

TITLE: H/V 015-060 208-230/60/1 & 265/60/1 DXM2 w/LON, ECM CV

PCN: 19-0192 **DATE:** 4/26/19 **DRAWING NO.** 96B04.67NI2 **REV** -

LEGEND:

- Factory Low voltage Wiring
- Factory Line Voltage Wiring
- Field Low voltage Wiring
- Field Line voltage Wiring
- Printed Circuit Trace
- Optional Wiring
- Optional Block
- Capacitor
- Circuit Breaker
- Condensate Pan
- Control Board Jumper
- FUSE
- Ground
- High Pressure Switch
- LED
- Low Pressure Switch
- Mate-N-Lock
- Multi Splice Connector
- Optional Overload
- Relay contacts - N.C.
- Relay contacts - N.O.
- Relay / Contactor Coil
- Solenoid Coil
- Splice Cap
- Temperature Switch
- Thermistor
- Wire Nut

ACO Automatic Change Over
AL Alarm Relay Contacts
ATS Air Temperature Sensor
BM Blower Motor
BMC Blower Motor Capacitor
BR Blower Relay / Blower Contactor
CAP Capacitor
CB Circuit Breaker
CC Compressor Contactor
CDT Compressor Discharge Temperature
CO Condensate Overflow Sensor
CR Compressor Relay
CRC Compressor Run Capacitor
CS Current Sensor
DHW Domestic Hot Water
DM Damper Motor
DTS Discharge Temperature Switch
EED Electronic Expansion Valve
EHC Electronic Heat Contactor
ES End Switch
ETC Electronic Temperature Control
FWT Entering Water Temp Sensor
FSR Fan Speed Relay
FSS Fan Speed Switch
HP High Pressure Switch
HPWS High Pressure Water Switch
HR Heating Relay
JW Jumper Wire
LAT Leaving Air Temperature
LOR Lock Out Relay
LP Low Pressure Switch
LT1 Sensor, low temp protection, water coil
LT2 Sensor, low temp protection, air coil
LWT Leaving Water Temp Sensor
MCO Manual Change Over
MOD Modulating Water Valve
MS Manual Starter
MSC Multi Splice Connector
MWV Motorized Water Valve
NLL Night Low Limit Switch
PDB Power Distribution Block
POT Potentiometer
P1 Field Wiring Terminal Block
PR Pump Relay
RAS Return Air Sensor
RVS Reversing Valve Solenoid
SAC Start Assist Capacitor
SAS Supply Air Sensor
TB Terminal Block
TRANS Transformer
UMT Unit Mounted Thermostat
VFD Variable Frequency Drive
VSP Variable Speed Pump
WSTAT Water Stat

NOTES:

- Compressor and Blower Motor thermally protected internally.
- All wiring to the unit must comply with NEC and local codes low voltage wiring shall be Class 2 or equivalent.
- Transformer wiring is voltage sensitive. Use layout corresponding to the unit voltage.
- LT1 provides low temperature protection for WATER. When using ANTI-FREEZE solutions, cut JW3 jumper.
- Typical heat pump thermostat wiring shown. Refer to thermostat IOM for wiring to the unit. T-Stat wiring must be "Class 1" and voltage rating equal to or greater than unit supply voltage.
- 24V Alarm signal shown. For Dry Alarm contact between AL1 & AL2, cut JW1 for CXM/DXM Gen2 or JW4 DXM.
- Transformer Secondary Ground via control board standoffs and/or Common to Control Box.

ECM1. For ECM Blower Motor air flow adjustment and diagnostic information refer to I.O.M.
LON1. Refer to LON, OR TSTAT Installation, Application, and Operation Manual for control wiring to the unit.
LON2. Optional LON wires. Only connect if LON connection is desired at the wall sensor.
LON6. Factory cut JW1 jumper. Dry Contact will be available between AL1 and AL2
SAC3. Use Start Assist Capacitor only on unit size 015-018.

OPTIONAL IONIZATION AIR PURIFIER

IAP ALARM RED MSC2(1) RED MSC2(2) RED (BLOWER HOUSING) IAP BLK MSC2(3) MSC2(4)

DIGITAL WALL SENSOR SEE NOTE 5 ASW03

SENSOR SUPPLY AIR TEMP **SENSOR-LEAVING WATER TEMP**

LON CONTROLLER SEE NOTE LON1

U1 COM U2 COM COM DI1 S-LK S-LK LON LON

24H BRN 24G BRN GND BRN C1 RED C2 YEL C3 BLU C4 RED N01 YEL N02 RED N03 GRY N04 RED

MSC3(1) MSC3(2)

SEE NOTE LON2

LONWORKS **PROTOCOL**

REFER TO DATA PLATE POWER SUPPLY USE COPPER CONDUCTORS ONLY. SEE NOTE 2

OPTIONAL DISCONNECT

G/Y G G/TI RED LI T1 BLK

SEE NOTE 3 TRANS 208/230

24V 0V 208V 230V

T-STAT ATC32U01* SEE NOTE 5

C B- A+ R

K1 RELAY **K2 RELAY**

COM NC COM NC

TEST

DXM2 MICROPROCESSOR CONTROL LOGIC

ALARM RELAY SEE NOTE LON6 AL2 DRY

JW3 LT1 SEE NOTE 4

DIP SWITCH PACKAGE

OFF ON

1 COMM:SLAVE/MASTER 2 HWG:NORM/TEST 3 HWG SP:125/150 4 HWG:DISABLE/ENABLE

UPS: DISABLE/ENABLE UNIT STAGE: 2/I

T' STAT: HEAT COOL/HEAT PUMP RV ON B/RV ON O DEHUMID/NORMAL NOT USED BOILERLESS: ENABLE/DISABLE BOILERLESS: 40°F/50°F

ACC1 FUNCTIONS **ACC2 FUNCTIONS**

H: HI FAN/DEHUMID NOT USED

DIP SWITCH PACKAGE **P13** **P14**

REFER TO 99D2006N01 OR I.O.M FOR DIP SWITCH SETTINGS

P8 12V DC IN OUT GND NC

P9 HP LOC LT1 LT2 RV CO12

P6 24V DC EHI EH2 CCG CC

P7 HP LP LT1 LT2 RV CO

P10 TI T2 T3 T4 T5 T6

P11 AO-1 GND AO-2 GND

P12 EVT LWT LAT CDT

COMPRESSOR BLU S RED R

See Note SAC3 **SAC** CAP

SEE NOTE ECM1 **BM** G/Y RED BLK RED YEL WHT GRN

SEE NOTE 3 265/277V Trans

L1 BLK L2 BLK C 0V YEL R

SAC 015-018 ONLY See Note SAC3

CONTROL BOX LAYOUT

DISC* CAP TRANS EC *GRN L2 LI

DXM2 **LON**