RFAC-24D RFI (EMI) Filter Kit (Part No. 9507)
INSTALLATION INSTRUCTIONS

(The RFAC-24D Kit is used on the KBAC-24D and KBDA-24D Series Drives with and without the On/Off AC Line Switch Kit)

Items Included in this Kit: RFAC-24D, Installation Instructions, two white jumper wires with right angle terminals, Warranty Registration Card.

SEE SAFETY WARNING ON REVERSE SIDE

WARNING! HIGH VOLTAGE! DISCONNECT AC LINE BEFORE INSTALLING THE RFAC-24D

DESCRIPTION

The RFAC-24D (filter) is used with Models KBAC-24D and KBDA-24D (drive) to provide RFI (EMI) suppression. The filter installs onto the drive's PC Board with quick-connect terminals and wire jumpers (supplied). The filter can be installed on drives with or without the AC Line Switch Kit (Part No. 9482). With the filter installed, the drive complies with CE Council Directive 89/336/EEC relating to the Class A Industrial Standard. The filter is rated 1 HP (0.75 kW) at 230 Volts AC Line input and 3/4 HP (0.56 kW) at 115 Volts AC Line input.

Note: *The following instructions provide for three variations of the filter installation.*

1. *Filter installation without the AC Line Switch Kit.*
2. *Filter and AC Line Switch Kit installation.*
3. *Filter installation with the AC Line Switch Kit previously installed.*

1 WIRING AND INSTALLATION INSTRUCTIONS FOR FILTER ONLY (WITHOUT AC LINE SWITCH)

Note: *If the filter will be installed along with the AC Line Switch Kit, follow the instructions in Section 2 only. If the filter will be installed with the AC Line Switch Kit previously installed, follow the instructions in Section 3 only.*

1.1 Remove and discard both jumper wires that are installed on the drive's Terminals L1A-L1B and L2A-L2B. Using pliers, gently rock the terminals back and forth while pulling them upward. See Figure 1.

1.2 Install one end of the new jumper wire on the drive's Terminal L1B. See Figure 2.

1.3 Install one end of the other new jumper wire on the drive's Terminal L2B. See Figure 2.

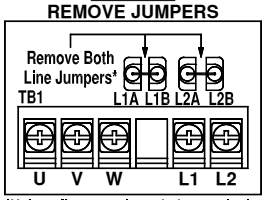
1.4 Install the new jumper wire from the drive's Terminal L1B on the filter's Terminal L1C. See Figures 2 and 3.

1.5 Install the new jumper wire from the drive's Terminal L2B on the filter's Terminal L2C. See Figures 2 and 3.

1.6 Align the filter's Terminals L1A and L2A with the drive's Terminals L1A and L2A. Push down on the filter, between these two terminals, until the terminals are fully engaged. See Figure 3.

1.7 Install the ring terminal of the filter's green/yellow ground wire onto the drive's green ground screw (chassis) located at the lower right corner of the case. See Figure 4.

FIGURE 1
REMOVE JUMPERS



*Using pliers, gently rock the terminals back and forth while pulling them upward.

FIGURE 2
INSTALL NEW JUMPERS

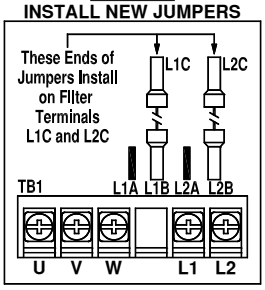


FIGURE 3
ALIGN TERMINALS L1A AND L2A AND INSTALL FILTER ON DRIVE

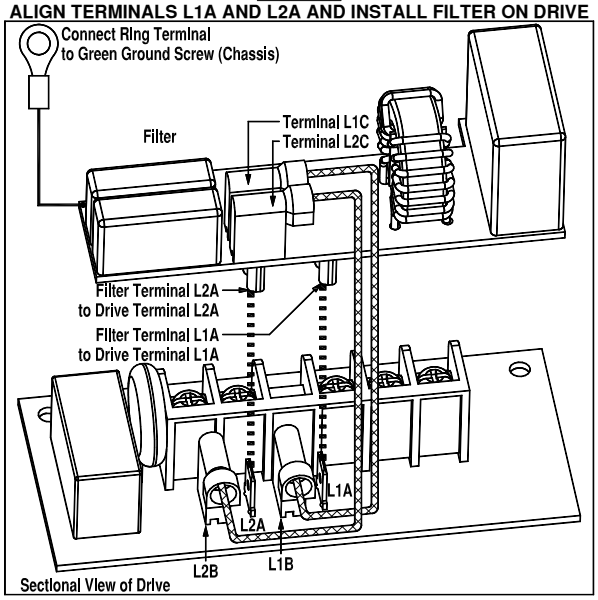
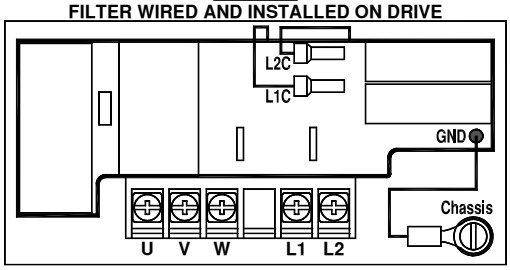


FIGURE 4
FILTER WIRED AND INSTALLED ON DRIVE



2 WIRING AND INSTALLATION INSTRUCTIONS FOR FILTER AND AC LINE SWITCH

Note: *If the filter will be installed without the AC Line Switch Kit, follow the instruction in Section 1 only. If the filter will be installed with the AC Line Switch Kit previously installed, follow the instructions in Section 3 only.*

2.1 Mount the AC Line Switch using only the "Mounting" instructions that are provided with the AC Line Switch Kit. Skip the "Electrical Connections" instructions.

2.2 Remove and discard both jumper wires that are installed on the drive's Terminals L1A-L1B and L2A-L2B. Using pliers, gently rock the terminals back and forth while pulling them upward. See Figure 5 on page 2.

2.3 Install the switch's top blue wire on the drive's Terminal L1B. See Figure 6 on page 2.

2.4 Install the switch's top white wire on the drive's Terminal L2B. See Figure 6 on page 2.

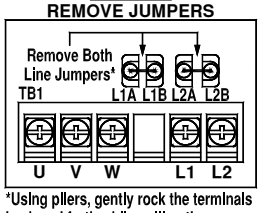
2.5 Install the switch's bottom blue wire on the filter's Terminal L1C. See Figures 6 and 7 on page 2.

2.6 Install the switch's bottom white wire on the filter's Terminal L2C. See Figures 6 and 7 on page 2.

2.7 Align the filter's Terminals L1A and L2A with the drive's Terminals L1A and L2A. Push down on the filter, between these two terminals, until the terminals are fully engaged. See Figure 7 on page 2.

2.8 Install the ring terminal of the filter's green/yellow ground wire onto the drive's green ground screw (chassis) located at the lower right corner of the case. See Figure 8 on page 2.

FIGURE 5
REMOVE JUMPERS



*Using pliers, gently rock the terminals back and forth while pulling them upward.

FIGURE 6
CONNECT SWITCH TO DRIVE AND FILTER

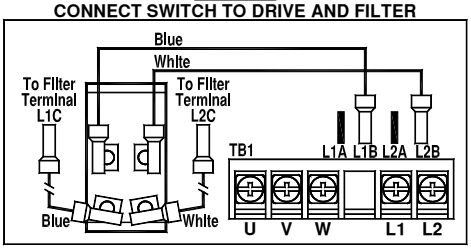


FIGURE 7
ALIGN TERMINALS L1A AND L2A AND INSTALL FILTER ON DRIVE

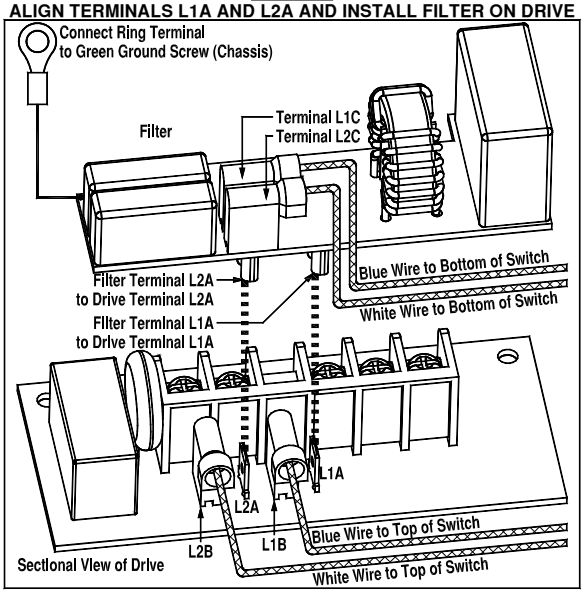
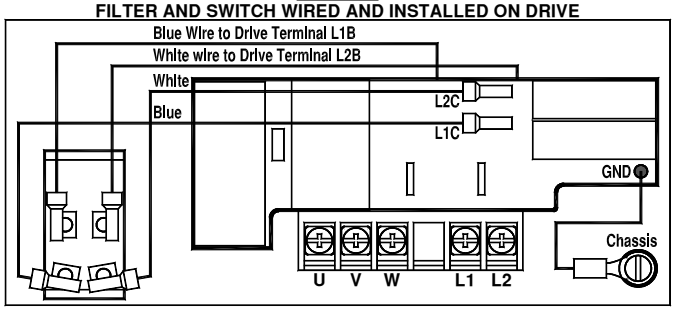


FIGURE 8
FILTER AND SWITCH WIRED AND INSTALLED ON DRIVE



3 WIRING AND INSTALLATION INSTRUCTIONS FOR FILTER WITH AC LINE SWITCH PREVIOUSLY INSTALLED

Note: *If the filter will be installed without the AC Line Switch Kit, follow the instruction in Section 1 only. If the filter will be installed along with the AC Line Switch Kit, follow the instructions in Section 2 only.*

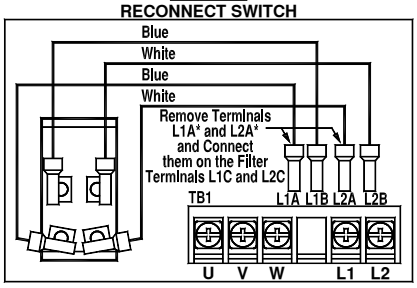
3.1 Remove the terminal that is installed on the drive's Terminal L1A (blue wire) and connect it on the filter's Terminal L1C. Using pliers, gently rock the terminal back and forth while pulling it upward. See Figures 9 – 11.

3.2 Remove the terminal that is installed on the drive's Terminal L2A (white wire) and connect it on the filter's Terminal L2C. Using pliers, gently rock the terminal back and forth while pulling it upward. See Figures 9 – 11.

3.3 Align the filter's Terminals L1A and L2A with the drive's Terminals L1A and L2A. Push down on the filter, between these two terminals, until the terminals are fully engaged. See Figure 10.

3.4 Install the ring terminal of the filter's green/yellow ground wire onto the drive's green ground screw (chassis) located at the lower right corner of the case. See Figure 11.

FIGURE 9
RECONNECT SWITCH



*Using pliers, gently rock the terminals back and forth while pulling them upward.

FIGURE 10
ALIGN TERMINALS L1A AND L2A AND INSTALL FILTER ON DRIVE

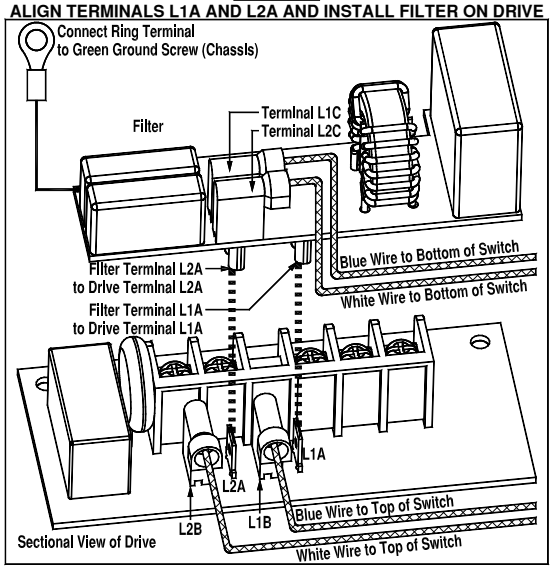
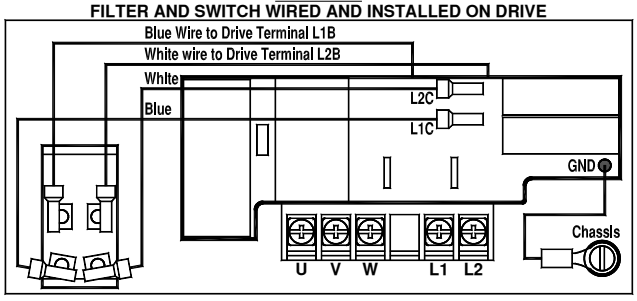


FIGURE 11
FILTER AND SWITCH WIRED AND INSTALLED ON DRIVE



SAFETY WARNING! Please read carefully before proceeding.

This product must be installed and serviced by a qualified technician, electrician, or electrical maintenance person familiar with its operation and the hazards involved. Proper installation, which includes electrical connections, fusing or other current protection, and grounding, can reduce the chance of electrical shocks, and/or fires, in this product or products used with this product, such as electric motors, switches, coils, solenoids, and/or relays. Do not use this drive in an explosion-proof application. Eye protection must be worn and insulated adjustment tools must be used when working with drive under power. This product is constructed of materials (plastics, metals, carbon, silicon, etc.) which may be a potential hazard. Proper shielding, grounding, and filtering of this product can reduce the emission of radio frequency interference (RFI) which may adversely affect sensitive electronic equipment. It is the responsibility of the equipment manufacturer and individual installer to supply this Safety Warning to the ultimate end user of this product. (SW 8/2012)

The control contains electronic Start/Stop circuits, which can be used to start and stop the control. However, these circuits are never to be used as safety disconnects since they are not fail-safe. Disconnect the input power for this purpose. Be sure to read and follow all instructions carefully. Fire and/or electrocution can result due to improper use of this product.