

TITLE:TRC REV# I15/60/I, 208-230/60/I, 265/60/I, CXM UNIT-MOUNTED AVB32V02 S-4758

PCN21-0436

DATE:9/1/21

DRAWING NO.96B0414N10

REV D

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

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.

NEUTRAL ON 265 V SYSTEM

Refer to Data Plate
Power Supply

Use copper
conductors only.
SEE NOTE 2

YEL

RED

BLK

BLK

BLK

BLK

T2

PDB

T1

L2

T2

RED

CR

L1

T1

BLK

BLK

SAC

BLK

CAP

BLU

S

RED

R

COMPR

YEL

YEL or WHT

BLK

BLK

BLK

NO2

COM2

BR 2

BLK

NC2

COM BR 1

NO

BM

BRN

BMC

RED

RED

YEL

CB

24V

BLK 230V

0V

BLK 208V

BLK COM

TRANSFORMER
SEE NOTE 3.

RED

RED

YEL

CB

24V

BLK 115V

0V

BLK COM

TRANSFORMER
SEE NOTE 3.

RED

RED

YEL

CB

24V

BLK 265V

0V

BLK COM

TRANSFORMER
SEE NOTE 3.

AVB32V02
T-STAT

D/H

RAS

RS

R

C

Y1

W

O

Y2

CK

YEL

ORG

GRY

RED

BRN

VIO

Y

W

O

G

R

C

AL1

AL2

A

P1

HP

2

RED

RED

LP

3

BLU

BLU

FP1

4

GRY

LT1

5

GRY

FP2

6

VIO

LT2

7

VIO

RV

8

BRN

RVS

9

ORG

CO 12

YEL

CO

10

24V

DC

EH1

EH2

P3

COO

Test Pins

SEE NOTE 4

JW3

FP1

JW2

FP2

Dip Switch

UPS: DISABLED/ENABLED

STAGE2: 2/1

NOT USED

DDC OUTPUT: DDC/NORMAL

FP 1/FP 2 FAULTS: 3/1

Off On

Status LED

CXM
Microprocessor
Control Logic

SEE NOTE 6

Alarm Relay

SEE NOTE 7.

BR1

LOW

BRN

CCG

CC

YEL

GRY

BR

BRG

Control Box Layout

COMPRESSOR
CAPACITOR

START
ASSIST
CAPACITOR

BLOWER RELAY 2
(HIGH)

CXM

POWER
DISTRIBUTION
BLOCK

GROUND

TRANSFORMER

COMPRESSOR
RELAY

BLOWER RELAY 1
(LOW)

BLOWER
CAPACITOR

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
EWI	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