

PACKAGED UNITS KITS AND ACCESSORIES

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VFD REPLACEMENT KIT

INSTALLATION INSTRUCTIONS FOR VARIABLE FREQUENCY DRIVE (VFD) REPLACEMENT KITS USED WITH LGH/LCH420, 480, 540, & 600 UNITS

⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a licensed professional HVAC installer or equivalent, service agency, or the gas supplier

⚠ WARNING

ELECTRICAL SHOCK HAZARD.

Failure to follow instructions exactly could result in serious injury or death.

VFD HOLDS A POTENTIALLY LETHAL CHARGE UP TO 10 MINUTES AFTER POWER HAS BEEN DISCONNECTED. Do not open VFD cover until 10 minutes AFTER power source has been disconnected and power lamp has turned off.

Read manual provided by VFD manufacturer. Carefully review and follow all safety warnings in that manual also.

Shipping and Packing List

Package 1 of 1 contains:

- 1- Pre-programmed VFD (A96)

Application

These kits are used to replace the variable frequency drive (VFD) on LGH/LCH420, 480, 540, & 600 units. See table 1 for usage.

⚠ CAUTION

As with any mechanical equipment, contact with sharp sheet metal edges can result in personal injury. Take care while handling this equipment and wear gloves and protective clothing.

TABLE 1

Voltage	Kit Number	Catalog Number	HP Rating
230	617132-03	15Y88	25HP
230	617132-06	15Y89	30HP
460	617132-04	15Y90	25HP
460	617132-07	15Y91	30HP
575	617132-01	15Y92	15HP
575	617132-02	15Y93	20HP
575	617132-05	15Y94	25HP
575	617132-08	15Y95	30HP

Installation

- 1- Disconnect all power to unit and **WAIT AT LEAST 10 MINUTES** before opening the VFD cover.

⚠ WARNING

ELECTRICAL SHOCK HAZARD.

STOP! Before you continue, make sure that power to the VFD has been off for at least 10 minutes. The capacitor in the VFD holds high voltage power for up to 10 minutes after power has been disconnected.

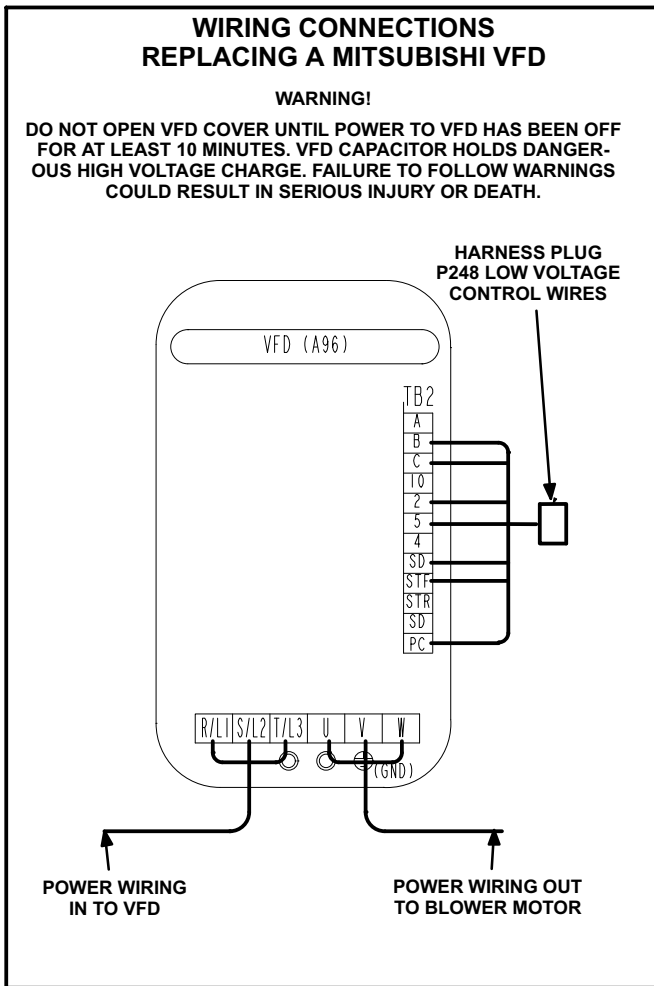
- 2- Open the lower cover on the VFD to access wire connections. Disconnect the power wires from the terminals, making special note of the wire color and identification stamping on the wire that was connected to each terminal.
- 3- Disconnect control wiring connectors J/P248 when replacing the supply air blower VFD and connectors J/P258 when replacing the power exhaust fan VFD.
- 4- Remove the top two screws and loosen the lower two screws securing the VFD to the mounting bracket. Remove the VFD from the controls compartment.
- 5- Slide keyholes on replacement VFD over lower securing screws. Reinsert and tighten two upper screws, then tighten lower screws.

⚠ WARNING

Power wiring must be connected properly. Improperly connected power wiring may result in damage to the VFD.



- 6- Carefully connect existing power wires to the replacement VFD as illustrated in figure 1. Take care to properly connect the power wiring going into and out of the VFD.
- 7- Connect P248 or P258 harness wires to the replacement VFD as illustrated in figure 1. Use a separately ordered, field-provided harness when the unit harness has not been updated.
- 8- Connect control wiring connectors J/P248 or J/P258.
- 9- Close access panel and restore power to the unit.



Verify Proper Operation

If the blower is not rotating in the proper direction:

- 1- Disconnect all power to the unit and open the compressor / controls compartment access panel.
- 2- Reverse any two power wires going from the VFD to the blower motor.
- 3- Check all field wiring to the VFD. No wires should be connected to TB2-STR.
- 4- Check to ensure that wiring connections are secure.
- 5- Close access panel and restore power to unit.

Verify proper operation of VFD:

Refer to MSAV unit start-up instructions in unit installation instructions.

Note - Operate unit in the heating mode or mode which operates at the highest blower speed. Measure amp draw to the blower between the VFD and blower motor. Verify that the amperage does not exceed the FLA value listed on the motor nameplate.

