

TITLE:TE COMM, G/E DXM2 + LON ISP

PCN20-0339DATE:9/9/20

DRAWING NO.96B0242N06REV K

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

ACOAutomatic Change Over

ALAlarm Relay Contacts

ATSAir Temperature Sensor

BMBlower Motor

BMCBlower Motor Capacitor

BRBlower Relay

CAPCapacitor

CBCircuit Breaker

CCCompressor Contactor

CDTCompressor Discharge Temperature

COCondensate Overflow Sensor

CRCompressor Relay

CRCCompressor Run Capacitor

CSCurrent Sensor

DHWDomestic Hot Water

DMDamper Motor

DTSDischarge Temperature Switch

EEVElectronic Expansion Valve

EHElectronic Heat Contactor

ESEnd Switch

ETCElectronic Temperature Control

EWTEntering Water Temp Sensor

FSRFan Speed Relay

FSSFan Speed Switch

HPHigh Pressure Switch

HPWSHigh Pressure Water Switch

HRHeating Relay

JWJumper Wire

LATLeaving Air Temperature

LORLock Out Relay

LPLow Pressure Switch

LT1Sensor, low temp protection, water coil

LT2Sensor, low temp protection, air coil

LWTLeaving Water Temp Sensor

MCOManual Change Over

MODModulating Water Valve

MSManual Starter

MSCMulti Splice Connector

MWVMotorized Water Valve

NLLNight Low Limit Switch

PDBPower Distribution Block

POTPotentiometer

P1Field Wiring Terminal Block

PRPump Relay

RASReturn Air Sensor

RVSReversing Valve Solenoid

SACStart Assist Capacitor

SASSupply Air Sensor

TBTerminal Block

TRANSTransformer

UMTUnit Mounted Thermostat

VFDVariable Frequency Drive

VSPVariable Speed Pump

WSTATWater Stat

NOTES:

1. Compressor and Blower Motor thermally protected internally.

2. All wiring to the unit must comply with NEC and local codes low voltage wiring shall be Class 2 or equivalent.

3. Transformer wiring is voltage sensitive. Use layout corresponding to the unit voltage.

4. LT1 provides low temperature protection for WATER. When using ANTI-FREEZE solutions, cut JW3 jumper.

5. 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.

6. 24V Alarm signal shown. For Dry Alarm contact between AL1 & AL2, cut JW1 for CXM/DXM Gen2 or JW4 DXM.

7. Transformer Secondary Ground via CXM/DXM board standoffs and screws to Control Box.

ECM1. For ECM Blower Motor air flow adjustment and diagnostic information refer to IOM.

HWG3. WATER STAT is supplied with unit and must be wired in series with the hot leg to the pump. Aqua stat 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.

PMP1. For Variable Speed pump control and diagnostic information refer to unit IOM.

PMP2. For Variable Speed pump option, place jumper on PWM pins.

The diagram illustrates the electrical connections for the TE COMM, G/E DXM2 + LON ISP control unit. It features a central DXM2 Microprocessor Control Logic board with multiple terminal blocks (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10) and internal components like relays (K1, K2), switches (S1, S2, S3), and a test button. Key components and their connections include:

- IAP Alarm:** IAP ALARM (RED) and IAP (RED, ORG) are connected to terminal block TB. IAP is connected to MSC2(1), MSC2(2), and MSC2(4). MSC2(1) and MSC2(2) are connected to the IAP ALARM. MSC2(4) is connected to the IAP.
- T-STAT:** T-STAT ATC32U01* is connected to terminals C, B-, A+, and R. B- is connected to terminal P1. A+ is connected to terminal P2. R is connected to terminal P3. C is connected to terminal P4.
- Transformer:** A 208/230V TRANSFORMER is shown with terminals 240V, 208V, 0V, and COM. 240V is connected to terminal P1. 208V is connected to terminal P2. 0V is connected to terminal P3. COM is connected to terminal P4.
- Blower Motor (BM):** The blower motor is connected to terminals P1, P2, and P3. P1 is connected to terminal P4. P2 is connected to terminal P5. P3 is connected to terminal P6.
- Compressor:** The compressor is connected to terminals P1, P2, and P3. P1 is connected to terminal P4. P2 is connected to terminal P5. P3 is connected to terminal P6.
- Sensors:** Various sensors are connected to terminal block P1, including HP (High Pressure), LP (Low Pressure), LT1 (Low Temp Protection, Water Coil), LT2 (Low Temp Protection, Air Coil), RV (Reversing Valve), and CO (Condensate Overflow).
- Wiring:** The diagram shows a complex network of wires connecting these components to the control unit. Wires are color-coded: RED, YEL, BLU, GRY, VIO, BRN, GND, and COM.

Additional components and connections shown include:

- Optional Ionization Air Purifier:** IAP ALARM (RED) and IAP (RED, ORG) are connected to terminal block TB. IAP is connected to MSC2(1), MSC2(2), and MSC2(4). MSC2(1) and MSC2(2) are connected to the IAP ALARM. MSC2(4) is connected to the IAP.
- Optional Internal Pump:** The pump is connected to terminals P1, P2, and P3. P1 is connected to terminal P4. P2 is connected to terminal P5. P3 is connected to terminal P6.
- Optional Disconnect:** A disconnect switch is shown with terminals G, T2, T1, L2, and L1. G is connected to terminal P1. T2 is connected to terminal P2. T1 is connected to terminal P3. L2 is connected to terminal P4. L1 is connected to terminal P5.
- Neutral on 265V System:** A note indicates that the neutral should be connected to the 265V system.
- Residential Hi-Voltage 1-Phase:** A diagram shows the connection for a residential hi-voltage 1-phase system.
- Commercial Hi-Voltage 1-Phase:** A diagram shows the connection for a commercial hi-voltage 1-phase system.
- Low Voltage DXM2/LON:** A diagram shows the connection for a low voltage DXM2/LON system.
- Control Box Layout:** A diagram shows the layout of the control box, including the DXM2 board, terminal blocks, and various components.

CONTROL BOX LAYOUT