

Installation Instructions

Start Capacitor/ Relay Kit

KSAHS

NOTE: Read the entire instruction manual before starting the installation.
This symbol → indicates a change since last issue.

INTRODUCTION

These instructions cover the installation of Start Capacitor/Relay Kits on split-system air conditioners and heat pumps.

Kit contents:

Relay	1
Capacitor	1
Capacitor strap	1
Screws	3
Black wire	1
Blue wire	1
Brown wire	1
Yellow wire	1
Installation Instructions	1

→ **Table 1—Kit Components**

KIT NUMBER	START RELAY	START CAPACITOR	MICROFARAD/VOLTAGE
KSAHS0901AAA	HN61HB543	HC95DE020	145-174/330
KSAHS1001AAA	HN61HB541	HC95DE020	145-174/330
KSAHS1101AAA	HN61HB540	HC95DE020	145-174/330
KSAHS1201AAA	HN61HB542	HC95DE012	135-155/330
KSAHS1301AAA	HN61HB542	HC95DE090	189-227/330
KSAHS1401AAA	HN61HB542	HC95DE088	88-108/330
KSAHS1501AAA	HN61HB540	HC95DE088	88-108/330
KSAHS1601AAA	HN61HB540	HC95DE297	270-324/330

SAFETY CONSIDERATIONS

Installing and servicing air conditioning equipment can be hazardous due to system pressures and electrical components. Only trained personnel should install or service air conditioning equipment.

Untrained personnel can perform basic maintenance functions such as cleaning coils, or cleaning and replacing filters. All other operations should be performed by trained service personnel. When working on air conditioning equipment, observe precautions in the literature, on tags, and on labels attached to the unit.

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

⚠ WARNING: Before beginning any installation or modification, be sure the main electrical disconnect switch is in the OFF position. TAG THE DISCONNECT SWITCH WITH A SUITABLE WARNING LABEL. Electrical shock can cause personal injury or death.

Use only the kit components described in this installation procedure.

⚠ CAUTION: Care must be exercised when drilling kit mounting holes to avoid damage to wires and other existing electrical and refrigerant components.

→ INSTALLATION

NOTE: Remove and discard start thermistor if used.

PROCEDURE 1—RUN CAPACITOR MOUNTED IN VERTICAL POSITION (SEE FIG. 1 AND 2.)

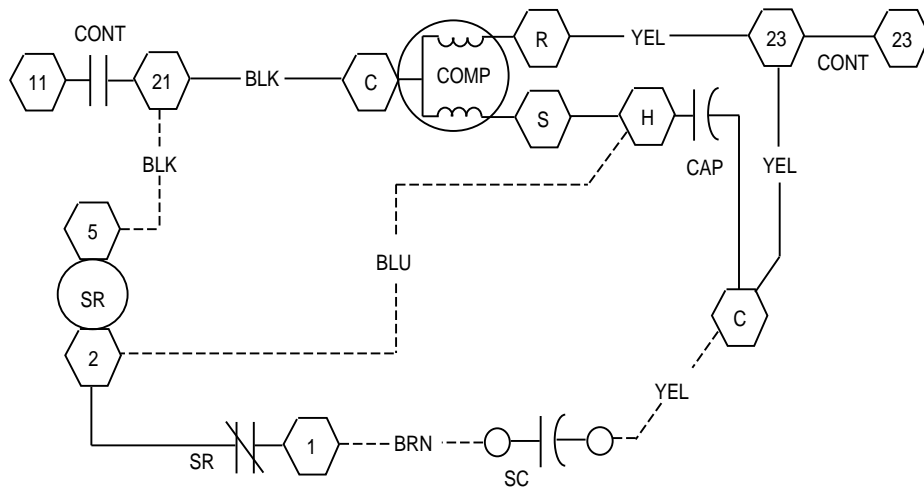
1. Remove 2 screws located above and right of run capacitor.
2. Attach start capacitor strap to start capacitor with flap pointing down and capacitor terminals pointing left.
3. Attach start capacitor and strap assembly above run capacitor. Use provided screw.
4. Attach start relay above and right of run capacitor. Locate relay tab in dimple of control box. Use provided screw.
5. Connect black wire to terminal 5 on start relay and terminal 21 on contactor.
6. Connect blue wire to terminal 2 on start relay and H on unit run capacitor.
7. Connect brown wire to terminal 1 on start relay and start capacitor.
8. Connect yellow wire to start capacitor and C on run capacitor.
9. Installation is complete. Proceed to Procedure 3—Unit Start-Up.

PROCEDURE 2—RUN CAPACITOR MOUNTED IN HORIZONTAL POSITION (SEE FIG. 1 AND 3.)

1. Remove 2 screws above run capacitor.
2. Attach start relay to top center of control box. Locate relay tab in dimple of control box. Use provided screw.
3. Attach start capacitor strap to start capacitor with flap pointing down and capacitor terminals pointing left.
4. Attach start capacitor and strap assembly to control box above run capacitor. Use provided screw.
5. Connect black wire to terminal 5 on start relay and terminal 21 on contactor.
6. Connect blue wire to terminal 2 on start relay and H on unit run capacitor.
7. Connect brown wire to terminal 1 on start relay and start capacitor.
8. Connect yellow wire to start capacitor and C on unit run capacitor.
9. Installation is complete. Proceed to Procedure 3—Unit Start-Up

PROCEDURE 3—UNIT START-UP

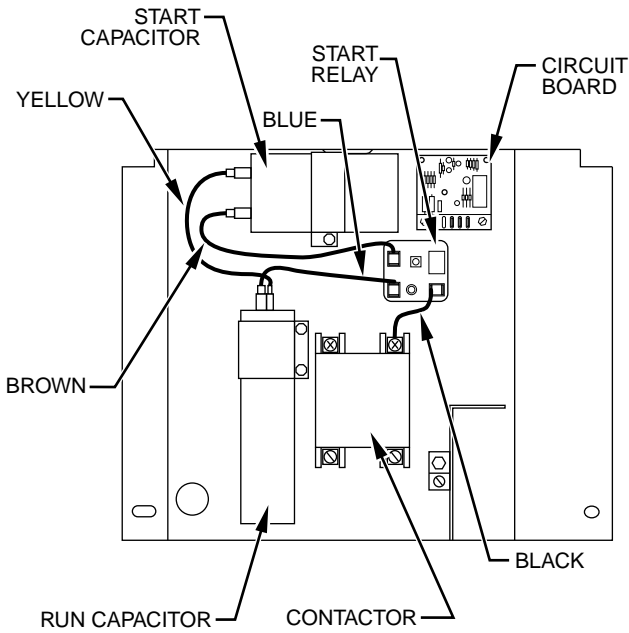
Check all electrical connections for proper position. Check system pressures for equalization. Restore power to unit and start compressor. Should the compressor fail to start, check unit wiring. Power supply must be within operating voltage range indicated on unit rating plate.



————— FACTORY WIRING
 - - - - - FIELD INSTALLED WIRING
 COMP COMPRESSOR
 SR START RELAY
 SC START CAPACITOR
 CAP RUN CAPACITOR
 CONT CONTACTOR

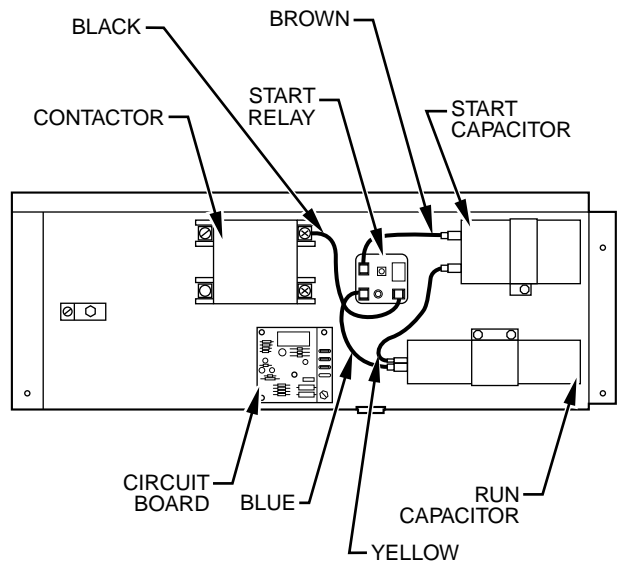
Fig. 1—Electrical Connections

A96112



A99089

→ Fig. 2—Run Capacitor Mounted in a Vertical Position



A99090

→ Fig. 3—Run Capacitor Mounted in a Horizontal Position

