

Wiring Diagrams

Size 024, 036

Index

Model	Voltage	Label Diagram (On Unit)	Fig. No.
40QE024	208/230	315010-401	1
40QE036, 40QEH036	208/230	314732-401	2

LEGEND

	MARKED CONNECTION
	UNMARKED CONNECTION
	FIELD POWER WIRING
	FIELD GROUND
	FIELD SPLICE
	PLUG RECEPTACLE
	JUNCTION
	FIELD GROUND
	FACTORY WIRING
	FIELD CONNECTIONS
	CASING GROUND (SHIELDED CABLE)
A1	COMM. BUS (+), TO COMPRESSOR BEARING UNIT
A2	COMM. BUS (+), TO THERMOSTAT
B1	COMM. BUS (-), TO COMPRESSOR BEARING UNIT
B2	COMM. BUS (-), TO THERMOSTAT
C1	COMM. BUS (COMMON), TO COMPRESSOR BEARING UNIT
C2	COMM. BUS (COMMON), TO THERMOSTAT
CB	CIRCUIT BREAKER (2 AMP @ 25°C)
EAC	ELECTRONIC AIR CLEANER LEADS
DL	DEMAND LIMIT INPUT (ACROSS DL&R)
FLT	FILTER, LINE
FR	FAN RELAY
GND	GROUND
H	HUMIDIFIER CONTL (ACROSS H-C)
HR	HEAT RELAY
HS	HUMIDISTAT INPUT TERMINAL
HTR	HEATER
LVTB	LOW VOLTAGE TERMINAL BOARD
LS	LIMIT SWITCH
MTR1	MOTOR BLOWER-1CM (INTEGRAL ECM CONTROLLER/MOTOR)
PCB1	P.C. BOARD-SIM (STD INDOOR MODULE) OR (INDOOR VSR VAR. SPEED RESIDENTIAL MODULE)
PL2	CONN. J2 (COMMUNICATION BUS)
PL3	CONN. J3 (SENSOR INPUTS)
PL4	CONN. J4 (DISCRETE "ON-OFF" INPUTS)
PL5	CONN. J5 (MOTOR SPEED CONTL)
PL6	CONN. J6 (MOTOR ON-OFF CONTL)
PL7	CONN. J7 (HUMIDIFIER ACCY CONTL)
PL8	CONN. J8 (ELECTRIC HTR CONTL)
PL9	CONN. ON MTR1-(SPEED CONTL)
PL10	CONN. ON MTR1 (208-230 VAC INPUT)
R1	RESISTOR, 1K OHM 2 WATT MOF
R2	RESISTOR, 1K OHM 2 WATT MOF
SEQ	SEQUENCER
SEV	SOLENOID EXPANSION VALVE
TB1	TERM. BLOCK K1 ON PCB1 (ELECTRONIC AIR CLEANER ACCY)
TB2	TERM. BLOCK (CONTL POWER JUNCTION)
TB3	TERM. BOARD (FIELD CONNECT.)
TB4	TERM. BLOCK J1 ON PCB1—(24 VAC INPUT, UNGROUNDED)

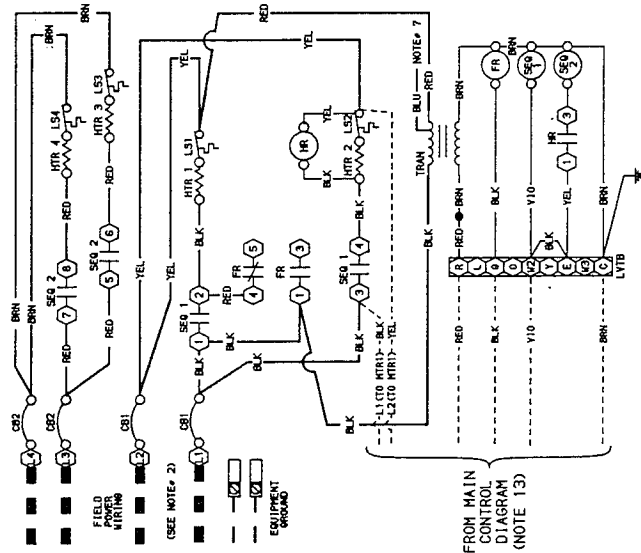
TIC	THERMISTOR, INDOOR COIL
TRA	THERMISTOR, RETURN AIR
TRAN	TRANSFORMER (208/230 VAC PRI/24 VAC SEC, GROUNDED)
TRAN2	TRANSFORMER, ISOLATION 24 VAC 1:1 RATIO

NOTES

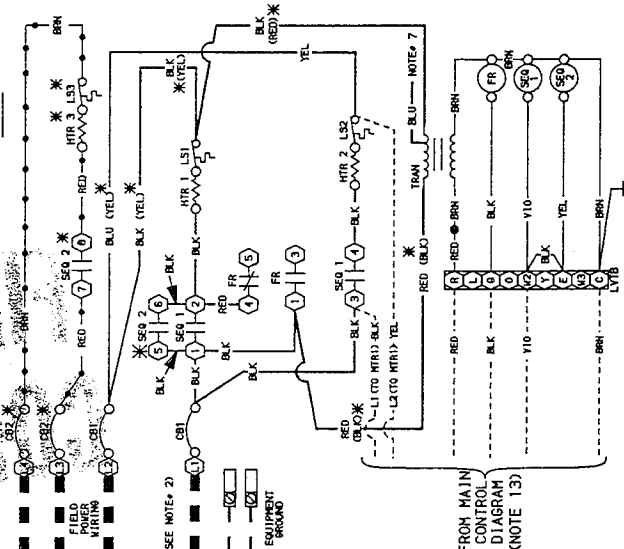
1. USE EXTREME CAUTION NOT TO SHORT OR GROUND COMMUNICATION BUS LEADS. SERIOUS DAMAGE OF PCB1 AND THERMOSTAT WILL OCCUR.
2. USE COPPER CONDUCTORS ONLY. SEE CHART.
3. REPLACE DAMAGED WIRE WITH AWM (105°C) WIRE OR ITS EQUIVALENT.
4. BLOWER MOTOR (MTR1) HAS INTERNAL THERMAL OVERLOAD SWITCH.
5. SYMBOLS ARE ELECTRICAL REPRESENTATION ONLY.
6. TO BE WIRED IN ACCORDANCE WITH NEC & LOCAL CODES.
7. ACCESSORY PACKAGE TRANSFORMER PIGTAILS: BLUE 208V, RED 230V, INSULATE UNUSED LEAD.
8. WHEN CONNECTING HUMIDISTAT (ACROSS R & HS) OR DEMAND LIMIT (ACROSS R & DL) REMOVE JUMPER ACROSS RELATED SCREW TERMINALS.
9. SOLENOID EXPANSION VALVE (SEV) REQUIRED ONLY WITH CERTAIN COMPRESSOR SECTIONS.
10. SPEED SELECTORS LOCATED ON MTR1 AT PL11. ADJUST SPEED SELECTORS PER PROPER SYSTEM AND OPERATION PROCEDURES.
HIGH (BLACK) SPEED OCCURS AT HIGH COMPRESSOR SPEED, AND DURING ELECTRIC HEAT. DO NOT SET BELOW MINIMUM INDICATED IN TABLE BELOW.
LOW (WHITE) IS ENGAGED AT LOW COMPRESSOR SPEED, DURING NORMAL OPERATION.
11. REMOVE EXISTING MOTOR LEADS, RED, BLACK AND YELLOW FROM HEATER OR COOLING CONTROL ACCESSORY AND DISCARD. CONNECT ICM MOTOR POWER LEADS (BLK & YEL) AS SHOWN IN FIGS. 1 & 2. FOR COOLING CONTROL ACCESSORY. REMOVE ICM MOTOR LEAD TERMINALS, STRIP LEADS BACK 1/2 IN. AND CONNECT AS SHOWN IN ACCESSORY DIAGRAM IN FIGS. 1 & 2.
12. FOR ELECTRONIC AIR CLEANER ACCESSORY CONNECTION RUN (ORN) LEADS FROM TB1 UP INTO HEATER OR COOLING CONTROL ACCESSORY HIGH VOLTAGE AREA AND SPLICE LEADS INTO AIR CLEANER CIRCUIT (CAUTION: DO NOT EXCEED 10 AMPS MAX, N.O. CONTACTS).
13. ROUTE CONTROL LEADS TO HEATER/COOLING CONTROL ACCESSORY AND CONNECT AS SHOWN TO BACK OF LVTB WHERE PROVIDED, USING QUICK CONNECTS PROVIDED ON LEADS. IN COOLING CONTROL ACCESSORY, REMOVE TERMINALS FROM R, C & G LEADS. STRIP BACK AND SPLICE IN AT THERMOSTAT LEAD SPLICES. INSULATE UNUSED VIOLET (W2) LEAD.

**FILE
COPY**

SCHEMATIC DIAGRAM FOR ACCESSORY #40AQ903080



SCHEMATIC DIAGRAM FOR ACCESSORIES #40AQ901190, #40AQ901200 (* SEE NOTE # 2) FOR #40AQ903060 & 100 ONLY)

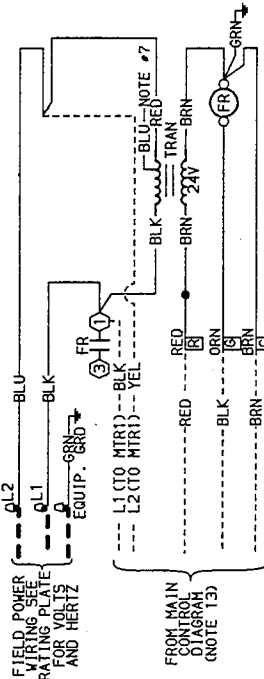


CAUTION:

— THIS WIRING LABEL OVERRIDES SCHEMATIC SECTION OF WIRING LABEL ATTACHED TO HEATER OR COOLING CONTROL ACCESSORY. REMOVE OR DEFACE THAT PORTION OF EXISTING ACCESSORY LABEL.
 — USE EXTREME CAUTION NOT TO SHORT OR GROUND COMMUNICATION BUS LEADS TO THERMOSTAT OR COMPRESSOR SECTION. SERIOUS DAMAGE TO PCB1 AND THERMOSTAT(S) WILL RESULT.

ACCESSORY NO.	KW	PH	VOLT	WIRE SIZE MIN.
40AQ901190	5.6/7.5	1	208/230	#8
40AQ901200	7.5/10.0	1	208/230	#6
40AQ903100	9.0/12.0	1	208/230	#8 (L1-L2) #10 (L3-L4)
40AQ903060	11.25/15.0	1	208/230	#6 (L1-L2) #10 (L3-L4)
40AQ903080	15.0/20.0	1	208/230	#6 (L1-L2) #6 (L3-L4)

SCHEMATIC DIAGRAM FOR COOLING CONTROL ACCESSORY #40QB900130



MAIN CONTROL SCHEMATIC DIAGRAM

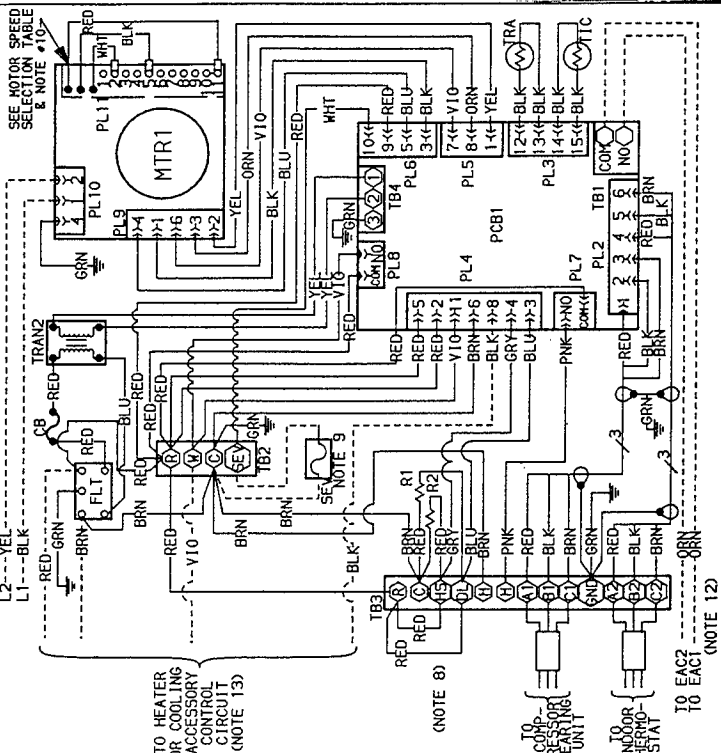


Fig. 1— 40QE024 Schematic

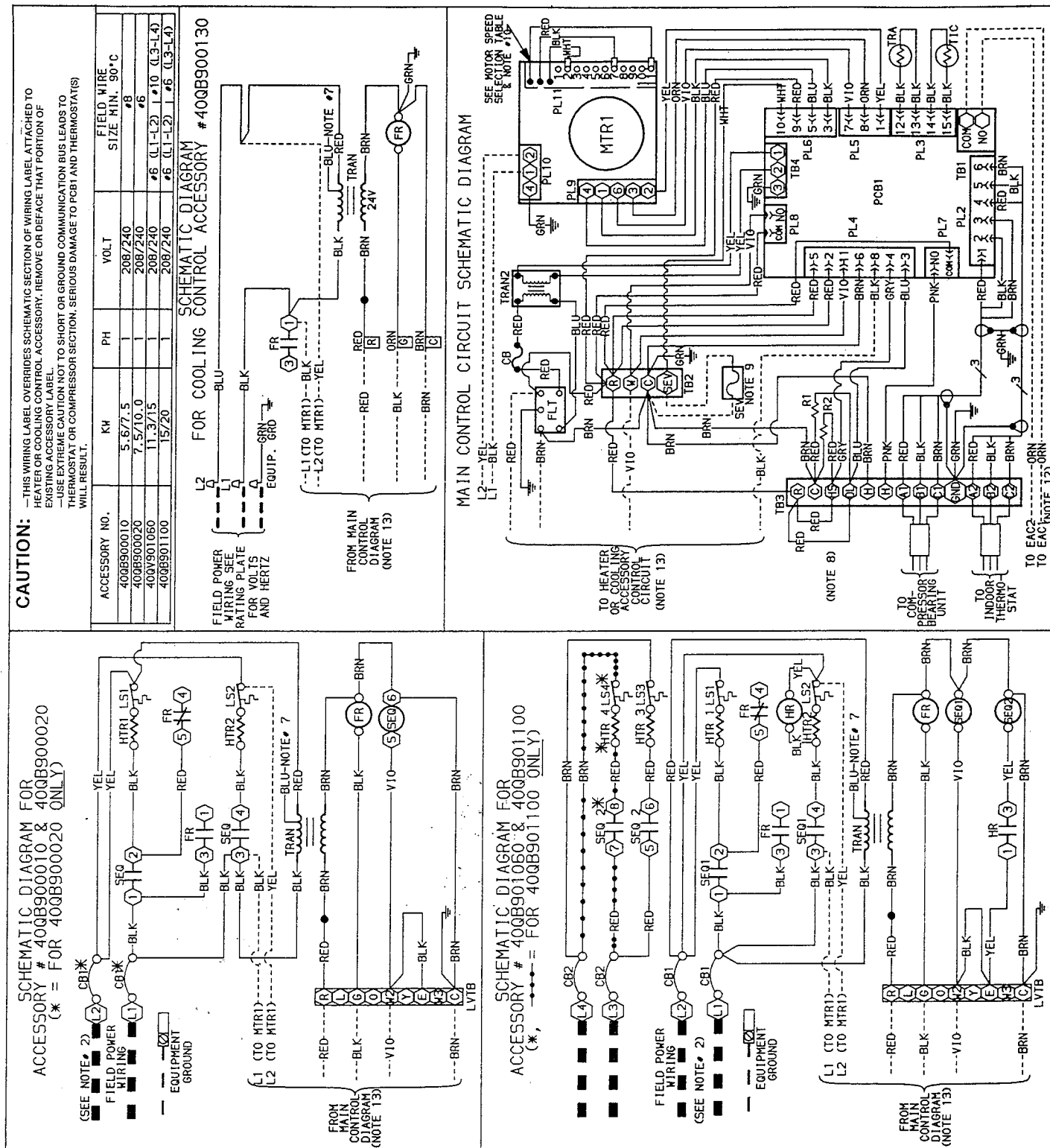


Fig. 2—40QE036, 40QEH036 Schematic

