538098-02

AA BB CC DD EE FF GG HH JJ KK LL MM NN PP QQ RR SS

01 02 03 04 05 06 07 08 09 10

S4 HPS — S5 HTS — S7 HPS — S87 LPS — S88 LPS

L14 RHV COIL — L30 RHV COIL

A55 MAIN CTRL — P394 J394 — J395 P395 — J394 P394 — J381 P381 — J392 P392 — J390 P390 — J389 P389 — J398 P398 — J400 P400

24VAC HPSW1 — HTSW1 — 24VAC — HPSW2 — 24VAC — LPSW1 — 24VAC — LPSW2

P388 J388

RT17 ODA TEMP — RT48 COMPR 1 SLT SENS — RT49 COMPR 2 SLT SENS — RT44 COMPR 1 LT SENS — RT45 COMPR 2 LT SENS

P385 J385 — J382 P382

RT6 SA TEMP — RT46 COMPR 1 SST SENS — RT47 COMPR 2 SST SENS — RT42 COMPR 1 ST SENS — RT43 COMPR 2 ST SENS

P399 J399

S28 HPS — 24VAC — HPSW3

S98 LPS — 24VAC — LPSW3

P379 J379 — J383 P383

RT52 COMPR 3 SLT SENS — RT56 COMPR 3 LT SENS

P404 J404 — P405 J405

RT50 COMPR 3 SST SENS — RT54 COMPR 3 ST SENS

J401 P401 — J402 P402

A178 AUX CTRL

A55 MAIN CTRL — J358 P358

A55 MAIN CTRL — J381 P381 — J403 P403

B5 OFM ECM CNTRL — B4 OFM ECM CNTRL — B22 OFM ECM CNTRL — B21 OFM ECM CNTRL

P337 P320 P336 P339 P321 P338

OPTIONAL IONIZER WIRING. SEE IAQ WIRING DIAGRAM.

P422 — K191 RELAY COIL — K1 CONTACTOR, COMP 1 - COIL - — K2 CONTACTOR, COMP 2 - COIL - — K14 CONTACTOR, COMP 3 - COIL -

FROM T18 — SHIELDED CABLE — A192 INVERTER MODBUS

TO P400 ON A178

MODBUS CABLE W/RJ-45 — A96 INVERTER

A55 MAIN CTRL — A 178 — K 191 RELAY

FROM F10 LOAD L1

FROM A12 MODBUS A-SECT LOC FF02 -OR- A55 HEADER 413 (NOT SHOWN)

T1 — T18 — 208V 240V — 24VAC — LOAD

F6 FUSE BLOCK POWER EXHAUST — F10 COMPONENT FUSE BLOCK — LINE — LOAD

TO K191-9 — TO K125/K262, A-SECT LOC BB07 — TO A3/A12, A-SECT LOC BB07 — TO B6/B15, A-SECT LOC BB07 — TO HR6/HR16, A-SECT LOC BB07

UVC-LIGHT POWER: USE DUAL CONNECTOR PROVIDED IN KIT. SEE IAQ DIAGRAM.

TB13 TERMINAL BLK POWER DIST — L1 L2 L3 — REAR MIDDLE FRONT

SEE POWER ENTRY DIAGRAM IN DISCONNECT BOX FOR DETAILS

FROM T18 LOC BB04/05

A96 — AM1 AIR MONITOR SUPPLY — AM2 AIR MONITOR RETURN — IBM B3

FL1 FLTR BOARD — T61 — L43 REACTOR — A192 INV

K1 - LINE MAIN - CONTACTOR, COMP 1 — K2 - LINE MAIN - CONTACTOR, COMP 2 — K14 - LINE MAIN - CONTACTOR, COMP 3

COMP B1 HR1 — COMP B2 HR2 — COMP B13 HR5

J106 — OFM B21 — OFM B22 — OFM B4 — OFM B5

P87 P107 P86 P52 P47

B47 FAN FOR A192 — J417 P417 — K191 RELAY

A55 MAIN CTRL — J390 P390 — A178 AUX CTRL — J397 P397 — A55 MAIN CTRL — J378 P378

K65 RELAY COIL — K231 RELAY COIL

P24 P18 P132 P133 — C6 — C8 — EXH B10 — EXH B11

FIELD PROVIDED WIRING — A30 SUPPLY AIR DUCT PRESSURE TD

## KEY LIST

| LOCATION | COMPONENT DESCRIPTION | |
|---|---|---|
| SS06 | A30 | TRANSDUCER, SA DUCT PRESSURE |
| CC05/08 | A96 | CONTROL INVERTER, BLOWER |
| MM05,EE10 | A192 | INVERTER, COMPRESSOR 1 |
| BB09 | AM1, AM2 | AIR MONITOR, SUPPLY/RETURN, IAQ-TVOC |
| FF/GG/JJ10 | B1, B2, B13 | COMPRESSOR 1, 2, 3 |
| CC10 | B3 | MOTOR, BLOWER |
| PP02,NN08 PP01,NN09 PP04,LL08 PP03,LL09 | B4, B5, B21, B22 | MOTOR, OUTDOOR FAN 1, 2, 3, 4 |
| QQ09 | B10, B11 | MOTOR, EXHAUST FAN 1, 2 |
| KK09 | B47 | MOTOR, COOLING FAN FOR A192 |
| QQ09 | C6, C8 | CAPACITOR, EXHAUST FAN 1, 2 |
| LL05 | F6 | FUSE, EXHAUST FAN |
| LL07 | F10 | FUSE, COMPONENT |
| LL08 | F57 | FUSE, T5 TRANSFORMER PRIMARY |
| LL09 | F58 | FUSE, T59 TRANSFORMER PRIMARY |
| EE09 | FL1 | FILTER BOARD |
| FF/GG/JJ10 | HR1, HR2, HR5 | HEATER, COMPRESSOR 1, 2, 3 |
| FF/GG05,06,08 JJ05/06/08 | K1, K2, K14 | CONTACTOR, COMPRESSOR 1, 2, 3 |
| QQ07 | K65, K231 | RELAY, EXHAUST FAN 1, 2 |
| EE05/08,LL10 | K191 | RELAY, CRANKCASE HEATER 1 |
| EE05 | K203 | RELAY, INVERTER CONTROL |
| AA02 | L14, L30 | VALVE, SOLENOID, REHEAT COIL 1, 2 |
| DD09 | L43 | REACTOR INVERTER |
| GG01 | RT6 | SENSOR, A55 DISCHARGE (IMC) |
| DD01 | RT17 | SENSOR, OUTSIDE AIR TEMP |
| GG03,MM02 | RT42, RT43, RT54 | SENSOR, SUCTION TEMP., COMP 1, 2, 3 |
| DD03,JJ02 | RT44, RT45, RT56 | SENSOR, LIQUID TEMP., COMP 1, 2, 3 |
| GG02,MM01 | RT46, RT47, RT50 | SENSOR, SAT, SUCT TEMP., COMP 1, 2, 3 |
| DD01/02,JJ01 | RT48, RT49, RT52 | SENSOR, SAT, LIQUID TEMP., COMP 1, 2, 3 |
| BB01/02,GG02 | S4, S7, S28 | LIMIT, HI PRESS. SWITCH, COMP 1, 2, 3 |
| AA01 | S5 | LIMIT, HI TEMP, SWITCH, COMP 1 |
| BB02/03,GG03 | S87, S88, S98 | SWITCH, LOW PRESS., COMP, 1, 2, 3 |
| AA06 | T1 | TRANSFORMER, CONTROL |
| BB06 | T18 | TRANSFORMER, CONTACTOR |
| FF09 | T61 | TRANSFORMER, INV INTERNAL POWER |
| AA07 | TB13 | TERMINAL STRIP, POWER DISTRIBUTION |

## NOTES

1. ONLY ON UNITS WITH HUMIDITROL OPTION
2. FOR REMOTE LOCATION OF RT6, ADD THE EXTENSION HARNESS
3. MOVE WIRES FROM 240 TO 208 TAP ON TRANSFORMER FOR 208 VOLT APPLICATIONS
4. USED ON VAV UNITS ONLY

DENOTES OPTIONAL COMPONENTS AND WIRING

**WARNING**

DISCONNECT ALL POWER BEFORE SERVICING.

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

FOR USE WITH COPPER CONDUCTORS ONLY. REFER TO UNIT RATING PLATE FOR MINIMUM CIRCUIT AMPACITY AND MAXIMUM OVERCURRENT PROTECTION SIZE.

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

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Model: LCM, LGM 156U, 180U - Y-VOLT
COOLING - MSAV NO BYPASS -OR- VAV - 3 COMPRESSORS, 4 CONDENSER FANS

Voltage: 208-240/3/60 (Y)
Supersedes: 538098-01 Form No: 538098-02 Rev: 0

WIRING DIAGRAM FLOW

| HEATING | COOLING | COOLING | ACCS | ACCS |
|---|---|---|---|---|
| SECTION A | SECTION B | SECTION B3 | SECTION C | SECTION D |

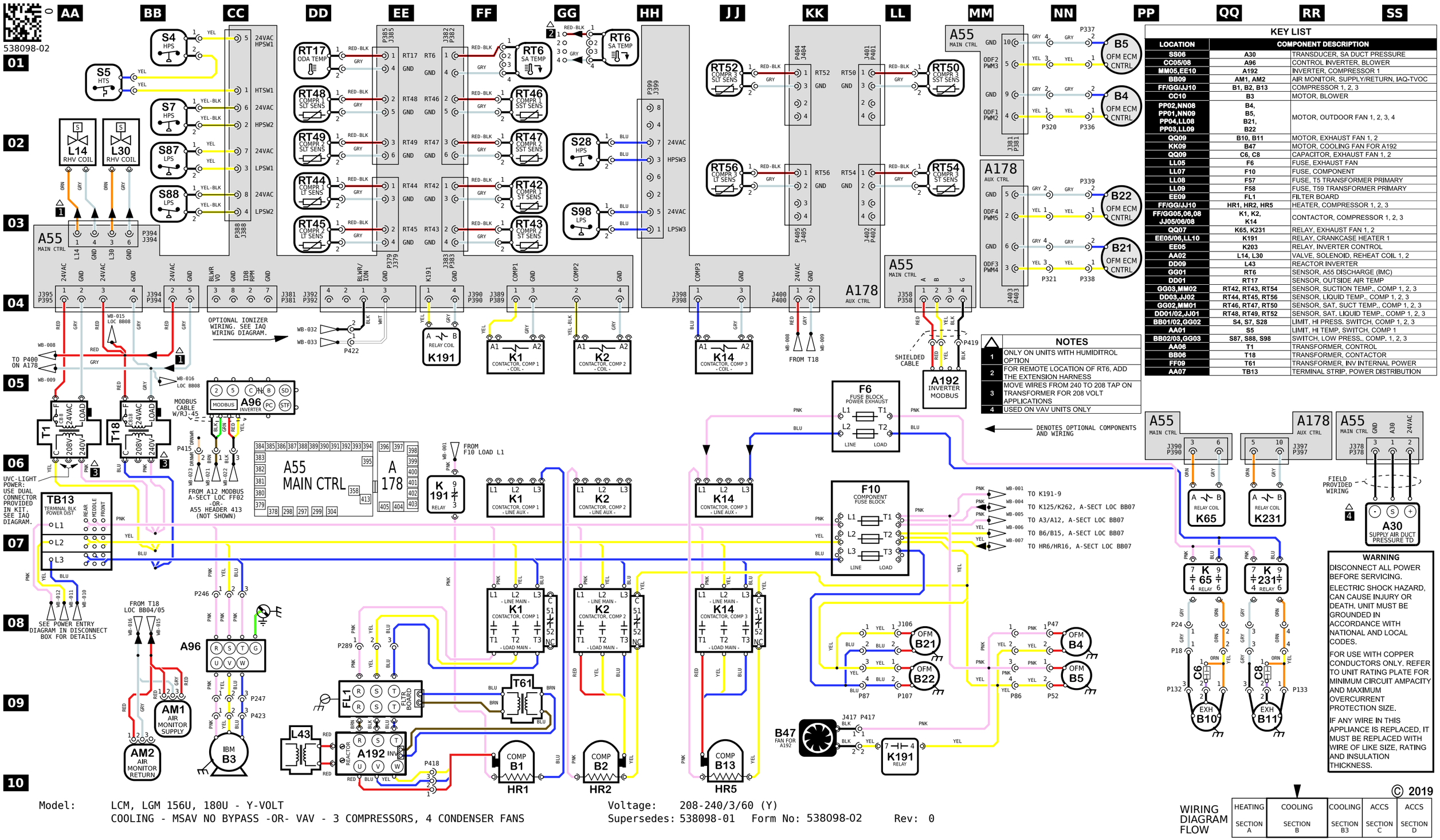
10x17 CUT SIZE

| REV | EC NO. | DATE | BY | APVD | REVISION NOTE |
|---|---|---|---|---|---|
| --- | CN-010356E | 08-02-2022 | MXR6 | JAL21 | ORIGINATED AT PD&R CARROLLTON, TX |
| | | | | | |
| | | | | | |

538098-02

AA BB CC DD EE FF GG HH JJ KK LL MM NN PP QQ RR SS

01 02 03 04 05 06 07 08 09 10




## KEY LIST

| LOCATION | COMPONENT | DESCRIPTION |
|---|---|---|
| SS06 | A30 | TRANSDUCER, SA DUCT PRESSURE |
| CC05/08 | A96 | CONTROL INVERTER, BLOWER |
| MM05,EE10 | A192 | INVERTER, COMPRESSOR 1 |
| BB09 | AM1, AM2 | AIR MONITOR, SUPPLY/RETURN, IAQ-TVOC |
| FF/GG/JJ10 | B1, B2, B13 | COMPRESSOR 1, 2, 3 |
| CC10 | B3 | MOTOR, BLOWER |
| PP02,NN08 PP01,NN09 PP04,LL08 PP03,LL09 | B4, B5, B21, B22 | MOTOR, OUTDOOR FAN 1, 2, 3, 4 |
| QQ09 | B10, B11 | MOTOR, EXHAUST FAN 1, 2 |
| KK09 | B47 | MOTOR, COOLING FAN FOR A192 |
| QQ09 | C6, C8 | CAPACITOR, EXHAUST FAN 1, 2 |
| LL05 | F6 | FUSE, EXHAUST FAN |
| LL07 | F10 | FUSE, COMPONENT |
| LL08 | F57 | FUSE, T5 TRANSFORMER PRIMARY |
| LL09 | F58 | FUSE, T59 TRANSFORMER PRIMARY |
| EE09 | FL1 | FILTER BOARD |
| FF/GG/JJ10 | HR1, HR2, HR5 | HEATER, COMPRESSOR 1, 2, 3 |
| FF/GG05,06,08 JJ05/06/08 | K1, K2, K14 | CONTACTOR, COMPRESSOR 1, 2, 3 |
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WIRING DIAGRAM FLOW

| HEATING SECTION A | COOLING SECTION B | COOLING SECTION B3 | ACCS SECTION C | ACCS SECTION D |
|---|---|---|---|---|

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| --- | CN-010356E | 08-02-2022 | MXR6 | JAL21 | ORIGINATED AT PD&R CARROLLTON, TX |
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