53DS−900−−−093
53DS−900−−−094

Duct−Free Systems

Cooling Only and Heat Pump Units

Crankcase Heater Accessory

Installation Instructions

NOTE: Read and become familiar with these instructions before beginning installation.

SAFETY CONSIDERATIONS

Installing and servicing air-conditioning equipment can be hazardous due to system pressures and electrical components. Only trained and qualified personnel should install or service air-conditioning equipment. When working on air-conditioning equipment, observe the precautions provided in literature, tags, and labels attached to the unit.

Follow all safety codes. Wear safety glasses, protective clothing, and work gloves. Use quenching cloth for brazing operations. Have fire extinguisher available. Read these instructions thoroughly and follow all warnings or cautions included in literature and attached to the unit. Consult local building codes and National Electrical Code (NEC) for special requirements.

Recognize safety information. This is the safety-alert symbol ⚠. When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury.

Understand these signal words: DANGER, WARNING, and CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies hazards which **could** result in personal injury or death. CAUTION is used to identify unsafe practices which **may** result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

⚠ WARNING

ELECTRICAL SHOCK HAZARD

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

Before beginning any modification or installation of this kit, be sure the main electrical disconnect is in the OFF position. Ensure power is disconnected to the fan coil unit. On some systems both the fan coil and the outdoor unit may be on the same disconnect. Tag the disconnect switch with a suitable warning label. There may be more than one disconnect.

GENERAL

A Crankcase Heater is required for all low ambient and long line applications utilizing cooling only and heat pump models as shown in Table 1.

Table 1 – Crankcase Heater Part Numbers

Models	Part No.	Voltage
38MVC/MVQ009−012	53DS−900−−−093	120v
38MVC/MVQ012	53DS−900−−−094	240v
38MVC/MVQ018−024	53DS−900−−−094	240v

INSTALLATION

1. Remove access panels
2. Remove compressor blanket.
3. Wrap crankcase heater around compressor base and tighten screw clamp.
4. Reinstall compressor blanket.
5. Route crankcase heater wires to unit control box and cut to length (save excess wire).
6. Connect wiring in unit control box as shown in Fig. 1, 2, and 3 using terminations provided with crankcase heater kit.
7. If the installation requires field wires (called out in Fig. 3), they can be made by utilizing the excess wire from Step 5 along with the terminations provided with the kit.
8. Reinstall access panels.

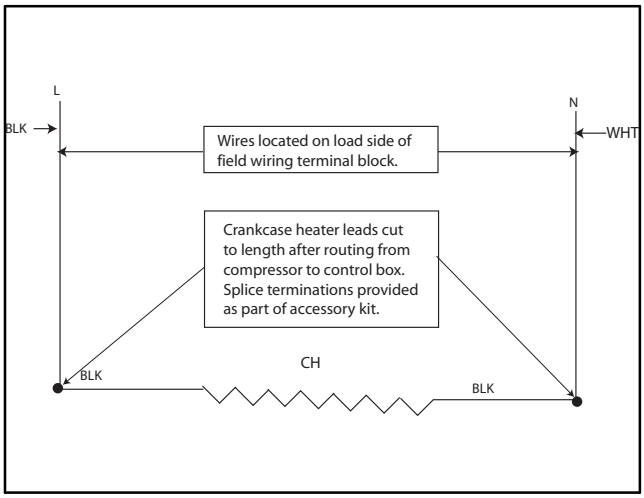

Fig. 1 - 38MVC/MVQ009 & 012 120 VOLT

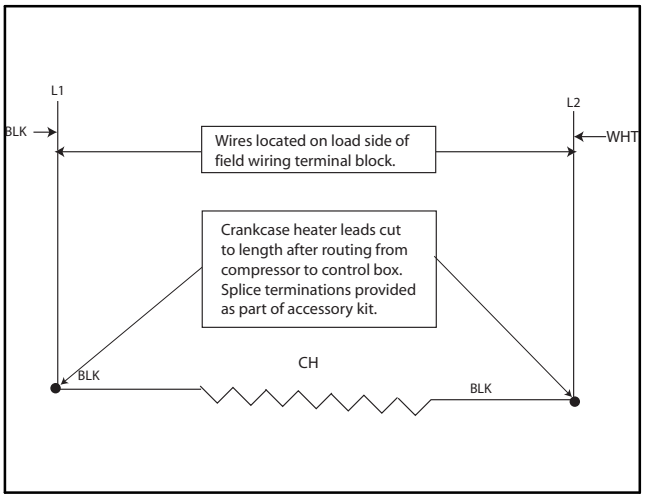

Fig. 2 - 38MVC/MVQ012 208/240 VOLT

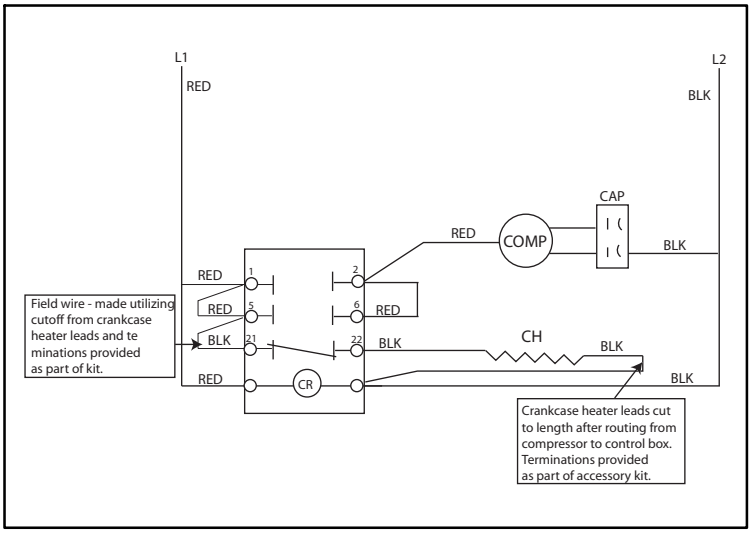

Fig. 3 - 38MVC/MVQ018 & 024 208/240 VOLT

LEGEND:

CAP	=	Capacitor
CH	=	Crankcase Heater
CR	=	Compressor Relay
COMP	=	Compressor

Copyright 2008 CAC / BDP • 7310 W. Morris St. • Indianapolis, IN 46231
Printed in U.S.A. Edition Date: 02/08 **Catalog No: IIK-53DS900-07**

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

Replaces: NEW