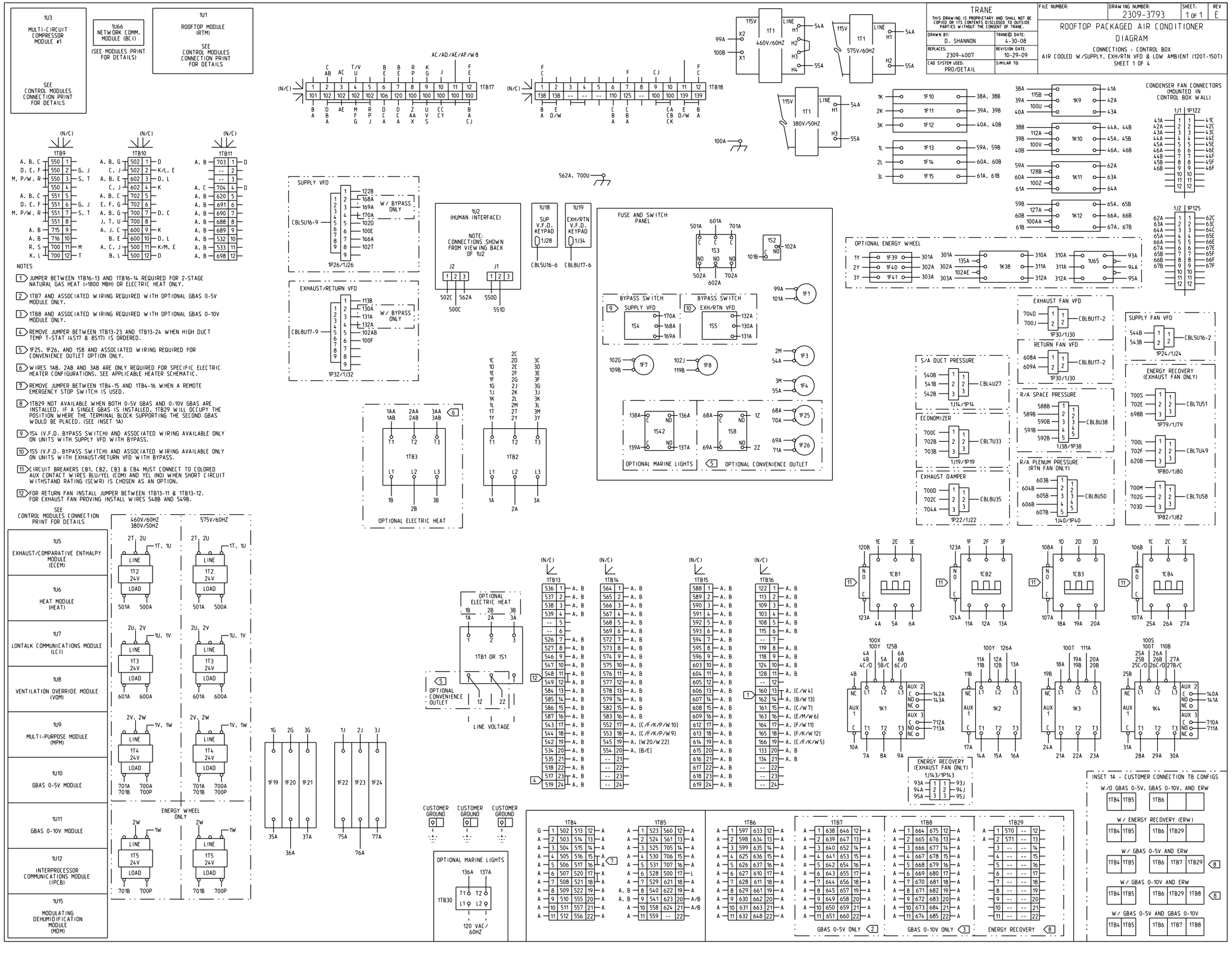
TRANE
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DRAWN BY: D. SHANNON
TRANE® DATE: 4-30-08
REPLACES: 2309-4007
REVISION DATE: 10-29-09
CAD SYSTEM USED: PRO/DETAIL
SIMILAR TO:
FILE NUMBER:
DRAWING NUMBER: 2309-3793
SHEET: 1 OF 1
REV E
ROOFTOP PACKAGED AIR CONDITIONER DIAGRAM
CONNECTIONS - CONTROL BOX
AIR COOLED W/SUPPLY, EXH/RTN VFD & LOW AMBIENT (120T-150T)
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
1TB17
1TB18
1T1 460V/60HZ
1T1 575V/60HZ
1T1 380V/50HZ
1F10 1F11 1F12 1F13 1F14 1F15
1K9 1K10 1K11 1K12
CONDENSER FAN CONNECTORS (MOUNTED IN CONTROL BOX WALL)
1J1 1P122
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 1S5 (V.F.D. BYPASS SWITCH) AND ASSOCIATED WIRING AVAILABLE ONLY ON UNITS WITH EXHAUST/RETURN VFD WITH BYPASS.
11 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.
12 FOR RETURN FAN INSTALL JUMPER BETWEEN 1TB13-11 & 1TB13-12. FOR EXHAUST FAN PROVING INSTALL WIRES 548B AND 549B.
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
SUPPLY VFD
EXHAUST/RETURN VFD
W/ BYPASS ONLY
1P26/1J26
1P32/1J32
1U2 (HUMAN INTERFACE)
NOTE: CONNECTIONS SHOWN FROM VIEWING BACK OF 1U2
1U18 SUP V.F.D. KEYPAD 1J28
1U19 EXH/RTN V.F.D. KEYPAD 1J34
FUSE AND SWITCH PANEL
BYPASS SWITCH SUPPLY VFD
BYPASS SWITCH EXH/RTN VFD
OPTIONAL MARINE LIGHTS
OPTIONAL CONVENIENCE OUTLET
OPTIONAL ELECTRIC HEAT
1TB3 1TB2
OPTIONAL ENERGY WHEEL
EXHAUST FAN VFD
RETURN FAN VFD
SUPPLY FAN VFD
S/A DUCT PRESSURE
ECONOMIZER
EXHAUST DAMPER
R/A SPACE PRESSURE
R/A PLENUM PRESSURE (RTN FAN ONLY)
ENERGY RECOVERY (EXHAUST FAN ONLY)
1CB1 1CB2 1CB3 1CB4
1K1 1K2 1K3 1K4
1TB13 1TB14 1TB15 1TB16
1TB1 OR 1S1
LINE VOLTAGE
CUSTOMER GROUND
1TB30
120 VAC/60HZ
1TB4 1TB5 1TB6 1TB7 1TB8 1TB29
GBAS 0-5V ONLY
GBAS 0-10V ONLY
ENERGY RECOVERY
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