provides run-indication relay contacts for use with Franklin Electric NEMA 4 drives (SubDrive300 excluded). If the Auxiliary Relay Board cannot communicate with the SubDrive, the relay is held in an inactive state.

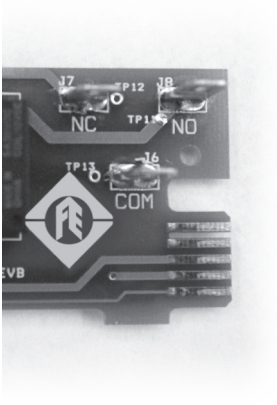
Contact Ratings	**Resistive Load** ($\cos\phi = 1$)	**Inductive Load** ($\cos\phi = 0.4$; L/R = 7 ms)
Rated Load	5A @ 250 VAC; 5A @ 30 VDC	1.5A @ 250 VAC; 1.5A @ 30 VDC
Max. Switching Power	1,250 VA, 150 W	375 VA, 80 W

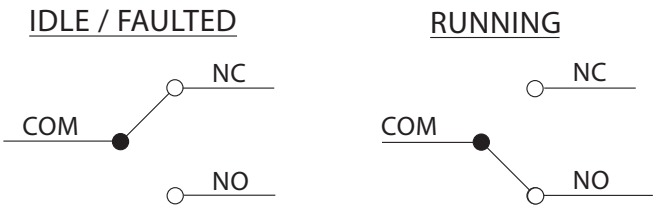
Relay Quick Connect Tabs:

J6: COM: Common — Relay Common Point

J7: NC: Normally Closed contact
- Drive Idle: NC state = closed
- Drive Running: NC state = open

J8: NO: Normally Open contact
- Drive Idle: NO state = open
- Drive Running: NO state = closed





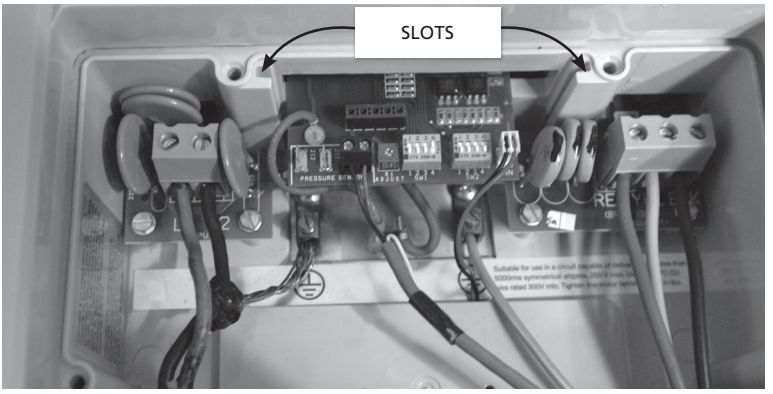
Either or both sets of contacts can be utilized to reflect drive status.

Installation Procedure

1. If the SubDrive is powered, remove power from the drive and wait at least **10 minutes** before accessing the drive to ensure that the bus voltage has been given sufficient time to dissipate.
2. Remove the access panel.

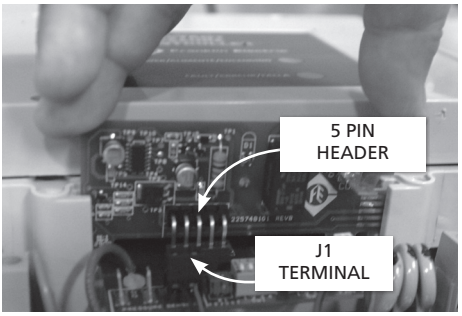
3. With the access panel removed, locate the slots in the plastic chassis that will hold the Auxiliary Relay Board.

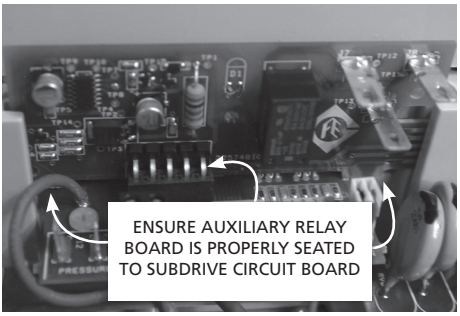
NOTE: The Auxiliary Relay Board and the SubDrive are electrically-sensitive devices. Please follow standard anti-static precautions to protect the electronic components.



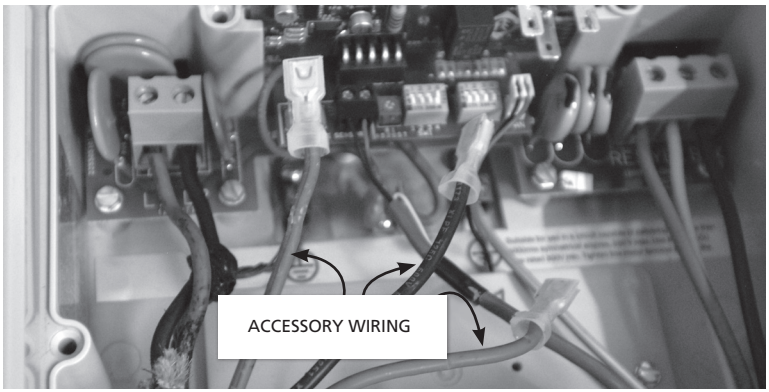
4. Align the 5-pin header on the Auxiliary Relay Board with the J1 terminal on the SubDrive, gently install the Auxiliary Relay Board until fully seated.

ATTENTION: avoid contact with SubDrive DIP switches to prevent setting changes.

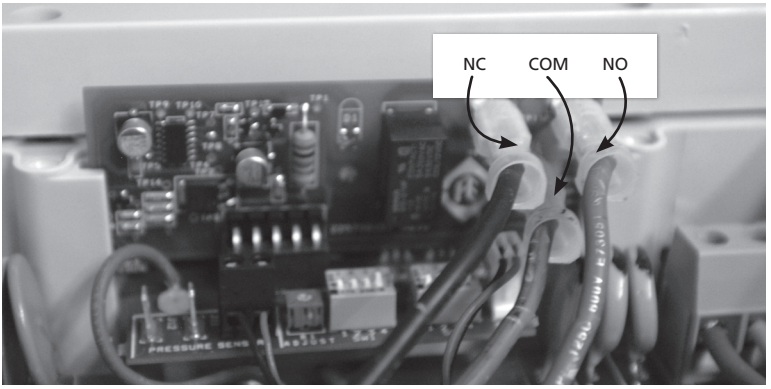




5. Feed the control lines from the auxiliary device through an available conduit opening at the bottom of the drive. Ensure the accessory wires are terminated using ¼" quick connects.



6. Attach wires to NO, NC and COM as needed.



7. Reinstall the access panel.

8. Restore power to the system and verify system operation.

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