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_0339	SHEET: 1 OF 1 / REV A
DRAWN BY: A.MCCLURE	TRANE® DATE: 07/14/10	DIAGRAM CONNECTION ELECTRICAL COOLING/GAS HEAT 400-575V YC 151E.181E	
REPLACES:	REVISION DATE:		
CAD SYSTEM USED:	SIMILAR TO: 2313_0040		

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

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

W14 (RD) SPLICE

IGN J1 PPF3 S1 S2 L2 L1 HI/SINGLE LO COM 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)

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) 104A (BL) 103A (PR) BLACK BLACK 127A(BK)

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

84A (YL) FROM HPC1 BLACK BLACK FROM TDL1

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

J2 RTOM J6 P6 15 124A(BK) 125A(BK) 126A(BK)

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

W63 (BK) W64 (BK) W66 (RD) W65 (BL)

36BD(BL) TIOR 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

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 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) 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 P3 P5 J2 J3 J5 J4 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)

RTRM

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) (T1) (COM) 1 2 3 4 5 6 7 8 9

1 2 3 4 5 6 7 8 9 10

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

FROM LPC2 YELLOW YELLOW 117A(PR) 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)

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

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

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)

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

FIRE PANEL

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

ODM2 6E (PR) 11A (BR) 15A (BK)

ODM1 6C (PR) 7A (BR) 4C (BK)

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

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

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)

W65 (BL) W64 (BK) W66 (RD) W63 (BK) 40A (BL) 41A (RD) 39A (BK) 38A (BK) 14 7 PPF5 J2 P21 J1 COMM ON 1 2 3 4 5 SW1 TB1 TB2

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(BK) W55(BK) W57(RD)

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

INSET K
RHS (+) (-) 138A(RD) 137A(PR) 12 13
RAS 142A(PR) 141A(PR) 13

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

ECA
2-10VDC FEEDBACK+ INPUT- J17 P24 J14 E_xF
97A(PR) P23 J13 MAT
2-10VDC CONTROL+ OUTPUT- J18
139A(PR) 140A(RD) P12 J12 OAH/OAE
P31 J11 OAT
142A(PR) 141A(PR) P10 J10 RAT
137A(PR) 138A(RD) P9 J9 RAH/RAE
121A(BRN) 120A(BK) 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) W38(RD) 51B(PR) 52E(BL)

NEC CLASS 2

ZONE SENSOR 1 2 3 4 5 6 7 8 9 10

BMS

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

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

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

TO F BLACK RHV BLACK

BLACK CCH2 GREEN BLACK

BLACK CCH1 GREEN BLACK

BLUE BLUE LPC1 YELLOW YELLOW LPC2 ORANGE ORANGE LPC3

BLACK BLACK HPC1 RED RED HPC2

BLACK BLACK TDL1 RED RED TDL2

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

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

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

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

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

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

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)