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.
23. WIRES W14, W34, 107A, 109A, 112A NOT USED WITH MODULATING GAS HEAT.
24. 3 STAGE COOLING CONFIG WIRE. CONNECT WIRES 36BY AND 36BZ TO ENABLE 3 STAGE COOLING ONLY ON HIGH EFFICIENCY SHORT ORIFICE UNITS

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

⚠ 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.

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_0342
DRAWN BY: A.MCCLURE	TRANE© DATE: 07/14/10	SHEET: 1 OF 1	REV A
REPLACES:	REVISION DATE:	DIAGRAM CONNECTION ELECTRICAL COOLING/MOD GAS HEAT 400-575V YC 151E, 181E	
CAD SYSTEM USED:	SIMILAR TO: 2313_0046		

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

TNS2 4 — W13(RD) 12B.C(BL) H1 H2 H3 — W14(RD) W34(PR) — 14G(WH) 14F(GR) X2 X1 Y2 Y1 — W67(RD) — 13C(BK) W68(BL) 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) 198A(BR) 197A(BR) 192A(BK) 112A(BR) 109A(RD) 107A(RD)

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

12J(BL) 2C(BL) 1D .E(RD) — L3 L2 L1 CC2 CC1 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 T3 T2 T1 — 4C. W28(BK) 5A(BL) 10A.B(RD) 87A(YL) 61A(YL)

37C(PR) BLUE; W8(PR) BLUE — FROM LPC1

FROM LPC2: YELLOW 117A(PR); YELLOW 118A(PR)

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

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

W14(RD) — SPLICE

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

90A(YL) 1E(RD) 22B(RD) — RED BLACK BLACK — FROM HPC2 — FROM CCH2

107A(RD) 107B(RD) 249A(BK) 248A(BK)

P8 J8 — P4 J4 — J9 — J10 — 104A(BL) 103A(PR) BLACK BLACK 127A(BK)

J3 P13 — BLACK BLACK 36CA(BL) — TB1 TB2

RTOM — J2

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

87A(YL) 1C(RD) 10B(RD) — BLACK BLACK — FROM HPC1 — FROM CCH1

J1 P11 — J5 P15 — J7 P7 — PPM8 PPF8 — 191A(BK) 196A(BR) — 101A(PR) 102A(RD) 58J(PR) 105A(PR) 100A(RD) 106A(RD)

J6 P6 — 15 — 124A(BK) 125A(BK) 126A(BK) — 175A(BK) — BLACK FROM RHV

RTRM — P32 P3 P5 J2 J3 J5 J4 — 7 14 — 22

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

J1 P31 — 179A(BK) 180A(BK) 188A(BK) 189A(BK) 181A(BK) 182A(BK) 183A(BK) 184A(BK) 185A(BK) 186A(BK) 187A(BK)

J8 P8 — 50A(BL) 56A(PR)

J6 — 1 2 3 4 5 6 7 8 9 10 11 12 13 14

J7 — (R) (Y1) (W1/D) (G) (W2) (Y2) (X2) (T) (COM) — 1 2 3 4 5 6 7 8 9

W65(BL) W64(BK) W63(BK) 40A(BL) — W66(RD) 41A(RD) 39A(BK) 38A(BK) — 14 7

PPF5 J2 — P21 J1 — COMM — TB1 TB2 — ON SW1

36BZ(BL) — 24 — 36BY(BL)

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

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

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)

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

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

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

ODM2 — 6E(PR) 11A(BR) 15A(BK)

ODM1 — 6C(PR) 7A(BR) 4C(BK)

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

HI HUMIDISTAT C — 31E(RD) TC01 85A(BR); 85A(BR) 1 TC02 2 83A(BR)

FIRE PANEL

CO2 SENSOR — OUT (-) GND (+) 24V

21 — IDM — 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)

TIOR — 3 2 1 — 36BD(BL) — 190A ORANGE — 87D(YL) — 135A(PR)

WIRING TO IP, TCO2, AND GV
WIRING TO CFM
WIRING FROM HPC1 & HPC2, CCH2
WIRING FROM CCH1 & CCH2
WIRING FROM TDL1 & TDL2

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

CUSTOMER CONNECTION

WIRING FROM ODM1 & OAS & ODM2

WIRING TO BMS

NEC CLASS 2

BMS

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

CPR1 — T1 10A(RD) T2 5A(BL) T3 3B(BK)

ZONE SENSOR — 1 2 3 4 5 6 7 8 9 10

LPC1 BLUE BLUE; LPC2 YELLOW YELLOW; LPC3 ORANGE ORANGE — HPC1 BLACK BLACK; HPC2 RED RED — TDL1 BLACK BLACK; TDL2 RED RED

CFM — BK RED WH — BK RD WH — SEE INSET C FOR CONNECTION TO GAS VALVE

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

CFMB — MTR LEAD CONN. BK RD WH — J10 + - — 1 2 3 — + - G — 191A(BK) 192A(BK) 199A(G/Y) W68(BL) W67(RD)

INSET A - ECONOMIZER/MOTORIZED OUTSIDE AIR OPTION

INSET M
WIRING FOR ECA WHEN OPTIONAL RTOM IS INSTALLED
RTOM PPM6 J2 — W54(BK) 1; W55(BK) 2; W56(BL) 3; W57(RD) 4

INSET P
WIRING FOR ECA W/O OPTIONAL RTOM
PPF8 PPM6 — W63(BK) 1; W64(BK) 2; W65(BL) 3; W66(RD) 4 — W54(BK) 1; W55(BK) 2; W56(BL) 3; W57(RD) 4

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

INSET K — 12 — 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 E_XF — 2-10VDC FEEDBACK+ INPUT- J17 — 97A(PR) P23 J13 MAT — 2-10VDC CONTROL+ OUTPUT- J18 — 98A(PR) — 139A(PR) P12 J12 OAH/OAE — 140A(RD) — P31 J11 OAT — 142A(PR) P10 J10 RAT — 141A(PR) — 137A(PR) P9 J9 RAH/RAE — 138A(RD) — 121A(BRN) P28 J8 DCV — 120A(BK) — 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 — 179A(BK) 180A(BK) 188A(BK) 189A(BK) 181A(BK) 182A(BK) 183A(BK) 184A(BK) 185A(BK) 186A(BK) 187A(BK)

P33 PPM26 PPM27 P1 — 31D(RD) 36A(BL) 37C(PR) 61A(YL) 84A(YL) W38(RD) 51B(PR) 52E(BL)

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

TO F — BLACK RHV BLACK

CCH2 BLACK BLACK GREEN

CCH1 BLACK BLACK GREEN

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

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

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

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) W64(BK) W65(BL) W66(RD)

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

INSET C — GVP CONN COM NC — GV TH TR — 195A(BR) 42E(BR) 42D(BR) 36AS(BL) 199A(G/Y)