



Climate Control Solutions

Bard Manufacturing Company, Inc.  
Bryan, Ohio 43506

# INSTALLATION INSTRUCTIONS

## CMA-12

### LOW AMBIENT CONTROL AND COMPRESSOR TIME DELAY RELAY

#### DESCRIPTION

The CMA-12 is a field installable compressor time delay relay and low ambient fan cycling control kit. The CMA-12 consists of:

1. Installation Instructions 7960-242b
2. Low ambient fan cycling control 1804-0280
3. Control assembly 910-1099
4. Installation Instructions 7960-240
6. Unit Label 7961-312-0004

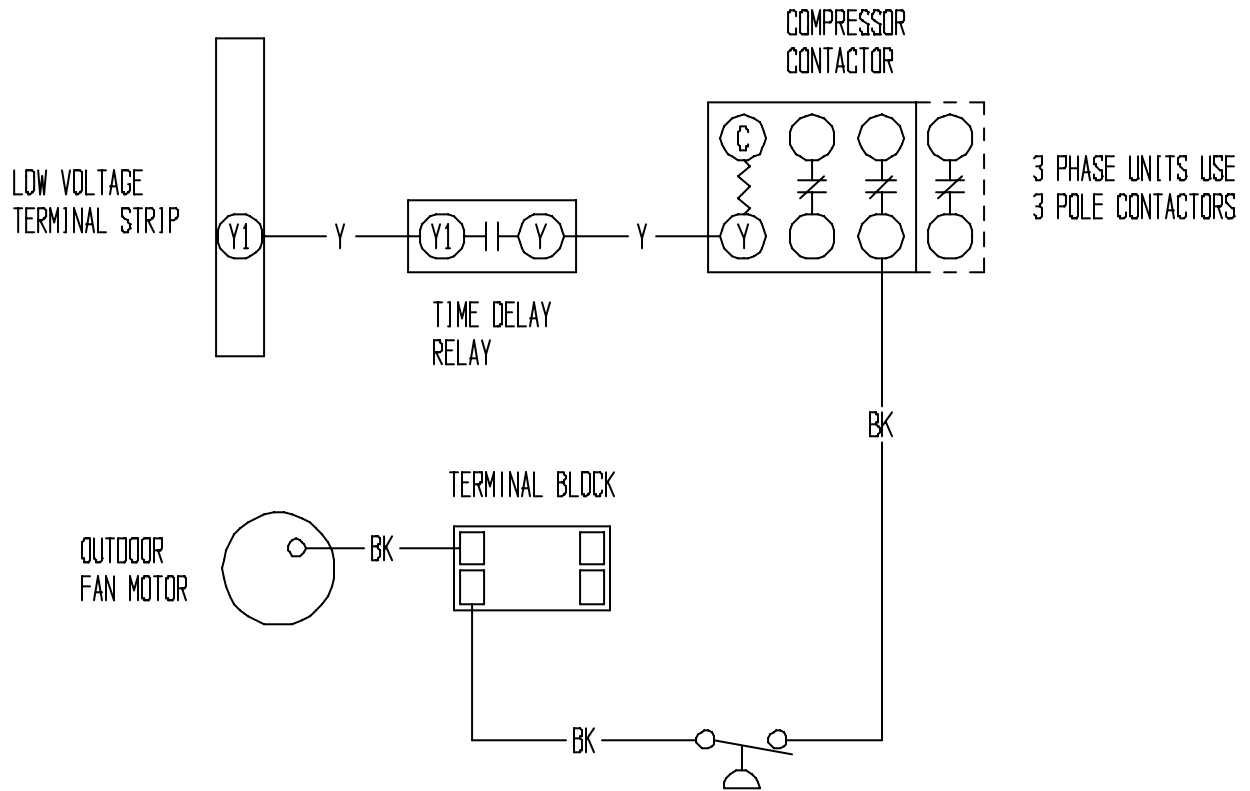
For use with all WA/WL182 – WA/WL423 Hi-Boy Wall Mount Air Conditioners (A & B Electrical Versions).

#### INSTALLATION INSTRUCTIONS

Disconnect all power to unit. Remove control panel inner and outer covers, and right side condenser inlet grille. Circled numbers on Figure 2 correspond to installation instruction steps. Dashed lines indicate that a wire has been disconnected from this terminal.

- Step 1. Snap control assembly into control panel as shown in Figure 2, Step 1.
- Step 2. Disconnect yellow low voltage (Y) wire at compressor contactor coil and reconnect to the Y1 or #3 terminal of the TDR. See Figure 2, Step 2.
- Step 3. Connect yellow wire from terminal (Y) of the TDR to the (Y) terminal of the compressor contactor coil. This is the terminal that the wire was removed from in Step 2. Route wires through wire holder as shown in Figure 2, Step 3.
- Step 4. Disconnect the black high voltage outdoor motor lead from compressor contactor and reconnect to terminal block. Route wires through wire holder as shown in Figure 2, Step 4.
- Step 5. Route low ambient control wires up through the busing in the bottom of the control panel. Replace sealing compound after routing wires through the bushing. Route the wires through the wire holders in the control panel as shown in Figure 2. Connect the low ambient control wires between the terminal block and L2 of the compressor contactor. See Figure 2, Step 5.
- Step 6. Remove service port cap on liquid line. Install the low ambient control on the liquid line with the flare tee adapter that is brazed to the low ambient control. Check for pressure at the flare tee dill valve after installation to insure that the dill valve in the unit service port was depressed by the flare tee connector. Check for leaks at the flare tee connectors. Replace service port cap on the flare tee service port and tighten. See Figure 3.
- Step 7. Recheck wiring. Refer to Figure 1. Check for proper operation of the unit by energizing in cooling mode. The condenser fan motor should not run until the discharge pressure has exceeded 300 PSI. Should the discharge pressure fall below 200 PSI while running, the condenser fan motor will de-energize until the head pressure builds to 300 PSI. Remove power and reapply. Compressor should not start until the 5 minute time delay has expired.
- Step 8. Apply "This unit equipped with CMA-12 control module" label to the inside of the inner control panel cover above the wiring diagram.
- Step 9. Replace all panels and covers. This completes installation.

FIGURE 1



MIS-1379

FIGURE 2

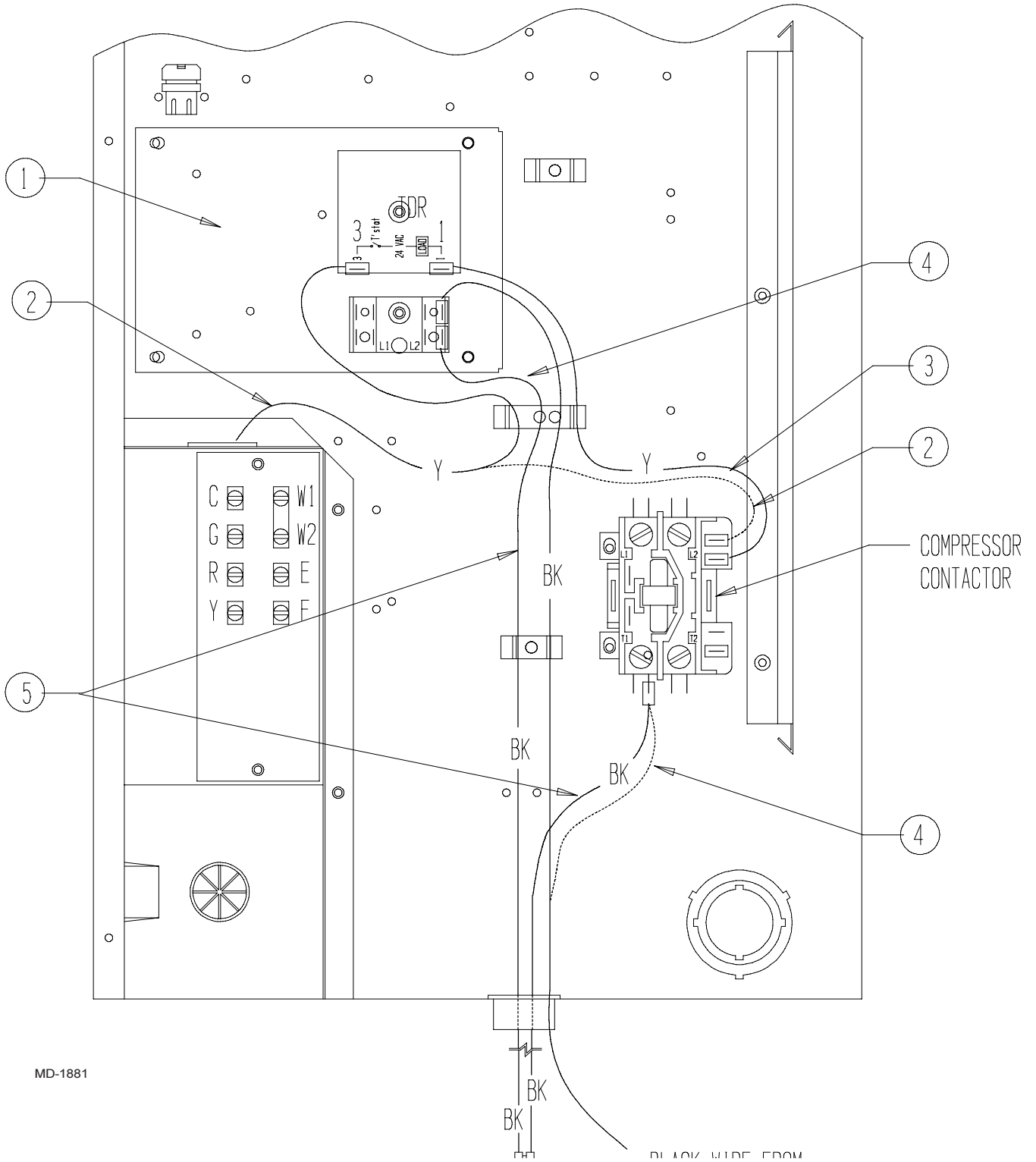
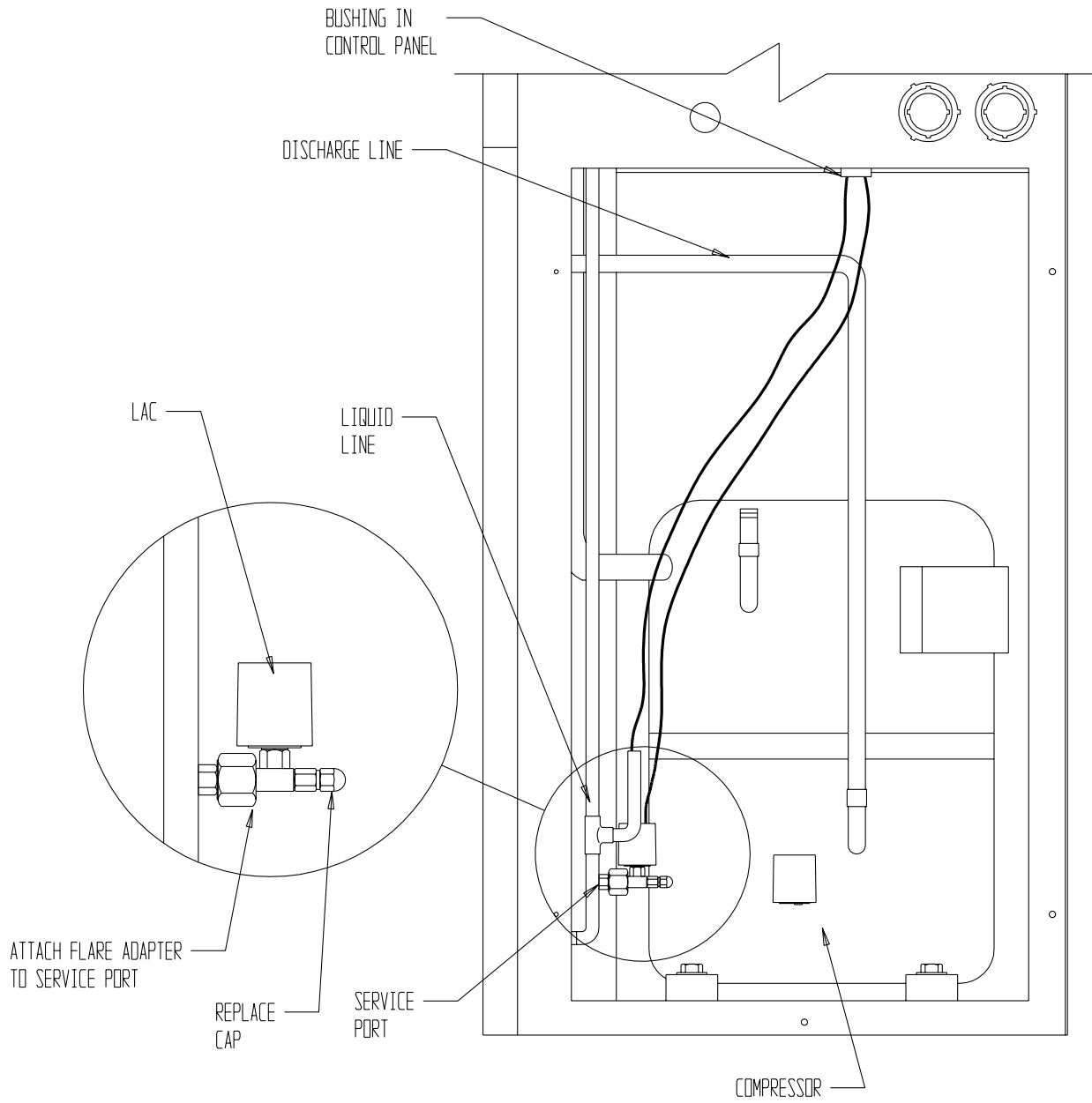


FIGURE 3



MIS-376 A