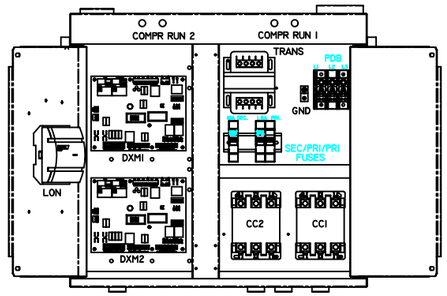
| TITLE: | PCN: | DATE: | DRAWING NO: | REV: |
|---|---|---|---|---|
| W/W SIZE-340 208-230/60/3 460/60/3 575/60/3 380-420/50/3 DXM & LON | 14-0064 | 2/10/14 | 96B0277N11 | A |




REFER TO DATA PLATE POWER SUPPLY USE COPPER CONDUCTORS ONLY.

EQUIP. GRND

DISC T3 T2 T1 L3 L2 L1

FIELD WIRING WHEN DISCONNECT OPTION IS NOT PRESENT

RED BLU BLK

POWER DISTRIBUTION BLOCK L1 L2 L3

460,575,380-420V TRANS SEE NOTE 3

BLK L1 BLK CB YEL

BRN L2 420V 24V

BLK BLU

TRANS PRIMARY LEAD COLORS (SEE CHART)

YEL

BLU

BLK BLU RED BLK BLU RED

CC2 L1 L2 L3 T1 T2 T3 COMP 1

CC1 L1 L2 L3 T1 T2 T3 COMP 2

SENSOR-LEAVING LOAD WATER TEMPERATURE BRN BRN

SENSOR-LEAVING SOURCE WATER TEMPERATURE BRN BRN

SEE NOTE 9

LON CONTROLLER

UI1 COM UI2 COM DI1 S-LK S-LK LON LON

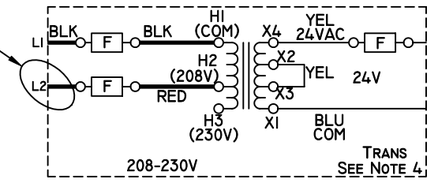
R Y G STATUS LED

24H 24G GND C1 NO1 C2 NO2 C3 NO3 C4 NO4

RED BRN RED RED RED RED

LONWORKS PROTOCOL

TRANS PRIMARY WIRE COLORS (SEE CHART)




| PRIMARY LEAD COLOR | PRIMARY VOLTAGE |
|---|---|
| RED | 208 |
| ORG | 230 |
| VIO | 380 |
| BRN | 420 |
| BLK/RED | 460 |
| GRY | 575 |

## LEGEND

- FACTORY LINE VOLTAGE WIRING
- FACTORY LOW VOLTAGE WIRING
- FIELD LINE VOLTAGE WIRING
- FIELD LOW VOLTAGE WIRING
- PRINTED CIRCUIT TRACE
- OPTIONAL WIRING
- RELAY CONTACTOR COIL
- SOLENOID COIL
- THERMISTOR
- GROUND
- INDICATOR LIGHT G=GREEN, R=RED (COMP ON) (ALARM LIGHT)
- WIRE NUT
- MATE-N-LOCK
- CIRCUIT BREAKER
- HIGH PRESSURE SWITCH
- LOW PRESSURE SWITCH
- TEMPERATURE SWITCH
- POSITIVE TEMPERATURE COEFFICIENT RELAY
- FUSE
- SPLICE CAP

| | |
|---|---|
| AL | ALARM RELAY CONTACTS |
| CB | CIRCUIT BREAKER |
| CC | COMPRESSOR CONTACTOR |
| DISC | UNIT DISCONNECT |
| FPI | SENSOR, SOURCE LOW TEMP. PROTECTION |
| FP2 | SENSOR, LOAD LOW TEMP. PROTECTION |
| HP | HIGH PRESSURE SWITCH |
| LOC | LOSS OF CHARGE PRESSURE SWITCH |
| JW4 | JUMPER WIRE FOR ALARM |
| PI | FIELD WIRING TERMINAL BLOCK |
| PDB | POWER DISTRIBUTION BLOCK |
| RVS | REVERSING VALVE SOLENOID |
| TRANS | TRANSFORMER |
| * | OPTIONAL |

NOTES:

1. COMPRESSOR MOTOR THERMALLY PROTECTED INTERNALLY.
2. ALL WIRING TO THE UNIT MUST COMPLY WITH NEC AND LOCAL CODES.
3. POWER SUPLY: 460V,575V, & 380-420V - TRANS IS FACTORY WIRED FOR 460V,575V & 380V POWER SUPPLY WITH WIRE LEAD COLORS AS SHOWN IN THE CHART. FOR 380-420V UNITS WITH 420V POWER SUPPLY DISCONNECT VIO TRANS LEAD AT L1 AND CONNECT BRN LEAD IN PLACE OF IT. THE TRANSFORMER IS 75VA AND IS PROTECTED WITH A CIRCUIT BREAKER IN THE SECONDARY CIRCUIT.
4. POWER SUPLY: 208-230V - TRANS IS FACTORY WIRED FOR 208V POWER SUPPLY. FOR 230V POWER SUPPLY, DISCONNECT RED LEAD AT H2 AND RECONNECT IT AT H3. THE TRANSFORMER IS 150VA AND IS PROTECTED WITH PRIMARY & SECONDARY FUSES.
5. FPI THERMISTOR PROVIDES LOW TEMP PROTECTION FOR SOURCE WATER. WHEN USING ANTI-FREEZE SOLUTIONS, CUT JW3 JUMPER.
6. FACTORY CUT JW4 JUMPER. DRY CONTACT WILL BE AVAILABLE BETWEEN AL1 & AL2.
7. TRANSFORMER SECONDARY GROUND VIA GRN/YEL WIRE FROM BOARD C TO TO CONTROL BOX.
8. SUFFIX 1 DESIGNATES ASSOCIATION WITH LEAD COMPRESSOR, SUFFIX 2 WITH LAG COMPRESSOR. EXCEPTION AL1, AL2, FP1, FP2 ARE PER LEGEND.
9. REFER TO MPC, LON, OR TSTAT INSTALLATION, APPLICATION, AND OPERATION MANUAL FOR CONTROL WIRING TO THE UNIT. LOW VOLTAGE WIRING MUST BE "CLASS 1" AND VOLTAGE RATED EQUAL OR GREATER THAN UNIT SUPPLY VOLTAGE.

G/Y NOTE 7

BRN RED YEL BLU ORG GRY VIO VIO

RED BRN VIO

P1 Y1 1, Y2 2, W1 3, O/W2 4, G 5, R 6, C 7, AL1 8

R C S COM2 S C COM1

FAN ENABLE RELAY COM NO

COM FAN SPEED RELAY NO NC

SEE NOTE 6 AL2 DRY

DXM MICROPROCESSOR CONTROL LOGIC

ALARM RELAY JW4 AL2 DRY

P2 AL2 R NSB C ESD OVR H A

STATUS TEST FAULT RV RELAY

TEST PINS

P3 R NO1 NC1 COM NO2 NC2 COM R

ACC1 RELAY ACC2 RELAY

JW3 FP1 LOW SEE NOTE 5

JW2 FP2 LOW

JW1 LP N.O.

HP 1 LOC 3 FPI 5 FP2 7 RV 9 CO 12

RED HP 1 RED BLU LOC 1 BRN GRY SEE NOTE 5 FPI GRY VIO FP2 VIO BRN RVS 1 ORG

P7 24V DC EH1 EH2

P6 CCG COMPR RELAY CC

BRN YEL CC1 YEL G BRN GRN COMP 1 RUN

OFF ON

1 UPS: DISABLE/ENABLE
2 UNIT STAGE: 2/1
3 T'STAT: HEAT COOL/HEAT PUMP
4 RV ON B/RV ON O
5 DEHUMID/NORMAL
6 DDC OUTPUT:DDC/NORMAL
7 BOILERLESS: ENABLE/DISABLE
8 BOILERLESS: 40°F/50°F

S1 DIP SWITCH PACKAGE

DXM 1 SEE NOTE 8

ACC1 FUNCTIONS
ACC2 FUNCTIONS
H: HI FAN/DEHUMID NOT USED

S2 DIP SWITCH PACKAGE

DXM MICROPROCESSOR CONTROL LOGIC

DXM 2 SEE NOTE 8

BLU CC2 BLU G BRN GRN COMP 2 RUN