

TITLE: RE096-144 F.H,N DXM2

PCN 21-0335

DATE: 7/8/21

DRAWING NO. 96B028IN02

REV J

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

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

AL Alarm Relay Contacts

BM Blower Motor

BMC Blower Motor Capacitor

BR Blower Relay

CAP Capacitor

CB Circuit Breaker

CC Compressor Contactor

CO Condensate Overflow Sensor

CR Compressor Relay

CTB Common Terminal Block

CS Current Sensor

DHW Domestic Hot Water

DM Damper Motor

DTS Discharge Temperature Switch

ES End Switch

EWTS Entering Water Temp Sensor

FP1 Sensor, low temp protection, water coil

FP2 Sensor, low temp protection, air coil

FSS Fan Speed Switch

HP High Pressure Switch

HPWS High Pressure Water Switch

HR Heating Relay

IAP Ionization Air Purifier

JW Jumper Wire

LAT Leaving Air Temperature

LOC Loss of Charge Pressure Switch

LOR Lock Out Relay

LP Low Pressure Switch

LT1 Sensor, low temp protection, water coil

LT2 Sensor, low temp protection, air coil

LWTS Leaving Water Temp Sensor

MOD Modulating Water Valve

MS Manual Starter

MSC Multi Splice Connector

MVV Motorized Water Valve

PB Power Terminal Block

PDB Power Distribution Block

POT Potentiometer

P1 Field Wiring Terminal Block

RAS Return Air Sensor

RVS Reversing Valve Solenoid

SAC Start Assist Capacitor

TB Terminal Block

TPS Thermal Protection Switch

TRANS Transformer

TS Terminal Strip

UMT Unit Mounted Thermostat

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.

DXM1. Suffix 1 designates association with Lead compressor, Suffix 2 with Lag compressor. EXCEPTION AL1, AL2, FP1, FP2 ARE PER LEGEND.

ECO1. For field installed ECONOMIZER OPTION, remove provided 9 pin male jumper plug and connect to Economizer Harness.

MOA1. For Motorized Outside Air option the standard jumper plug will be replaced with the MO option plug depicted.

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

**460V Trans**  
BLK 460/480  
230/240  
COM 208  
24V  
SEE NOTE 3

**575V Trans**  
BLK 575  
COM 24V  
SEE NOTE 3

**CONTROL BOX LAYOUT**  
\* LAYOUT w/OVERLOAD

**MO OPTION**  
O.A. MOTOR  
GRY  
BRN  
YEL  
BLU  
YEL  
9-PIN PLUG  
SEE NOTE MOA1

**115V / 1PH FIELD WIRING**  
WHT  
GRN  
BLK  
\* GFI

**OPTIONAL IONIZATION AIR PURIFIER**  
IAP ALARM R RED  
IAP ALARM R RED  
TB  
MSC2(2)  
MSC2(3)  
MSC2(4)  
GFU-5.2-1A  
FUSE

**9-PIN PLUG**  
GRY BC  
BRN C COMMON  
RED R 24V  
BRN U/K  
YEL Y1 OUTPUT  
BLU Y2 OUTPUT  
ORG RVS  
BLU Y2 INPUT  
YEL Y1 INPUT  
SEE NOTE ECO1 & MOA1

**TYPICAL HEAT PUMP T-STAT**  
SEE NOTE 5

**DXM2 MICROPROCESSOR CONTROL LOGIC**  
P1  
Y1 1  
Y2 2  
3  
G/W2 4  
G 5  
R 6  
C 7  
AL1 8  
P2  
AL2 R  
NSB  
C  
ESD  
OVR  
H  
A  
P3  
R  
NO1  
NC1  
COM  
NO2  
NC2  
COM  
R  
CCH  
COM  
P4  
GND  
A  
24V  
P5  
K1 RELAY  
COM  
NO  
K2 RELAY  
NC  
COM  
NO  
P8  
24V DC  
IN  
OUT  
GND  
NC  
HP1  
2  
RED  
RED  
LOC 4  
BLU  
LT1 5  
GRY  
LT2 6  
VIO  
VIO  
RV 7  
BRN  
ORG  
EH1  
EH2  
P6  
CCG  
BRN  
CCI  
YEL  
CC  
P9  
GND  
A0-1  
A0-2  
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