

INSTALLATION INSTRUCTIONS

HEAT PUMP MILD WEATHER CONTROL KIT

IMPORTANT SAFETY INFORMATION

These instructions are primarily intended to assist qualified individuals experienced in the proper servicing of heating and air conditioning appliances. Some local codes require licensed installation/service personnel for this type equipment. Use of this kit must be in accordance with these instructions and with all applicable national and local codes and standards.

INSTALLER: Please read all instructions thoroughly before servicing this equipment. Pay attention to all safety warnings and any other special notes highlighted in the manual. Safety markings are used frequently throughout this manual to designate a degree or level of seriousness and should not be ignored. **WARNING** - Indicates a potentially hazardous situation that if not avoided, could result in personal injury or death. **CAUTION** - Indicates a potentially hazardous situation that if not avoided, may result in minor or moderate injury or property damage.

WARNING:

The safety information listed in this manual must be followed during the installation, service, and operation of this unit. Unqualified individuals should not attempt to interpret these instructions or install this equipment. Failure to follow safety recommendations could result in possible damage to the equipment, serious personal injury or death.

WARNING:

ELECTRICAL SHOCK, FIRE OR EXPLOSION HAZARD

Failure to follow safety warnings exactly could result in serious injury or property damage.

Improper servicing could result in dangerous operation, serious injury, death or property damage.

- Before servicing, disconnect all electrical power to furnace.
- When servicing controls, label all wires prior to disconnecting. Reconnect wires correctly.
- Verify proper operation after servicing.

ABOUT THE START KIT

NORDYNE'S Heat Pump Mild Weather Control kit monitors the heat pump units operating on the heating cycle under Mild weather conditions. Under these conditions, the outdoor coil capacity increase to the point of tripping the high pressure switch and shutting down the unit. To maintain system operation, this mild weather control kit will reduce the outdoor capacity and subsequent head pressure by cutting out the outdoor fan. So, the system will continue to operate. The pressure switch control is factory set as follows:

- Refrigerant: R410A
- Cut-out pressure: 575 psig (1890 kPa)
- Cut-In (reset) pressure: 450 psig (3965 kPa)

NOTE: Application of this kit is designed for ambient temperatures usually over 50° F considered as mild weather

SEQUENCE OF OPERATION

The mild weather control pressure switch automatically cycles the outdoor fan motor when the head pressure rises above normal operating conditions. The cutoff point on this control is below that of a typical high pressure switch. So, annoying cutouts on high pressure are eliminated during the heating cycle. Because the outdoor fan is stopped and due to the capacity reduction the head pressure will drop. When the head pressure drops to a certain level, the outdoor fan will re-energize and the Mild weather Control automatically resets. No further adjustments are necessary.

Installation Sequence

1. **IMPORTANT!** Disconnect all electrical power to the unit.
2. Remove the cap from the service valve located on the vapor line outside of front panel on split units
3. Add 1 valve core to the service adapter tee (included with this kit). Install the tee onto the service valve and tighten.
4. Mount the Mild Weather Control pressure switch onto the port of service tee adapter (that does not have valve core) and tighten. **NOTE:** Mild weather control must be installed on open side of Tee adapter first to prevent refrigerant loss. See [Figure 1 \(page 2\)](#).
5. Route the two wire leads from the control pressure switch through the wire grommet as shown in [Figure 2 \(page 2\)](#) or through any available cutouts that comply with local regulations.
6. Refer to correct application wiring diagram to complete wiring. See [Figure 3 \(page 3\)](#) or [Figure 4 \(page 4\)](#).

Heat Pump with Condenser Fan Motors Up to 5 Amps (See Figure 3 (page 3))

- a.) Mount the Relay with 2 screws provided in the kit box, near the low voltage compartment in the control box of unit.
- b.) Connect the one switch (yellow) wire to terminals #1 on the Relay and the second wire through the low voltage divider by connecting the piggyback end of the red wire to **R** on the defrost board.
- c.) Connect the piggyback end of the two black wires to **C** (24V Common) on the defrost board and other end to terminal #3 on the relay.
- d.) Remove the black outdoor fan motor wire from **DF2** on the defrost board and connect it to the adapter on terminal #2 of the relay.

IMPORTANT NOTE

Depending on the particular board used, the DF2 terminal referred to in these instructions may be labelled FAN2 or similar.

- e.) Connect the adapters (2, one each end) to the black wire provided with the kit and connect the one end of black wire to terminals #4 on the relay and the second end to **DF2** on the defrost control board.

Heat Pump with ECM Outdoor Fan Motor - 14 SEER Units (See Figure 4 (page 4))

- a.) Remove the blue outdoor fan motor wire from **DF2** (defrost control board) and connect it to one of the Yellow wires of the Mild Weather Control Kit.

IMPORTANT NOTE

Depending on the particular board used, the DF2 terminal referred to in these instructions may be labelled FAN2 or similar.

- b.) Connect the wire jumper (54-18C2-1YE-002-54) to the end of the other yellow wire of the Mild Weather Control Kit. Connect blue outdoor fan motor wire to the other side.

7. Tie all wires with the wire tie 6" std (2) provided in the kit box back as needed.

8. Restore power to the unit.



Figure 1. Mild Weather Control Pressure Switch



Figure 2. Wire Leads Through Grommet

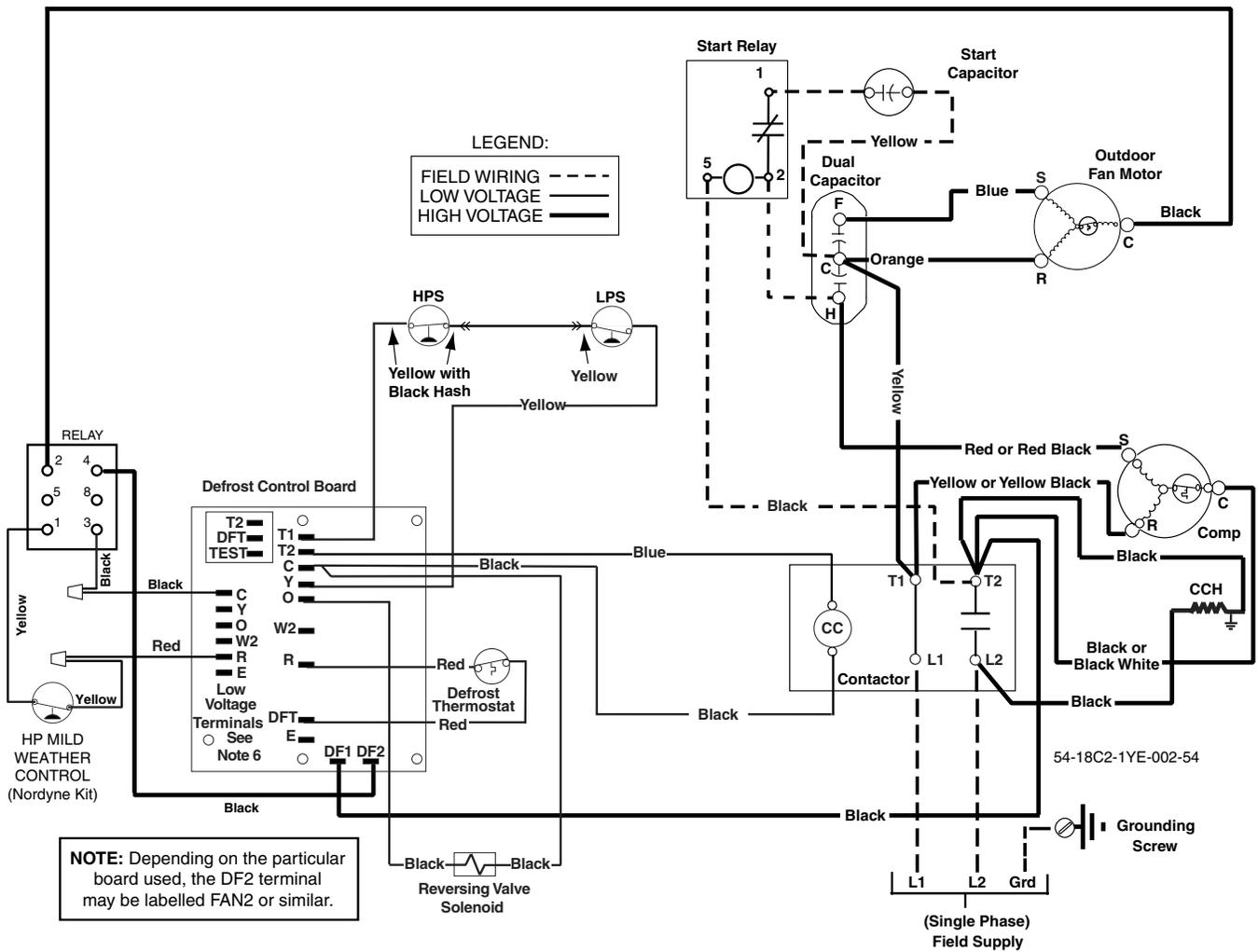


Figure 3. Field Wiring Diagram for Mild Weather Control Kit (Heat Pump with Condensor Fan Motors Up to 5 Amps)

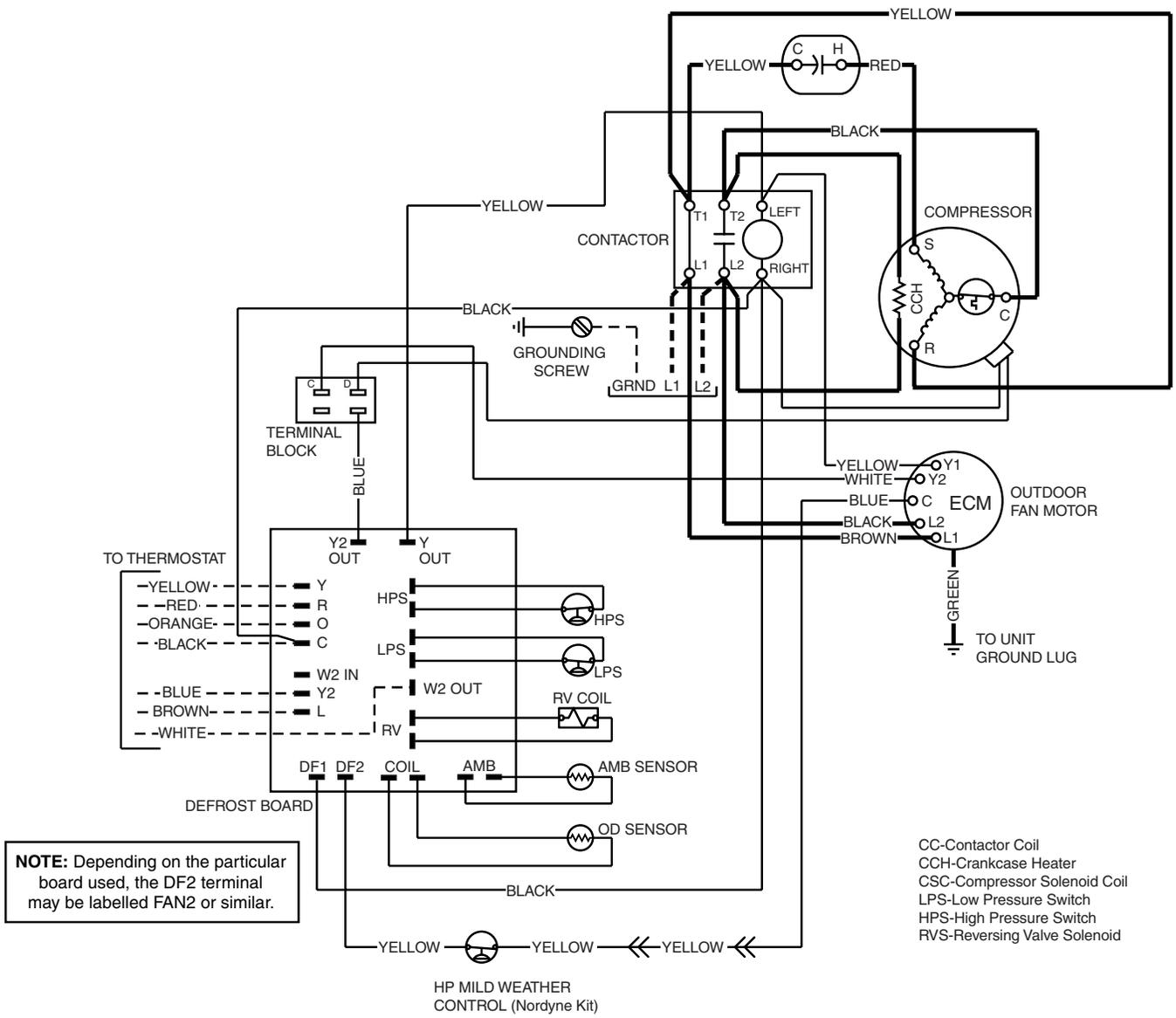


Figure 4. Field Wiring Diagram for Mild Weather Control Kit (Heat Pump with ECM Outdoor Fan Motor - 14 SEER Units)