



KEY	DESCRIPTION
A30	SENSOR, PRESSURE DISCHARGE AIR
A34	SENSOR, PRESSURE RETURN AIR
A55	PANEL, MAIN PANEL LENNOX
A96	CONTROL, INVERTER SUPPLY
A178	PANEL, COMP 3 & 4, C3 SECOND STAGE HEAT
A187	CONTROL, GENERAL PURPOSE GP3
B1	COMPRESSOR 1
B2	COMPRESSOR 2
B3	MOTOR, BLOWER
B4	MOTOR, OUTDOOR FAN 1
B5	MOTOR, OUTDOOR FAN 2
B13	COMPRESSOR 3
B20	COMPRESSOR 4
B21	MOTOR, OUTDOOR FAN 3
B22	MOTOR, OUTDOOR FAN 4
B23	MOTOR, OUTDOOR FAN 5
B24	MOTOR, OUTDOOR FAN 6
B35	MOTOR, EXHAUST BLOWER 1
B36	MOTOR, EXHAUST BLOWER 2
C1	CAPACITOR, OUTDOOR FAN 1
C2	CAPACITOR, OUTDOOR FAN 2
C18	CAPACITOR, OUTDOOR FAN 3
C19	CAPACITOR, OUTDOOR FAN 4
C20	CAPACITOR, OUTDOOR FAN 5
C21	CAPACITOR, OUTDOOR FAN 6
CB8	CIRCUIT, BREAKER T1
CB10	CIRCUIT BREAKER, MAIN DISCONNECT UNIT
CB18	CIRCUIT, BREAKER T18
F10	FUSE, OUTDOOR FAN MOTOR
F30	FUSE, TRANSFORMER T29 PRIMARY
F31	FUSE, TRANSFORMER T29 SECONDARY
F37	FUSE, COMPRESSOR GROUP 1
F38	FUSE, COMPRESSOR GROUP 2
F61	FUSE, UNIT
HR1	HEATER COMPRESSOR 1
HR2	HEATER COMPRESSOR 2
HR5	HEATER COMPRESSOR 3
HR11	HEATER COMPRESSOR 4
K1	CONTACTOR, COMPRESSOR 1
K2	CONTACTOR, COMPRESSOR 2
K10	RELAY, OUTDOOR FAN 1
K14	CONTACTOR, COMPRESSOR 3
K68	RELAY, OUTDOOR FAN 2
K146	CONTACTOR, COMPRESSOR 4
K149	RELAY, OUTDOOR FAN 3
K150	RELAY, OUTDOOR FAN 4
K152	RELAY, OUTDOOR FAN 5
K153	RELAY, OUTDOOR FAN 6
K199	CONTACTOR, EXHAUST STG 1
K201	CONTACTOR, EXHAUST STG 2
K203	RELAY, INVERTER CONTROL
L14	VALVE, SOLENOID REHEAT COIL 1
L30	VALVE, SOLENOID REHEAT COIL 2
R55	RESISTOR, VFD LOADING, A96
RT17	SENSOR, OUTDOOR AIR
S4	SWITCH, LIMIT HI PRESS COMPRESS 1
S7	SWITCH, LIMIT HI PRESS COMPRESS 2
S11	SWITCH, LOW PRESS, LOW AMBIENT KIT COMP 1
S28	SWITCH, LIMIT HI PRESS COMPRESS 3
S37	SWITCH, PRESSURE EXHAUST FAN
S39	SWITCH, PRESSURE EXHAUST FAN
S48	SWITCH, DISCONNECT
S49	SWITCH, FREEZE STAT COMPRESS 1
S50	SWITCH, FREEZE STAT COMPRESS 2
S53	SWITCH, FREEZE STAT COMPRESS 3
S54	SWITCH, LOW PRESS, LOW AMBIENT KIT COMP 2
S55	SWITCH, FREEZE STAT COMPRESS 4
S58	SWITCH, LOW PRESS, COMP 1
S59	SWITCH, LOW PRESS, COMP 2
S84	SWITCH, LOW PRESS, COMP 3
S85	SWITCH, LOW PRESS, COMP 4
S87	SWITCH, LOW PRESS, COMP 5
S88	SWITCH, LOW PRESS, COMP 6
S94	SWITCH, LOW PRESS, LOW AMBIENT KIT COMP 2
S95	SWITCH, LOW PRESS, LOW AMBIENT KIT COMP 3
S96	SWITCH, LIMIT HI PRESS COMPRESS 4
S97	SWITCH, LOW PRESS, COMP 4
S98	SWITCH, LOW PRESS, COMP 3
S117	SWITCH, GFI
T1	TRANSFORMER, CONTROL
T18	TRANSFORMER, CONTACTOR
T29	TRANSFORMER, GFI
TB2	TERMINAL BLOCK, POWER DISTRIBUTION
TB13	TERMINAL STRIP, POWER DISTRIBUTION
TB18	TERMINAL STRIP, CYCLE CONTROL
TB24	TERMINAL STRIP, UNIT ADDER
TB25	TERMINAL STRIP, BLOWER
TB40	TERMINAL STRIP, COMPRESSOR 1
TB41	TERMINAL STRIP, COMPRESSOR 2,3,4
TB47	TERMINAL STRIP, OUTDOOR FANS
TB58	TERMINAL STRIP, POWER EXHAUST
TB59	TERMINAL STRIP, POWER EXHAUST

J/P	JACK / PLUG DESCRIPTION
11	GFI, RECEPTACLE
86	OUTDOOR FAN INTERFACE
87	OUTDOOR FAN INTERFACE 2
118	COMPRESSOR 3 AND 4, CONTROL
119	COMPRESSOR 3 AND 4, INPUT
248	VFD CONTROL
259	BLOWER ECM MOTOR
263	HIGH AND LOW PRESSURE SWITCHES
264	BLOWER DECK
265	CONTACTORS AND RELAYS
267	OUTDOOR FAN AREA
268	TRANSFORMER 1 POWER
269	HUMIDITROL
299	HUMIDITROL INTERFACE
348	CONTROL, GENERAL PURPOSE GP3

120 VAC FIELD PROVIDED POWER SUPPLY IS REQUIRED

NOTE: USE COPPER CONDUCTORS ONLY

- ▲ P.E LESS INVERTER WIRING SHOWN
- ▲ ONLY ON UNITS WITH HUMIDITROL OPTION
- ▲ EXTERNAL HUMIDITROL CONTACTS
- ▲ CONNECTS TO SECTION "A" HEATING DIAGRAM, MAY BE LOCATED IN HEATING COMPARTMENT
- ▲ S49,S50,S53 AND S95 ARE PART OF 5VDC CIRCUIT
- ▲ F37 AND F38 ARE NOT USED ON UNITS LESS ELECTRIC HEAT, 480 AND 600 V
- ▲ S37 AND S39 PRESSURE SWITCH CONTROL FOR POWER EXHAUST
- ▲ VOLTAGE CONTROL SINGLE STAGE P.E
- ▲ VOLTAGE CONTROL TWO STAGE P.E
- ▲ A30 SENSOR FOR B3 SUPPLY AIR BLOWER IN VAV APPLICATIONS ONLY
- ▲ A34 SENSOR AND A137 INVERTER CONTROL FOR B35 AND B36 EXHAUST AIR BLOWERS
- ▲ A30 MAY BE USED WITH OR WITHOUT A34 A34 MAY BE USED WITH OR WITHOUT A30
- ▲ FOR UNITS WITH BYPASS OPTION, PLEASE REFER TO SECTION 3B WIRING DIAGRAM
- ▲ FOR POWER EXHAUST INVERTER WIRING, PLEASE REFER TO SECTION 5B WIRING DIAGRAM
- ▲ F61 USED ON ALL UNITS WITH LGH UNITS SCCR OPTION
- ▲ S48 IS FIELD INSTALLED ON ALL LCH UNITS WITH SCCR OPTION

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.

— DENOTES OPTIONAL COMPONENTS
 — LINE VOLTAGE FIELD INSTALLED
 - - - CLASS II FIELD WIRING

2022/03	WIRING DIAGRAM	03/22
538270-01		
COOLING - VFD		
LCH/LGH, 420S, 480S, 540S 1-G, J, Y		
SECTION B		REV. 0
Supersedes	New Form No. 538270-01	