

INSTALLATION INSTRUCTIONS

AXB260LAA and DNLOWAMB002A00 - Accessory 25° F Low-Ambient Kit

Used On: PGE/PAE240-300

These instructions must be read and understood completely before attempting installation.

Package Contents

Item	Qty.
3-Minute Time Delay Relay	2
Outdoor Fan Contactor	1
Head Pressure Control Thermostat (HPCT)	1
Bracket*	1
No. 8B, 5 /8-in. Sheet Metal Screws*	2
No. 6B, 1 /2-in. Sheet Metal Screws	8

*Only needed for cooling only units. Discard if installing on a gas unit.

Safety Considerations

Installation, start-up, and servicing of air-conditioning equipment can be hazardous due to system pressure, moving parts, and electrical components.

Only trained and qualified service personnel should install, repair, or service air-conditioning equipment. Untrained personnel can perform basic maintenance functions such as cleaning coils or replacing air filters. All other operations should be performed by trained service personnel.

When working on air-conditioning equipment, observe precautions in the literature, tags and labels attached to the unit or accessory, and other safety precautions that may apply.

Follow all safety codes. Wear safety glasses and work gloves.

⚠ WARNING

ELECTRICAL SHOCK HAZARD

Failure to follow this warning could result in personal injury or death.

Before installing or servicing system, always turn off main power to system. There may be more than one disconnect switch. Tag disconnect switch with suitable warning label.

General

The 25 F Low Ambient accessory is only necessary on 20 ton, large rooftop units for low ambient operation at outdoor temperatures down to 25 F.

The accessory package sequences outdoor fan motor no. 2 to control head pressure at low ambient conditions (25 to 65 F). The fan cycles off between 52 to 58 F and cycles on between 62 to 68 F. A bi-metal HPCT switch is located in the control box to control the sequencing of the fan motor. The accessory kit also contains a time delay relay that is used to bypass the low-pressure switch for the first 3 minutes after compressor no. 1 starts.

INSTALLATION:

Time-Delay Relay (TDR) - The TDR provides a 3-minute time delay for the low-pressure switch (LPS), and is a normally closed relay. Note that the TDR terminals are 1 /4-in.

quick connects. The lower connections are the coil connections and the upper connections are the contact connections. Install the TDRs in the upper right corner of the control box. See Fig. 1 and 2.

Outdoor (Condenser) Fan Contactor (OFC) Mounting - To install the OFC included with this accessory kit, mount it next to the current OFC using two 8B, 5 /8-in. sheet metal screws provided. See Fig. 2.

Head Pressure Control Thermostat (HPCT) and OFC Wiring - Wire the HPCT and the OFC2 as follows:

208-230 V Units (Fig. 3 and 4)

1. Remove black and yellow wires from the existing OFC-11 and OFC-13 that connect to OFM2.
2. Remove blue wires from FU3 that connects to OFM2.
3. Install a field-supplied black wire from existing OFC-21 to newly installed OFC2-21. Wire must be a minimum of 10 AWG (American Wire Gage), NEC (National Electrical Code) Class 90 C wire.
4. Install a field-supplied yellow wire from existing OFC-23 to newly installed OFC2-22. Wire must be a minimum of 10 AWG, NEC Class 90 C wire.
5. Install a field-supplied blue wire from FU3 to newly installed OFC2-23. Wire must be a minimum of 10 AWG, NEC Class 90 C wire.
6. Connect black, yellow, and blue leads from OFM2 to newly installed OFC-11, OFC-12, and OFC-13
7. Route the HPCT wires into the main control box through an existing connector in the middle of the control box.
8. Attach one wire from the HPCT to the existing OFC-C1, and the other to the newly installed OFC2-C1.
9. Add a brown wire from the existing OFC-C2 to the newly installed OFC2-C2. This wire should be a minimum of 18 AWG, NEC Class 90 C wire.

Figure 1 - Control Box Access Panel

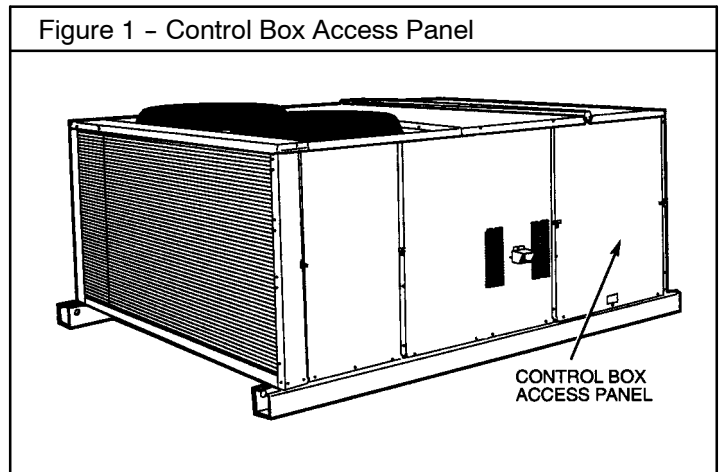
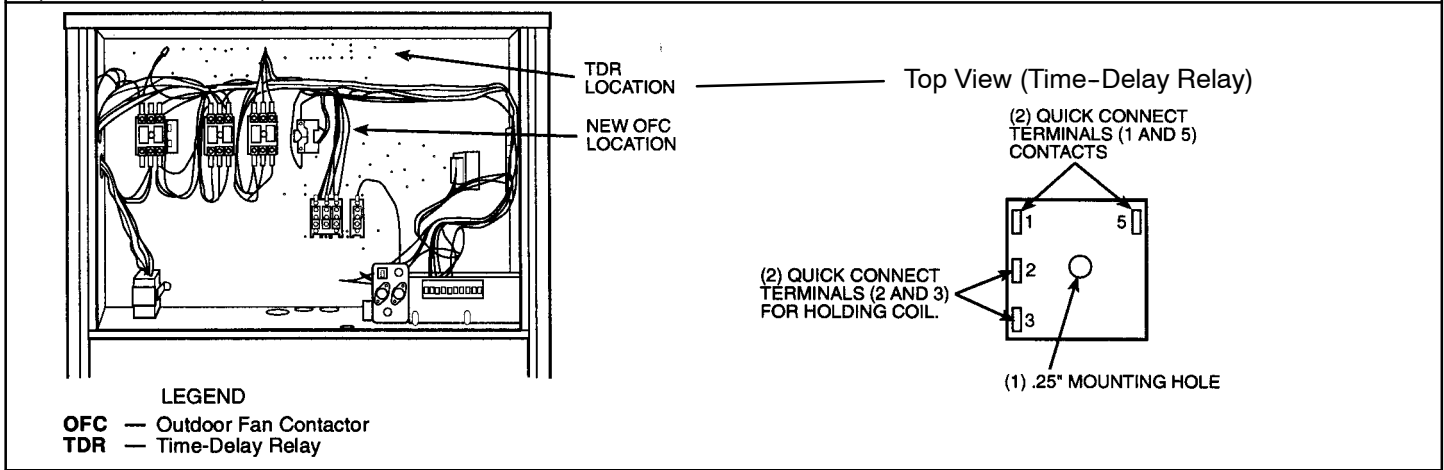


Figure 2 - Low Ambient Kit Installation Details
(208-230 V Shown)



460 V and 575 V Units (Fig. 5)

1. Remove black, yellow and blue wires from the existing OFC-11, OFC-12 and OFC-13 that connect to OFM2.
2. Install a field-supplied black wire from existing OFC-21 to newly installed OFC2-21. Wire must be a minimum of 10 AWG, NEC Class 90 C wire.
3. Install a field-supplied yellow wire from existing OFC-22 to newly installed OFC2-22. Wire must be a minimum of 10 AWG, NEC Class 90 C wire.
4. Install a field-supplied blue wire from existing OFC-23 to newly installed OFC2-23. Wire must be a minimum of 10 AWG, NEC Class 90 C wire.
5. Connect black, yellow, and blue leads from OFM2 to newly installed OFC-11, OFC-12, and OFC-13 respectively.
6. Route the HPCT wires into the main control box through an existing connector in the middle of the control box.
7. Attach one wire from the HPCT to the existing OFC-C1 and the other to the newly installed OFC2-C1.
8. Add a brown wire from the existing OFC-C2 to the newly installed OFC2-C2. This wire should be a minimum of 18 AWG, NEC Class 90 C wire.

Figure 3 - Typical 24 V Wiring of TDR, HPCT, and Outdoor Fan Contactor

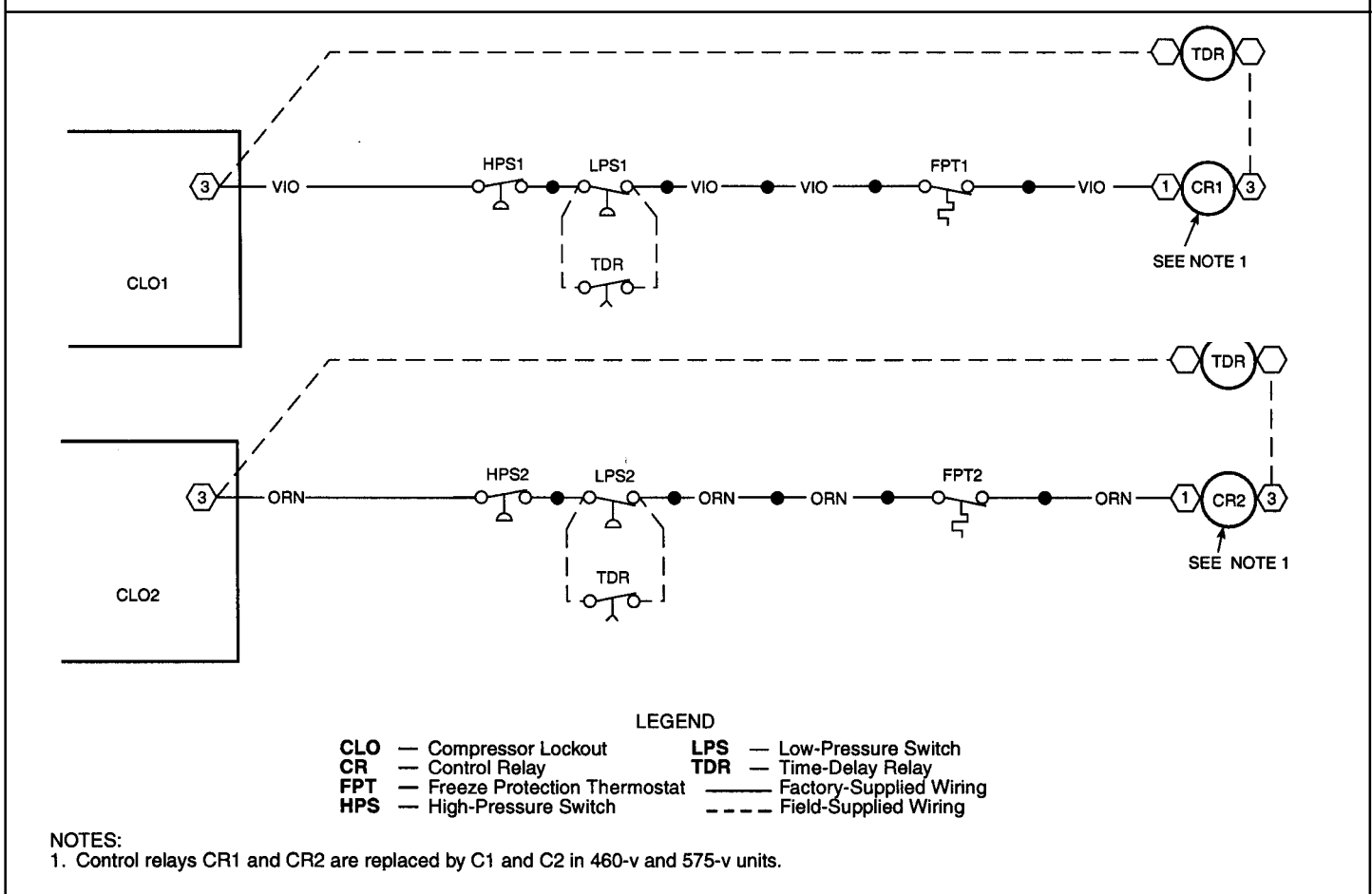


Figure 4 - Typical 230 V Wiring of Outdoor Fan Contactor

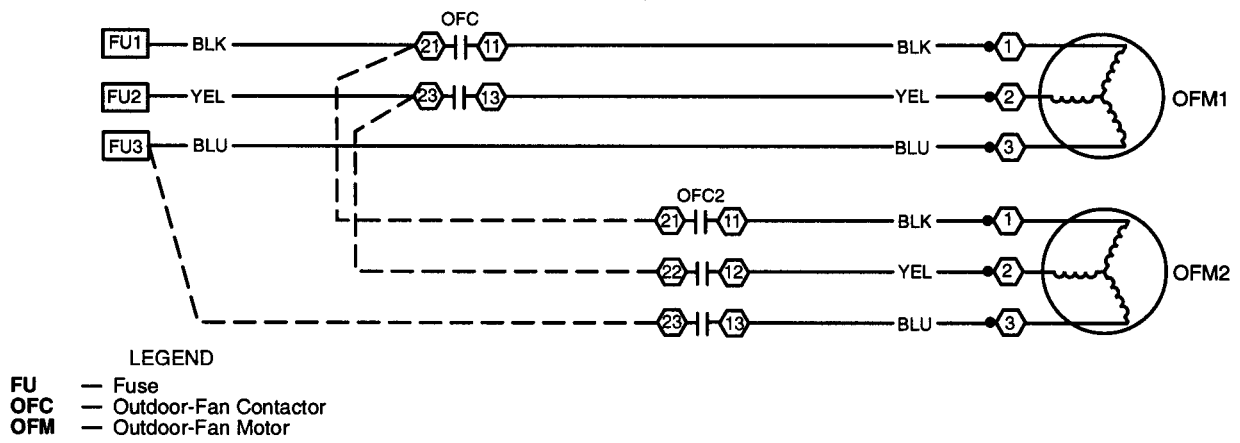


Figure 5 - Typical 460 V and 575 V Wiring of Outdoor Fan Contactor

