WIRE COLOR DESIGNATION			
ABBR	COLOR	ABBR	COLOR
BK	BLACK	PR	PURPLE
BL	BLUE	RD	RED
BR	BROWN	WH	WHITE
GR	GREEN	YL	YELLOW
OR	ORANGE	TN	TAN

NOTES:

1. ALL WIRING AND DEVICES SHOWN DASHED TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES.
2. IF ANY OF THE ORIGINAL WIRE, AS SUPPLIED WITH THIS UNIT, MUST BE REPLACED, REPLACE IT WITH APPLIANCE WIRING MATERIAL RATED AT 105°C.
3. THREE PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS. ALL MOTORS HAVE INTERNAL OVERLOAD PROTECTION. COMPRESSORS HAVE INTERNAL THERMAL PROTECTION.

<4> CONNECTIONS SHOWN ARE FOR 460V/60HZ/3PH OR 380V/50HZ/3PH. WHEN 575V/60HZ/3PH OR 415V/50HZ/3PH OPERATION IS REQUIRED. REMOVE WIRES 12B.C(BL) FROM H2 TERMINAL ON TNS2 AND CONNECT TO H3 TERMINAL ON TNS2.

<5> CONNECTIONS SHOWN ARE FOR 460V/60HZ/3PH. WHEN 575V/60HZ/3PH OR 380-415/50HZ/3PH OPERATION IS REQUIRED. REMOVE WIRE 12C(BL) FROM 460V TERMINAL ON TNS1 AND CONNECT TO 400V/575V TERMINAL ON TNS1.

<7> WHEN COMM INTERFACE IS INSTALLED. CONNECT CABLE FROM COMM J1 TO RTRM J4. SEE COMM INTERFACE LITERATURE FOR SWITCH SETTINGS. SEE ALSO INSET D.

<11> REQUIRED FOR OPTIONAL REFERENCE ENTHALPY CONTROL.

<12> REQUIRED FOR OPTIONAL COMPARATIVE ENTHALPY CONTROL.

<13> OPTIONAL MAS, RAS, RHS, OHS AND ASSOCIATED WIRING NOT USED WITH MOTORIZED OUTSIDE AIR.

<14> CONNECT PPF-5 TO COMM IF PRESENT.OTHERWISE CONNECT TO RTRM.

<15> REQUIRED FOR CO2 OR VENTILATION OVERRIDE ACCESSORY.

<18> TO DISABLE COMPRESSORS. REMOVE JUMPER AND CONNECT FIELD SUPPLIED CONTROL DEVICE.

<19> TO SHUT DOWN THE UNIT FOR EMERGENCY STOP. REMOVE JUMPER AND INSTALL FIELD SUPPLIED DEVICE.

<21> TERMINALS MAY NOT BE PRESENT.

<22> SEE INSET T FOR DEHUMIDIFICATION HOOKUP.

<24> 3 STAGE COOLING CONFIG WIRE. CONNECT WIRES 36BY AND 36BZ TO ENABLE 3 STAGE COOLING ONLY ON HIGH EFFICIENCY SHORT ORIFICE UNITS

⚠ WARNING

HAZARDOUS VOLTAGE!

DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS AND FOLLOW LOCK OUT AND TAG PROCEDURES BEFORE SERVICING. INSURE THAT ALL MOTOR CAPACITORS HAVE DISCHARGED STORED VOLTAGE. UNITS WITH VARIABLE SPEED DRIVE, REFER TO DRIVE INSTRUCTIONS FOR CAPACITOR DISCHARGE.

FAILURE TO DO THE ABOVE BEFORE SERVICING COULD RESULT IN DEATH OR SERIOUS INJURY.

⚠ AVERTISSEMENT

TENSION DANGEREUSE!

COUPER TOUTES LES TENSIONS ET OUVRIR LES SECTIONNEURS À DISTANCE. PUIS SUIVRE LES PROCÉDURES DE VERROUILLAGE ET DES ÉTIQUETTES AVANT TOUTE INTERVENTION. VÉRIFIER QUE TOUS LES CONDENSATEURS DES MOTEURS SONT DÉCHARGÉS. DANS LE CAS D'UNITÉS COMPORTANT DES ENTRAÎNEMENTS À VITESSE VARIABLE, SE REPORTER AUX INSTRUCTIONS DE L'ENTRAÎNEMENT POUR DÉCHARGER LES CONDENSATEURS.

NE PAS RESPECTER CES MESURES DE PRÉCAUTION PEUT ENTRAÎNER DES BLESSURES GRAVES POUVANT ÊTRE MORTELLES.

⚠ ADVERTENCIA

¡VOLTAJE PELIGROSO!

DESCONECTE TODA LA ENERGÍA ELÉCTRICA, INCLUSO LAS DESCONEXIONES REMOTAS Y SIGA LOS PROCEDIMIENTOS DE CIERRE Y ETIQUETADO ANTES DE PROCEDER AL SERVICIO. ASEGÚRESE DE QUE TODOS LOS CAPACITORES DEL MOTOR HAYAN DESCARGADO EL VOLTAJE ALMACENADO. PARA LAS UNIDADES CON EJE DE DIRECCIÓN DE VELOCIDAD VARIABLE, CONSULTE LAS INSTRUCCIONES PARA LA DESCARGA DEL CONDENSADOR.

EL NO REALIZAR LO ANTERIORMENTE INDICADO, PODRÍA OCASIONAR LA MUERTE O SERIAS LESIONES PERSONALES.

CAUTION

USE COPPER CONDUCTORS ONLY!

UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.

FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.

PRECAUCIÓN

N'UTILISER QUE DES CONDUCTEURS EN CUIVRE!

LES BORNES DE L'UNITÉ NE SONT PAS CONÇUES POUR RECEVOIR D'AUTRES TYPES DE CONDUCTEURS.

L'UTILISATION DE TOUT AUTRE CONDUCTEUR PEUT ENDOMMAGER L'ÉQUIPEMENT.

ATTENTION

¡UTILICE ÚNICAMENTE CONDUCTORES DE COBRE!

LAS TERMINALES DE LA UNIDAD NO ESTÁN DISEÑADAS PARA ACEPTAR OTROS TIPOS DE CONDUCTORES.

SI NO LO HACE, PUEDE OCASIONAR DAÑO AL EQUIPO.

IMPORTANT!

DO NOT ENERGIZE UNIT UNTIL CHECK-OUT AND START-UP PROCEDURE HAS BEEN COMPLETED.

TRANE THIS DRAWING IS PROPRIETARY AND SHALL NOT BE COPIED OR ITS CONTENTS DISCLOSED TO OUTSIDE PARTIES WITHOUT THE CONSENT OF TRANE.	FILE NUMBER: 2309_3377	DRAWING NUMBER: 2313_0336	SHEET: 1 OF 1 / REV: A
DRAWN BY: A.MCCLURE	TRANE® DATE: 07/14/10	DIAGRAM CONNECTION ELECTRICAL COOLING/GAS HEAT 400-575V YC 241E	
REPLACES:	REVISION DATE:		
CAD SYSTEM USED:	SIMILAR TO: 2313_0034		

WIRING TO FTB, ECONOMIZER, FFS, CFS, DTS & TC01

TNS2 <4> — W13(RD) 12B.C(BL) H1 H2 H3 — X2 X1 Y2 Y1 — 14G(WH) 14F(GR) — 13C(BK) — W14(RD) W34(PR) 14C(GR) — 14F(GR) 14C(GR)

IGN — J1 PPF3 — S1 S2 L2 L1 HI/SINGLE LO CBM L1 — 42D(BR) 68A(YL) 83A(BR) 81A(BK) 82A(BK) 16F(RD) 17F(RD) 14G(WH) 13C(BK) 112A(BR) 109A(RD) 107A(RD)

SPLICE — W14(RD) — 107A(RD) 107B(RD) 249A(BK) 248A(BK) 104A(BL) 103A(PR) BLACK BLACK 127A(BK)

86A(YL) FROM HPC2 RED — RED — FROM TDL2 — 90A(YL) RED FROM HPC2

P8 J8 P4 J4 J9 J10 J3 P13 — BLACK BLACK — TB1 TB2

J2 RTOM — 124A(BK) 125A(BK) 126A(BK) — J6 P6

84A(YL) FROM HPC1 BLACK — BLACK — FROM TDL1 — 87A(YL) BLACK FROM HPC1

J1 P11 — PPM8 PPF8 — W63(BK) W64(BK) W65(BL) W66(RD) — 101A(PR) 102A(RD) 105A(PR) 106A(RD) 58J(PR) 100A(RD) — J5 P15 J7 P7 — 175A(BK) BLACK FROM RHV

WIRING TO CPR1, CPR2
WIRING FROM LPC1, LPC2, RHV
WIRING FROM CCH1 & CCH2

36BD(BL) — TIOR — 190A ORANGE — 87D(YL) — 135A(PR)

WIRING TO IP, TCO2, AND GV
WIRING TO CFM
WIRING FROM HPC1 & HPC2
WIRING FROM TDL1 & TDL2

RTRM — J6 — J8 P8 — 50A(BL) 56A(PR) — J7 (R)(Y1)(W1/D)(G)(W2)(Y2)(X2)(C)(COM) — 179A(BK) 180A(BK) 188A(BK) 189A(BK) 181A(BK) 182A(BK) 183A(BK) 184A(BK) 185A(BK) 186A(BK) 187A(BK) — J1 P31 — 22

2A(BL) 1A(RD) L2 L1 F T2 T1 — 64A(BK) 64D(BK) — 36A.F .AS.W (BL) RED — 8A(BL) 9A(RD)

12J(BL) 2C(BL) 1D .E(RD) L3 L2 L1 CC2 T3 T2 T1 — 26C. W28(BK) 21A(BL) 22 A.B(RD) 90A(YL) 63A(YL)

W6 12J.B(BL) 2B(BL) 1B.C(RD) L3 L2 L1 CC1 T3 T2 T1 — 4C. W28(BK) 5A(BL) 10A.B(RD) 87A(YL) 61A(YL)

175A(BK) 176A(BK) 177A(BK) 64D(BK) — 174A(BK) 173A(BK) — 63A(YL) 36BY(BL) 117A(PR) 31C(RD) 86A(YL) 80A(YL) 36B(BL) — 81A(BK) 68A(YL) 82A(BK) 7 14

P32 J2 P3 J3 P5 J5 J4

FROM LPC1 — 37C(PR) BLUE — W8(PR) BLUE

FROM LPC2 — YELLOW 117A(PR) — YELLOW 118A(PR)

36BZ(BL) — 24 — 36BY(BL)

12C(BL) 6K.W13(RD) — 575V 400V 460V COM — TNS1 <5> — 24V — 36B.J.W.BZ(BL) 36V(GR) 31A.C.D .E(RD)

MARKED TERMINAL FOR 10MFD CAPACITORS ONLY — W5.6K .D(RD) 6C(PR) 7A(BR) — CF1

MARKED TERMINAL FOR 10MFD CAPACITORS ONLY — 6D(RD) 6E(PR) 11A(BR) — CF2

1A. 2A. 1B. 2B. 1D. 2C. 3A. 3B. 3D. — W5.(RD) W6.(BL) (BK) — HTB1

36V(GR) — EQUIPMENT GROUND — 112A.B(BK) 107B(RD) — CFR — 109A(RD) 110A.W34(PR) — 108A(RD) 113A(OR)

15A(BK) — 3 2 1 ODF1 — 36J.BX(BL) 80A(YL) — 26C(BK)

W38(RD) 136A(RD) 36BX(BLU) — Y-OUT Y C PHM L1 L2 L3 — 1P(RD) 2P(BLU) 3P(BK)

ODM2 — 6E(PR) 11A(BR) 15A(BK)

ODM1 — 6C(PR) 7A(BR) 4C(BK)

SHS * — A(BK) 249 19 — A(BK) 248 18 — -- 17 — -- 16 — -- 15 — -- 14 — -- 13 — -- 12

FTB — A — B 3 3A(BK) — C 8 8A(BL) — D 9 9A(RD) — 3C(BK) 8B(BL) 9B(RD)

A(RD) 136 6 — A.B(RD) 31 5 — A(PR) 118 4 — A(RD) 122 3 — W8(PR) 2 — B(RD) 31 1 — B(PR) 51 TEST 2 — E(BL) 52 TEST 1 — 19 18 18

LTB — 14 — W44(BL).121A(BRN) 13 — A(BK) 120 12 — A(BK) 127 11 — A(BK) 126 10 — A(BK) 125 9 — A(BK) 124 8 — 36F.W44(BL) 7 — A(RD) 122

HI HUMIDISTAT C — 31E(RD) TCO1 85A(BR) — 85A(BR) 1 TCO2 2 83A(BR)

FIRE PANEL

CO2 SENSOR — OUT (-)(~) GND (+)(~) 24V

IDM — 21 — L1 L2 L3 — 9B(RD) 8B(BL) 3C(BK)

SEE NAMEPLATE FOR LINE VOLTAGE AND MAX. FUSE SIZE — L1 L2 L3

OAS — BLACK SPLICE 50A(BL) — BLACK SPLICE 56A(PR)

J2 PPF5 — P21 J1 — COMM — TB1 TB2 — ON — 1 2 3 4 5 SW1

CUSTOMER CONNECTION

WIRING FROM ODM1 & OAS & ODM2

WIRING TO BMS

INSET A - ECONOMIZER/MOTORIZED OUTSIDE AIR OPTION

INSET M
WIRING FOR ECA WHEN OPTIONAL RTOM IS INSTALLED — RTOM — PPM6 J2 — W54(BK) W56(BL) W57(RD) W55(BK)

INSET P
WIRING FOR ECA W/O OPTIONAL RTOM — PPF8 PPM6 — W63(BK) W64(BK) W65(BL) W66(RD) — W54(BK) W55(BK) W56(BL) W57(RD)

INSET J — 11 12 — 13 — OHS (+) (-) — 140A(RD) 139A(PR)

INSET K — 12 — 13 — RHS (+) (-) — 138A(RD) 137A(PR)

13 — RAS — 142A(PR) 141A(PR)

13 — MAS — BLACK 98A(PR) — BLACK 96A(PR) — 97A(PR) — NOT USED WITH MOTORIZED OUTSIDE AIR

ECA — P24 J14 EXF — 2-10VDC FEEDBACK+ INPUT- J17 — 2-10VDC CONTROL+ OUTPUT- J18

98A(PR) 97A(PR) P23 J13 MAT

140A(RD) 139A(PR) P12 J12 OAH/OAE

P31 J11 OAT

141A(PR) 142A(PR) P10 J10 RAT

138A(RD) 137A(PR) P9 J9 RAH/RAE

120A(BK) 121A(BRN) P28 J8 DCV

J15 P25 P J16 P16 P1

J7 P17 — MBUS- MBUS+ TR1 24V COM TR 24V AC — W55(BK) W54(BK) W56(BL) W57(RD)

INSET T - REHEAT 14 POSITION PLUG — 22 — J1 P31 — P33 PPM26 PPM27 P1 — 179A(BK) 180A(BK) 188A(BK) 189A(BK) 181A(BK) 182A(BK) 183A(BK) 184A(BK) 185A(BK) 186A(BK) 187A(BK) — 31D(RD) 36A(BL) 37C(PR) 61A(YL) 84A(YL) 64A(BK) W38(RD) 51B(PR) 52E(BL)

ZONE SENSOR — 1 2 3 4 5 6 7 8 9 10

NEC CLASS 2

BMS

CPR2 — T1 T2 T3 — 22A(RD) 3D(BK) 21A(BL)

CPR1 — T1 T2 T3 — 10A(RD) 3B(BK) 5A(BL)

INSET S - DISCHARGE AIR SENSOR OPTION — DTS — BLACK 103A(PR) — BLACK 104A(BL)

TO F — BLACK RHV BLACK

1E(RD) 22B(RD) BLACK BLACK CCH2 GREEN

1C(RD) 10B(RD) BLACK BLACK CCH1 GREEN

INSET R- FROSTAT OPTION — FOS — 3 1 2 — 105A(PR) 106A(RD)

INSET B - PROGRAMMABLE ZONE SENSOR — RTRM J6-11 J6-12 J6-14 J6-7 J6-8 J6-9 J6-10 — PROGRAMMABLE ZONE SENSOR 11 12 14 7 8 9 10 — NEC CLASS 2

INSET N - WIRING FOR RTRM WHEN RTOM OR ECA IS INSTALLED W/O COMM BOARD — RTRM PPF5 J4 — W63(BK) W65(BL) W64(BK) W66(RD)

INSET D - WIRING FOR RTRM WHEN OPTIONAL COMM IS INSTALLED (SEE NOTE 7) — RTRM P14 J4 — 38A(BK) 40A(BL) 39A(BK) 41A(RD)

BLUE BLUE — LPC1 — YELLOW YELLOW — LPC2 — ORANGE ORANGE — LPC3

BLACK BLACK — HPC1 — RED RED — HPC2

BLACK BLACK — TDL1 — RED RED — TDL2

BROWN BROWN — CFM — GREEN/YELLOW — PURPLE RED ORANGE BLACK — PPM11 PPF11 — 110A(PR) 108A(RD) 113A(OR) 112B(BK)

INSET G-FAN FAILURE SWITCH OPTION FFS — CONN COM NOC — 102A(RD) 101A(PR)

INSET H-CLOGGED FILTER SWITCH OPTION CFS — CONN COM NOC — 100A(RD) 58J(PR)

PPF4 PPM4 — 16F(RD) 17F(RD) — TAN TAN — IP

150, 250, 350, AND 400 MBH HEAT EXCHANGERS. GV — TH TR — 42D(BR) 36AS(BL)