

TITLE: H/V/D 460/60/3 DXM2 LON PSC. CWR COMMERCIAL

PCN: 21-0026 **DATE:** 3/30/21

DRAWING NO. 96B0313NI2 REV G

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
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
EEV Electronic Expansion Valve
EHC Electronic Heat Contactor
ES End Switch
ETC Electronic Temperature Control
EWT 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
PI 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 CXM/DXM board standoffs and screws to Control Box.

BM6. Blower Motor is wired for Condenser water Reheat option with stage 1 Blower set on HIGH and stage 2 Blower set on LOW. For any other combination of speeds, at the motor attach BLK wire to the higher of the two desired speed taps and the blue wire to the lower of the two desired speed taps.

HUM1. Refer to HUMIDISTAT Installation application, and Operation Manual For Control Wiring to the unit.

HWG3. WSTAT is supplied with unit and must be wired in series with the hot leg to the pump. WSTAT is rated for voltage up to 277V.

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.

WHT3. In case of two white wires on the actuator, use white color wire labeled as 3-THREE.

The main wiring diagram illustrates the electrical connections for the DXM2 Microprocessor Control Logic. It shows power input from a transformer (24V/0V) through a circuit breaker (CB). The control board has multiple terminals for sensors (Y1-Y2, WI, O/W2, G, R, C, ALI), relays (P2-P3), and actuators (ACC1, ACC2, COM, NC1, NC2). It also includes connections for a digital wall sensor (ASW03), a humidistat (HUM1), and various safety switches (LP, LT1, LT2). A detailed section on the right shows the blower motor (BM) wiring with its capacitor (BMC) and relay (BR). The diagram also depicts the internal pump wiring and the optional disconnect switch. A separate section shows the connection to a digital wall sensor (ASW03) for air and water temperature sensing. The bottom right corner features a photograph of the physical control box with labels for components like PDB, TRANS, PR, and LON.

Control Box Layout