

# WIRING DIAGRAM MANUAL

## Split System Heat Pump

### N4H6

#### Safety Labeling and Signal Words

##### DANGER, WARNING, CAUTION, and NOTE

The signal words **DANGER**, **WARNING**, **CAUTION**, and **NOTE** are used to identify levels of hazard seriousness. The signal word **DANGER** is only used on product labels to signify an immediate hazard. The signal words **WARNING**, **CAUTION**, and **NOTE** will be used on product labels and throughout this manual and other manuals that may apply to the product.

**DANGER** - Immediate hazards which **will** result in severe personal injury or death.

**WARNING** - Hazards or unsafe practices which **could** result in severe personal injury or death.

**CAUTION** - Hazards or unsafe practices which **may** result in minor personal injury or product or property damage.

**NOTE** - Used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

##### Signal Words in Manuals

The signal word **WARNING** is used throughout this manual in the following manner:



The signal word **CAUTION** is used throughout this manual in the following manner:



##### Signal Words on Product Labeling

Signal words are used in combination with colors and/or pictures on product labels.

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<b>Voltage</b>	208/230- 1- 60
<b>Model No.</b>	N4H6

WARNING

**DEATH, PERSONAL INJURY, AND/OR PROPERTY DAMAGE HAZARD**

**Failure to carefully read and follow this warning could result in equipment malfunction, property damage, personal injury and/or death.**

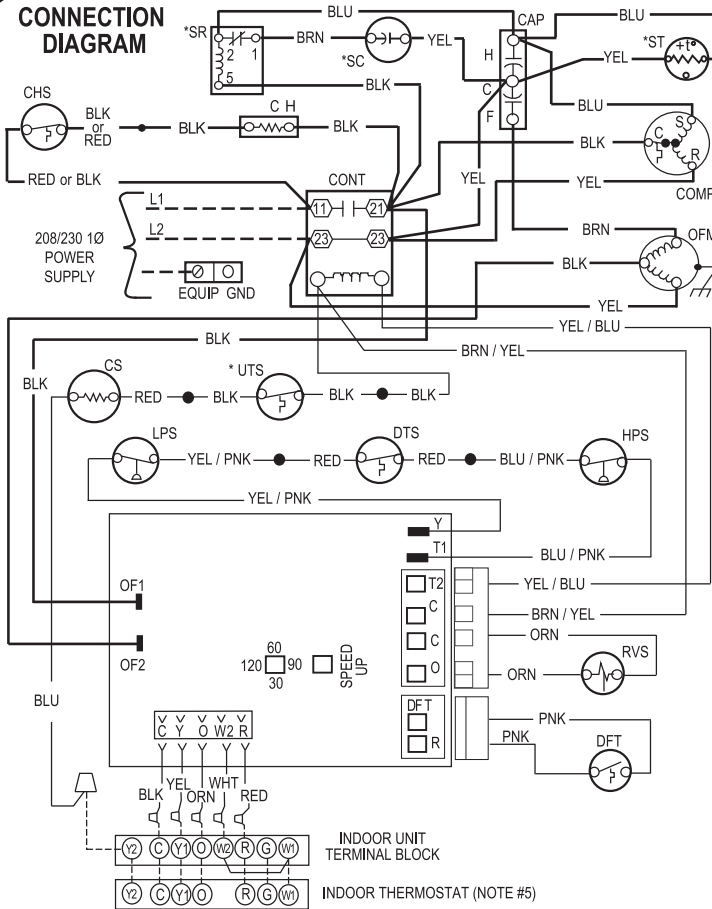
**Installation or repairs made by unqualified persons could result in equipment malfunction, property damage, personal injury and/or death.**

**The information contained in this manual is intended for use by a qualified service technician familiar with safety procedures and equipped with the proper tools and test instruments.**

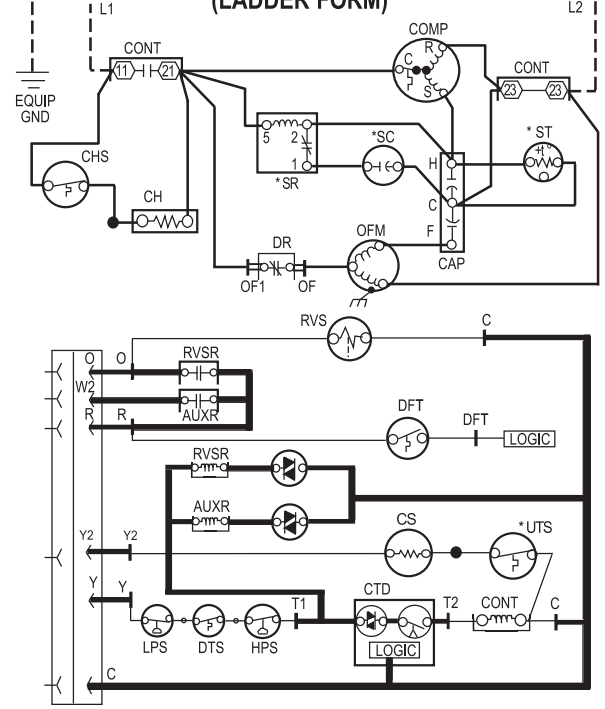
**Installation must conform with local building codes and with the National Electrical Code NFPA70 current edition or Canadian Electrical Code Part 1 CSA C.22.1.**

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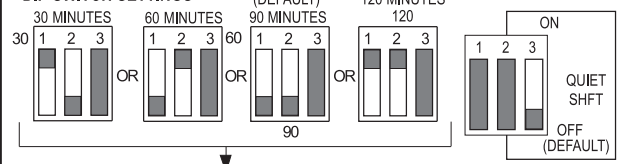
## CONNECTION DIAGRAM



## SCHEMATIC DIAGRAM (LADDER FORM)



### DIP SWITCH SETTINGS



FIELD SELECTABLE OPTIONS FOR TIME PERIOD BETWEEN DEFOST CYCLES (MINUTES)

- SPEED UP  JUMPERED TEST PINS (USE METAL OBJECT), FIELD SPEED-UP CYCLE
- MOMENTARILY SHORT PINS AND RELEASE TO BYPASS COMPRESSOR OFF DELAY.
  - SHORT FOR 5+ SEC. AND RELEASE FOR FORCED DEFOST.
  - PERMANENT SHORT WILL BE IGNORED. DEFOST WILL TERMINATE IN 30 SEC. IF DFT OPEN. DEFOST WILL TERMINATE NORMALLY IF DFT IS CLOSED.

### NOTE

**THIS DEFOST CONTROL BOARD CONTAINS A FIVE MINUTE SHORT CYCLE PROTECTOR. A FIVE MINUTE DELAY WILL OCCUR BETWEEN COMPRESSOR OFF/ON CYCLES.**

### LEGEND

—	FACTORY POWER WIRING	CHS	CRANKCASE HEATER SWITCH
—	FACTORY CONTROL WIRING	COMP	COMPRESSOR
----	FIELD CONTROL WIRING	CONT	CONTACTOR
----	FIELD POWER WIRING	CS	COMP HIGH CAP SOLENOID
—	CONDUCTOR ON CIRCUIT BOARD	CTD	COMPRESSOR TIME DELAY
○	COMPONENT CONNECTION	DFT	DEFOST THERMOSTAT
—	1/4-INCH QUICK CONNECT TERMINALS	DR	DEFOST RELAY AND CIRCUITRY
⌘	FIELD SPLICE	DTS	DISCHARGE TEMPERATURE SWITCH
●	JUNCTION	HPS	HIGH PRESSURE SWITCH
⌘	PLUG RECEPTACLE	LPS	LOW PRESSURE SWITCH
AUXR	AUXILLARY HEAT RELAY	OFM	OUTDOOR FAN MOTOR
CAP	CAPACITOR (DUAL RUN)	RVS	REVERSING VALVE SOLENOID
CB	CIRCUIT BOARD	RVSR	REVERSING VALVE SOLENOID
CH	CRANKCASE HEATER	*SC	RELAY START CAPACITOR
		*SR	RELAY START
		*ST	START THERMISTOR
		*UTS	UNLOADER TEMP SWITCH

**\* MAY BE FACTORY OR FIELD INSTALLED**

### NOTES:

- Compressor and fan motor furnished with inherent thermal protection.
- To be wired in accordance with national electric code (N.E.C.) and local codes.
- N.E.C. Class 2, 24 V circuit, min. 40 VA required, 60 VA on units installed with LLS.
- Use copper conductors only from disconnect to unit.
- Must use thermostat and sub-base as stated in pre-sale literature.
- If indoor section has a transformer with a grounded secondary, connect the grounded side to "C" on the circuit board.
- If any of the original wire, as supplied, must be replaced, use the same or equivalent wire.
- Check all electrical connections inside control box for tightness.
- Do not attempt to operate unit until service valves have been opened.
- Use conductors suitable for at least 75°C (167°F).



339130-101 REV. A