

# Installation Instructions

## AMWK001CK Cooling Control Kit AMWK005AH, AMWK005AH, AMWK005AH Electric Heat use with FWM Series Air Handlers

### General Information

These instructions cover the installation of field-installed cooling control kits and field-installed electric heater packages in model FWM series fan coil units. The cooling control unit is required when electric heat is not used. All packages contain a solid state fan control with a built-in time delay relay.

**Use these instructions in conjunction with the installation instructions packaged with the unit being installed.**

#### DESCRIPTION AND USAGE

Electric heater packages are available in capacities ranging from 5- through 11-kw. The factory-shipped heater package (Fig. 2.) contains a completely assembled and wired heater with controls and mounting screws. The factory-shipped cooling control (Fig. 1.) contains a completely assembled and wired control and mounting screws.

### Field Installation of Controls

Units shipped from factory without heaters require a field-installed cooling control kit or heater. These kits are completely assembled and factory-wired for easy installation.

## **WARNING**

**Electrical shock hazard.**

**Before installing or servicing fan coil, always turn off all power to unit. There may be more than 1 disconnect switch. Turn off accessory heater power if applicable.**

**Field wires on side of disconnect found in fan coil remain live, even when pull-out is removed. Service and maintenance to incoming wiring can not be performed until main disconnect switch (remote to the unit) is turned off.**

**Failure to do so can result in property damage, personal injury and/or death.**

**NOTE:** Before proceeding with electrical connections, make certain that voltage, frequency, and phase correspond to that specified on rating plate and (Figure 3). Also, check to be sure that the service provided by utility is sufficient to handle additional load imposed by this equipment. Refer to unit wiring label for proper field high- and low-voltage wiring. Make all electrical connections in

accordance with NEC and any local codes or ordinances that might apply. Unit must have a separate branch electrical circuit. The Cooling Control Kit and the heater packages provide a disconnect switch located within sight and readily accessible to the unit.

#### INSTALL COOLING CONTROL PACKAGE

1. Remove blower access panel (See Fig. 1.)
2. Install cooling control panel above blower motor on blower side plate. Attach with provided screws. (See Fig. 1.)
3. Route thermostat leads through small knockout in top of unit. Use grommet provided with cooling control to protect leads where they pass through casing.
4. Make low-voltage splice connections in low-voltage control box.
5. Route blower motor power leads up through hole in bottom of cooling control. Connect yellow common wire to piggyback common terminal on transformer. Connect black (HI) or red (LOW) speed tap wire to control board relay common terminal. See wiring label for proper speed tap selection.
6. Route unit power supply through knockout in top of unit and connect to line side of disconnect. Connect ground wire to ground lug. See wiring label to make connections.
7. Remove disconnect pullout.
8. Replace access panel.
9. Insert disconnect pullout through hole in access panel.

#### INSTALL HEATER PACKAGE

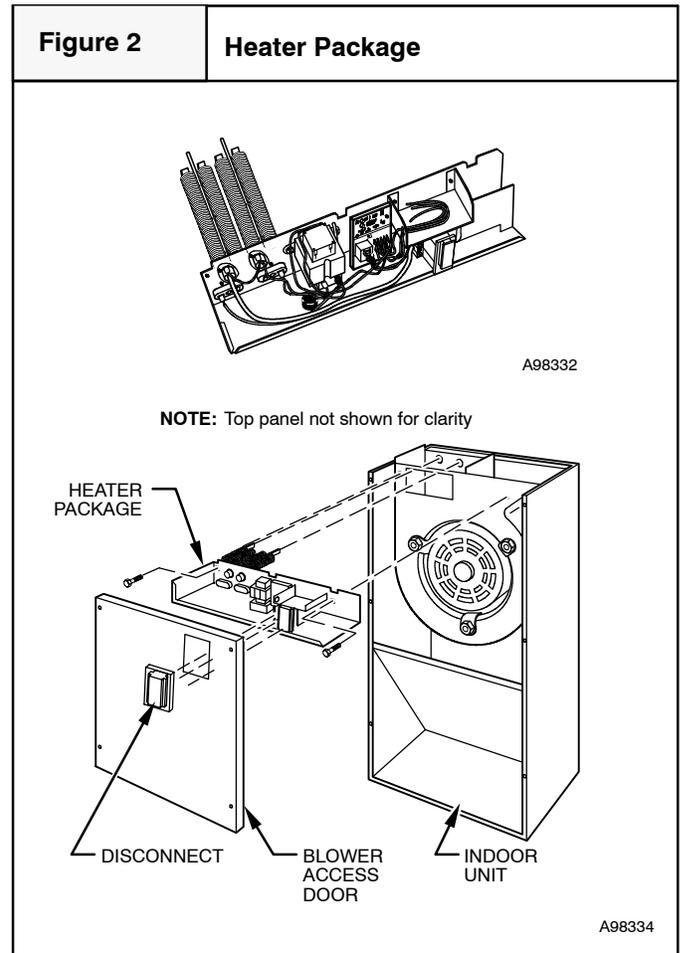
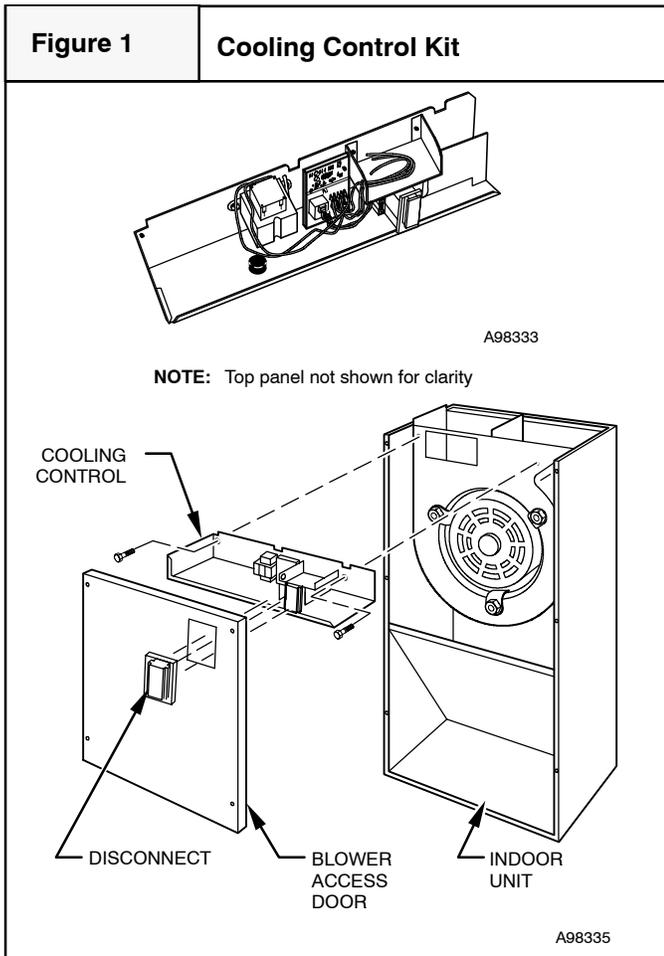
1. Remove blower access panel. (See Fig. 2.)
2. Insert heater into opening, engaging element support bars into holes in back of blower housing, and attach with provided screws. (See Fig.2.)
3. Route blower motor power leads up through hole in bottom of heater package. Connect yellow common wire to piggyback common terminal on transformer. Connect black (HI) or red (LOW) speed tap wire to control board relay common terminal. See wiring label for proper speed tap selection.
4. Route thermostat leads through small knockout in top of unit. Use plastic grommet provided with heater package to protect leads where they pass through casing.
5. Make low-voltage splice connections in low-voltage control box.

6. Route unit power supply through knockout in top of unit and connect to line side of disconnect. Connect ground wire to ground lug. See wiring label to make connections.

7. Remove disconnect pullout.

8. Replace access panel.

9. Insert disconnect pullout through hole in access panel.



**Figure 3 Electrical Data**

PART NO.	UNIT SIZE	VOLTAGE	NOM KW @ 240-V	HEATER AMPS	HEATER CAPACITY (BTUH)	WIRE RATING (°C)	MIN WIRE SIZE*	MIN AMPACITY	MAX CIRCUIT PROTECTION
AMWK001CK	018 024 030	208/230	0	0.0/0.0	0/0	75	14	2.5	15/15
AMWK005AH	018 024 030	208/230	5.0	18.1/20.0	12799/15700	75	10/10	25.2/27.5	30/30
AMWK007AH	018 024 030	208/230	7.5	27.1/30.0	19215/23515	75	8/8	36.4/40.0	40/40
AMWK011AH	018 024 030	208/230	11.0	39.8/44.0	25597/31331	75	6/6	52.3/57.5	60/60