



NOTE - IF ANY WIRE IN THIS APPLIANCE IS REPLACED IT MUST BE REPLACED WITH WIRE OF LIKE SIZE, RATING, TERMINATION AND INSULATION THICKNESS

WARNING - ELECTRIC SHOCK HAZARD. CAN CAUSE INJURY OR DEATH. UNIT MUST BE GROUNDED IN ACCORDANCE WITH NATIONAL AND LOCAL CODES

DISCONNECT ALL POWER BEFORE SERVICING.

J/P	JACKPLUG DESCRIPTION
2	HEAT
18	EXHAUST FAN COMP1
24	EXHAUST FAN
36	TEST
38	TEST COOL
47	OUTDOOR FAN 1
52	OUTDOOR FAN 2
52	OUTDOOR FANS 1,2,3
86	OUTDOOR FANS 4,5,6
87	OUTDOOR FAN 3
106	OUTDOOR FAN 4
107	OUTDOOR FAN 5
108	OUTDOOR FAN 6
109	EXHAUST FAN MOTOR 1
132	EXHAUST FAN MOTOR 2
133	EXHAUST FAN MOTOR 1
246	POWER TO VFD
247	POWER VFD TO MOTOR
248	VFD CONTROL
249	CONTACTOR BYPASS
250	SMOKE DETECTOR ONE
251	SMOKE DETECTOR ONE
252	SMOKE DETECTOR TWO
253	SMOKE DETECTOR TWO
255	MODULE, CONTROL SMOKE DETECTION
261	SMOKE DETECTOR JUMPER
324	VFD OPTION CONNECTION
325	K3 BLOWER CONTROL
326	PHASE MONITOR VFD CONTROL ADD ON
327	PHASE MONITOR VFD CONTROL ADD ON
328	VFD BLOWER CONTROL

KEY	COMPONENT
A42	MONITOR, PHASE PROTECTION
A96	CONTROL, INVERTER
A171	SENSOR ONE, SMOKE, RETURN AIR
A172	SENSOR TWO, SMOKE, SUPPLY AIR
A173	MODULE, CONTROL SMOKE DETECTION
A183	CONTROL, VFD BOARD
B1	COMPRESSOR 1
B2	COMPRESSOR 2
B3	MOTOR, BLOWER
B4	MOTOR, OUTDOOR FAN 1
B5	MOTOR, OUTDOOR FAN 2
B10	MOTOR, EXHAUST FAN 1
B11	MOTOR, EXHAUST FAN 2
B13	COMPRESSOR 3
B21	MOTOR, OUTDOOR FAN 3
B22	MOTOR, OUTDOOR FAN 4
B23	MOTOR, OUTDOOR FAN 5
B24	MOTOR, OUTDOOR FAN 6
C1	CAPACITOR, OUTDOOR FAN 1
C2	CAPACITOR, OUTDOOR FAN 2
C6	CAPACITOR, EXHAUST FAN 1
C8	CAPACITOR, EXHAUST FAN 2
C18	CAPACITOR, OUTDOOR FAN 3
C19	CAPACITOR, OUTDOOR FAN 4
C20	CAPACITOR, OUTDOOR FAN 5
C21	CAPACITOR, OUTDOOR FAN 6
C88	CIRCUIT, BREAKER T1
CB10	CIRCUIT, BREAKER MAIN DISCONNECT
CB18	CIRCUIT, BREAKER T18
DL46	DELAY, OVERFLOW SWITCH
F6	FUSE, EXHAUST FAN
H2	HEADER 2, LV1C1
HR1	HEATER, COMPRESSOR 1
HR2	HEATER, COMPRESSOR 2
HR5	HEATER, COMPRESSOR 3
J11	JACK, GFI RECEPTACLE
K1-1	CONTACTOR, COMPRESSOR 1
K2-1	CONTACTOR, COMPRESSOR 2
K3-1	CONTACTOR, BLOWER
K10-1,2	RELAY, OUTDOOR FAN
K14-1	CONTACTOR, COMPRESSOR 3
K65-1,2	RELAY, EXHAUST FAN 1
K66-1	RELAY, STAGE COOL. 1
K67-1	RELAY, STAGE COOL. 2
K68-1,2	RELAY, OUTDOOR FAN 2&3
K150-1,2	RELAY, OUTDOOR FAN 4
K152-1,2	RELAY, OUTDOOR FAN 5&6
K220-1	RELAY, INVERTER PROTECTION
K232	RELAY, INVERTER PROTECTION
S4	SWITCH, LIMIT HI PRESS COMP (MANUAL RESET)
S7	SWITCH, LIMIT HI PRESS COMP 2 (MANUAL RESET)
S11	SWITCH, LOW PRESS, LOW AMBIENT KIT COMP 1
S28	SWITCH, LIMIT HI PRESS COMP 3 (MANUAL RESET)
S42	SWITCH, OVERLOAD RELAY BLOWER MOTOR
S48	SWITCH, DISCONNECT
S49	SWITCH, FREEZE/STAT COMP 1
S50	SWITCH, FREEZE/STAT COMP 2
S53	SWITCH, FREEZE/STAT COMP 3
S84	SWITCH, LOW PRESS, LOW AMBIENT KIT COMP 2
S85	SWITCH, LOW PRESS, LOW AMBIENT KIT COMP 3
S149	SWITCH, OVERFLOW
T1	TRANSFORMER, CONTROL
T18	TRANSFORMER, CONTACTOR CONTROL
TB13	TERMINAL STRIP, POWER DISTRIBUTION

10/14

WIRING DIAGRAM

537608-01

COOLING

KCA/KGA - 240/300H - G,J,Y - VFD

SECTION B

New Form No. 537608-01

REV 2

- 1. USED WITH VFD CONTROL VFD OPERATION
- 2. USED WITH VFD CONTROL WITH BYPASS OPERATION
- NOTE - FOR USE WITH COPPER CONDUCTORS ONLY REFER TO UNIT RATING PLATE FOR MINIMUM PROTECTION SIZE.
- NOTE - P2 IS USED ON KCA UNITS ONLY
- 542 USED ON UNIT WITH 10 HP MOTOR AND VFD BYPASS
- CONNECT A172 SENSOR TO J261 ON SUPPLY AIR SMOKE DETECTOR ONLY
- 548 OR CB10 MAY BE USED
- TO BYPASS A96 VFD.
- DISCONNECT ALL POWER UNPLUG - J246 FROM P246, AND UNPLUG J247 FROM P247.
- UNPLUG - P249 INTO J249, AND PLUG J249 INTO P247.
- UNPLUG - J326 FROM P324, AND UNPLUG J324 FROM P327 PLUG - P324 INTO J324
- MITSUBISHI VFD
- 55, 58, 531, 5180 USED ON 240H UNITS ONLY
- F6 USED ON V-VOLT UNITS WITH FIELD INSTALLED POWER EXHAUST
- F10 USED ON V-VOLT UNITS ONLY
- ▲ DENOTES OPTIONAL COMPONENTS
- LINE VOLTAGE FIELD INSTALLED