

TITLE: TRC I15/60/I, 208-230/60/I, 265/60/I, DXM REM-MOUNTED ACO

PCN: 22-0446

DATE: 11/9/22

DRAWING NO. 96B0415N02

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
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 CXM/DXM board standoffs and screws to Control Box.

BM9. Fan Speed Switch is Factory wired to the MED & LOW blower motor taps. HI speed (BLK) wire is wire tied to the LOW & MED wires. For LOW/HI or MED/HI motor speed swap wires at switch as required.

NEUTRAL ON 265 V SYSTEM

Refer to Data Plate Power Supply Use copper conductors only. SEE NOTE 2.

Refer to Disconnect box for optional power supply connection

208/240V SEE NOTE 3.

24V 240V 208V BLK 0V COM BLK

YEL CB 24V 240V 208V BLK 0V COM BLK

BLU

SEE NOTE 7.

G/Y

Compressor

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

P1

AL2 R
NSB
C
ESD
OVR
H
A

P2

Typical Heat Pump T-stat SEE NOTE 5

NLL OPTION

RED

WHT

TEST PINS

JW3 FP1 Low
JW2 FP2 Low
JW1 LP N.O.

SEE NOTE 6
AL2 DRY

STATUS TEST G
FAULT R

DXM Microprocessor Control Logic

HP 1 RED HP
2 RED
LP 3 BLU
4 BLU
LT1 5 GRY
6 GRY
LT2 7 VIO
8 VIO
RV 9 BRN
10 ORG
CO 11 YEL
12 YEL

P7

24V DC
EH1
EH2

P6

CCG BRN 1
CC YEL 0

P3

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

ACC1 RELAY
ACC2 RELAY

OFF ON

1 ACC1 Functions
2
3
4 ACC2 Functions
5
6
7 H: hi fan/dehumid
8 FP1/FP2 Faults: 3/1

S2 DIP SWITCH PACKAGE

SEE I.O.M. FOR DIP SWITCH DEFINITIONS.

Control Box Layout

COMPRESSOR CAPACITOR
START ASSIST CAPACITOR
DXM
POWER DISTRIBUTION BLOCK
GROUND
TRANSFORMER
COMPRESSOR RELAY

LOW FAN DEFAULT POSITION

BLK TO BM (HIGH)
RED TO FAN SPEED RELAY (NC)
RED TO BM (LOW)

FSS LOCATED IN COMPRESSOR SECTION SEE NOTE BM9.

***CORD CONNECTION OPTION**

(RIBBED/WHT)
(GRN)
(PLAIN/BLK)

***DAMPER MOTOR OPTION**

MSC2(1)
MSC2(2)
DM
DXM (C)

***PUMP OPTION**

BLU
YEL
PUMP

***FIELD INSTALLED TIME CLOCK OPTION**

TIME CLOCK
CLOSED=UNOCCUPIED

DXM P2
AL2
R
NSB
C
ESD
OVR
H
A