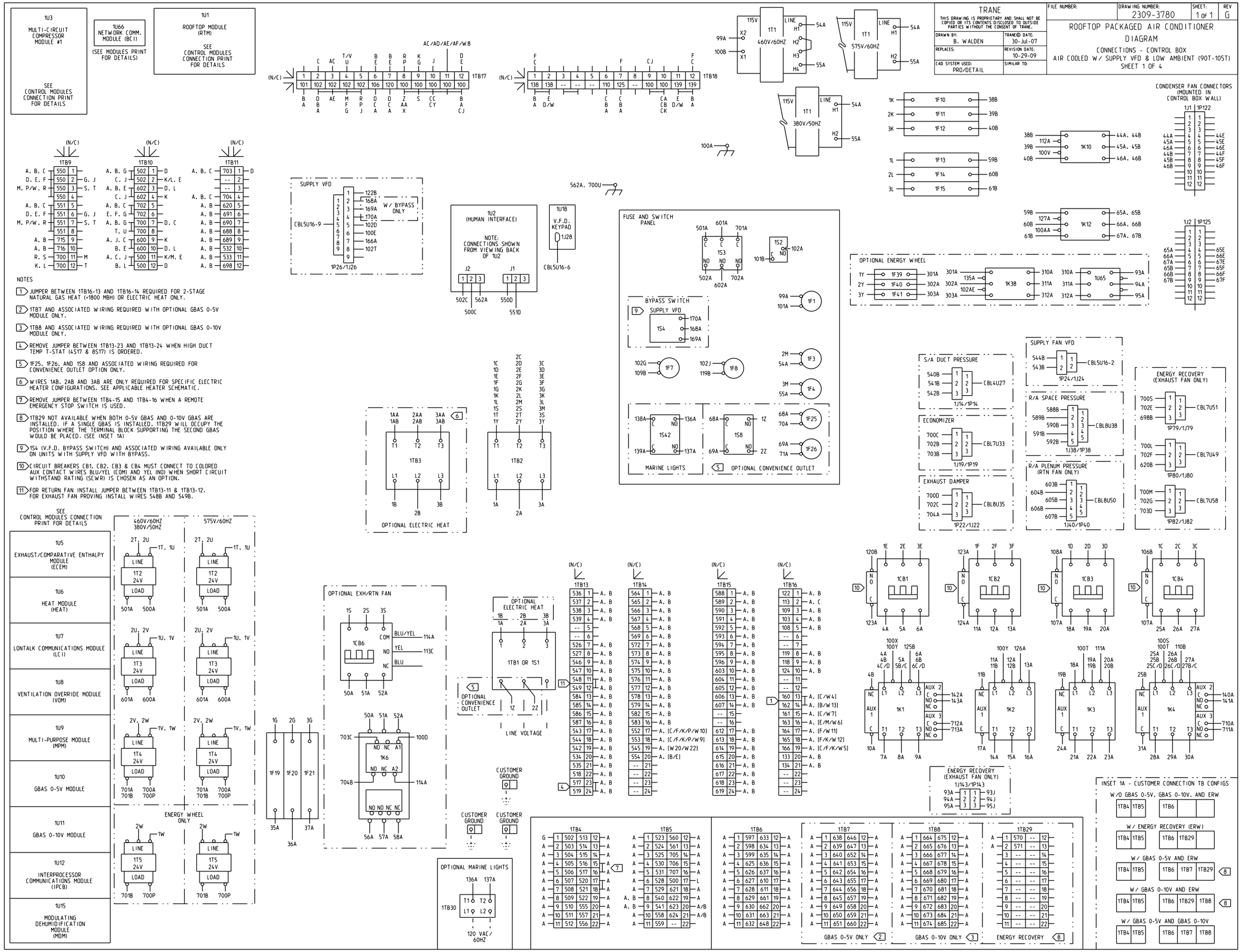
TRANE
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DRAWN BY: B. WALDEN
TRANE® DATE: 30-Jul-07
REPLACES:
REVISION DATE: 10-29-09
CAD SYSTEM USED: PRO/DETAIL
SIMILAR TO:
FILE NUMBER:
DRAWING NUMBER: 2309-3780
SHEET: 1 OF 1
REV G
ROOFTOP PACKAGED AIR CONDITIONER DIAGRAM
CONNECTIONS - CONTROL BOX
AIR COOLED W/ SUPPLY VFD & LOW AMBIENT (90T-105T)
SHEET 1 OF 4
1U3 MULTI-CIRCUIT COMPRESSOR MODULE #1
SEE CONTROL MODULES CONNECTION PRINT FOR DETAILS
1U66 NETWORK COMM. MODULE (BCI)
(SEE MODULES PRINT FOR DETAILS)
1U1 ROOFTOP MODULE (RTM)
SEE CONTROL MODULES CONNECTION PRINT FOR DETAILS
AC/AD/AE/AF/W8
1TB17
1TB18
1T1 460V/60HZ
1T1 575V/60HZ
1T1 380V/50HZ
CONDENSER FAN CONNECTORS (MOUNTED IN CONTROL BOX WALL)
1J1 1P122
1K10
1K12
1J2 1P125
1TB9
1TB10
1TB11
NOTES
1 JUMPER BETWEEN 1TB16-13 AND 1TB16-14 REQUIRED FOR 2-STAGE NATURAL GAS HEAT (<1800 MBH) OR ELECTRIC HEAT ONLY.
2 1TB7 AND ASSOCIATED WIRING REQUIRED WITH OPTIONAL GBAS 0-5V MODULE ONLY.
3 1TB8 AND ASSOCIATED WIRING REQUIRED WITH OPTIONAL GBAS 0-10V MODULE ONLY.
4 REMOVE JUMPER BETWEEN 1TB13-23 AND 1TB13-24 WHEN HIGH DUCT TEMP T-STAT (4S17 & 8S17) IS ORDERED.
5 1F25, 1F26, AND 1S8 AND ASSOCIATED WIRING REQUIRED FOR CONVENIENCE OUTLET OPTION ONLY.
6 WIRES 1AB, 2AB AND 3AB ARE ONLY REQUIRED FOR SPECIFIC ELECTRIC HEATER CONFIGURATIONS. SEE APPLICABLE HEATER SCHEMATIC.
7 REMOVE JUMPER BETWEEN 1TB4-15 AND 1TB4-16 WHEN A REMOTE EMERGENCY STOP SWITCH IS USED.
8 1TB29 NOT AVAILABLE WHEN BOTH 0-5V GBAS AND 0-10V GBAS ARE INSTALLED. IF A SINGLE GBAS IS INSTALLED, 1TB29 WILL OCCUPY THE POSITION WHERE THE TERMINAL BLOCK SUPPORTING THE SECOND GBAS WOULD BE PLACED. (SEE INSET 1A)
9 1S4 (V.F.D. BYPASS SWITCH) AND ASSOCIATED WIRING AVAILABLE ONLY ON UNITS WITH SUPPLY VFD WITH BYPASS.
10 CIRCUIT BREAKERS CB1, CB2, CB3 & CB4 MUST CONNECT TO COLORED AUX CONTACT WIRES BLU/YEL (COM) AND YEL (NO) WHEN SHORT CIRCUIT WITHSTAND RATING (SCWR) IS CHOSEN AS AN OPTION.
11 FOR RETURN FAN INSTALL JUMPER BETWEEN 1TB13-11 & 1TB13-12. FOR EXHAUST FAN PROVING INSTALL WIRES 548B AND 549B.
SUPPLY VFD
CBL5U16-9
W/ BYPASS ONLY
1P26/1J26
1U2 (HUMAN INTERFACE)
NOTE: CONNECTIONS SHOWN FROM VIEWING BACK OF 1U2
1U18 V.F.D. KEYPAD
CBL5U16-6
FUSE AND SWITCH PANEL
BYPASS SWITCH
MARINE LIGHTS
OPTIONAL CONVENIENCE OUTLET
OPTIONAL ENERGY WHEEL
S/A DUCT PRESSURE
CBL4U27
1J14/1P14
ECONOMIZER
CBL7U33
1J19/1P19
EXHAUST DAMPER
CBL8U35
1P22/1J22
SUPPLY FAN VFD
CBL5U16-2
1P24/1J24
R/A SPACE PRESSURE
CBL8U38
1J38/1P38
R/A PLENUM PRESSURE (RTN FAN ONLY)
CBL8U50
1J40/1P40
ENERGY RECOVERY (EXHAUST FAN ONLY)
CBL7U51
1P79/1J79
CBL7U49
1P80/1J80
CBL7U58
1P82/1J82
OPTIONAL ELECTRIC HEAT
1TB3
1TB2
SEE CONTROL MODULES CONNECTION PRINT FOR DETAILS
1U5 EXHAUST/COMPARATIVE ENTHALPY MODULE (ECEM)
1U6 HEAT MODULE (HEAT)
1U7 LONTALK COMMUNICATIONS MODULE (LCI)
1U8 VENTILATION OVERRIDE MODULE (VOM)
1U9 MULTI-PURPOSE MODULE (MPM)
1U10 GBAS 0-5V MODULE
1U11 GBAS 0-10V MODULE
1U12 INTERPROCESSOR COMMUNICATIONS MODULE (IPCB)
1U15 MODULATING DEHUMIDIFICATION MODULE (MDM)
460V/60HZ 380V/50HZ
575V/60HZ
ENERGY WHEEL ONLY
OPTIONAL EXH/RTN FAN
1CB6
OPTIONAL ELECTRIC HEAT
1TB1 OR 1S1
OPTIONAL CONVENIENCE OUTLET
LINE VOLTAGE
CUSTOMER GROUND
OPTIONAL MARINE LIGHTS
1TB30
120 VAC/ 60HZ
1CB1
1CB2
1CB3
1CB4
1K1
1K2
1K3
1K4
1K6
ENERGY RECOVERY (EXHAUST FAN ONLY)
1J143/1P143
INSET 1A - CUSTOMER CONNECTION TB CONFIGS
W/O GBAS 0-5V, GBAS 0-10V, AND ERW
W/ ENERGY RECOVERY (ERW)
W/ GBAS 0-5V AND ERW
W/ GBAS 0-10V AND ERW
W/ GBAS 0-5V AND GBAS 0-10V
1TB4
1TB5
1TB6
1TB7
1TB8
1TB29
GBAS 0-5V ONLY
GBAS 0-10V ONLY
ENERGY RECOVERY