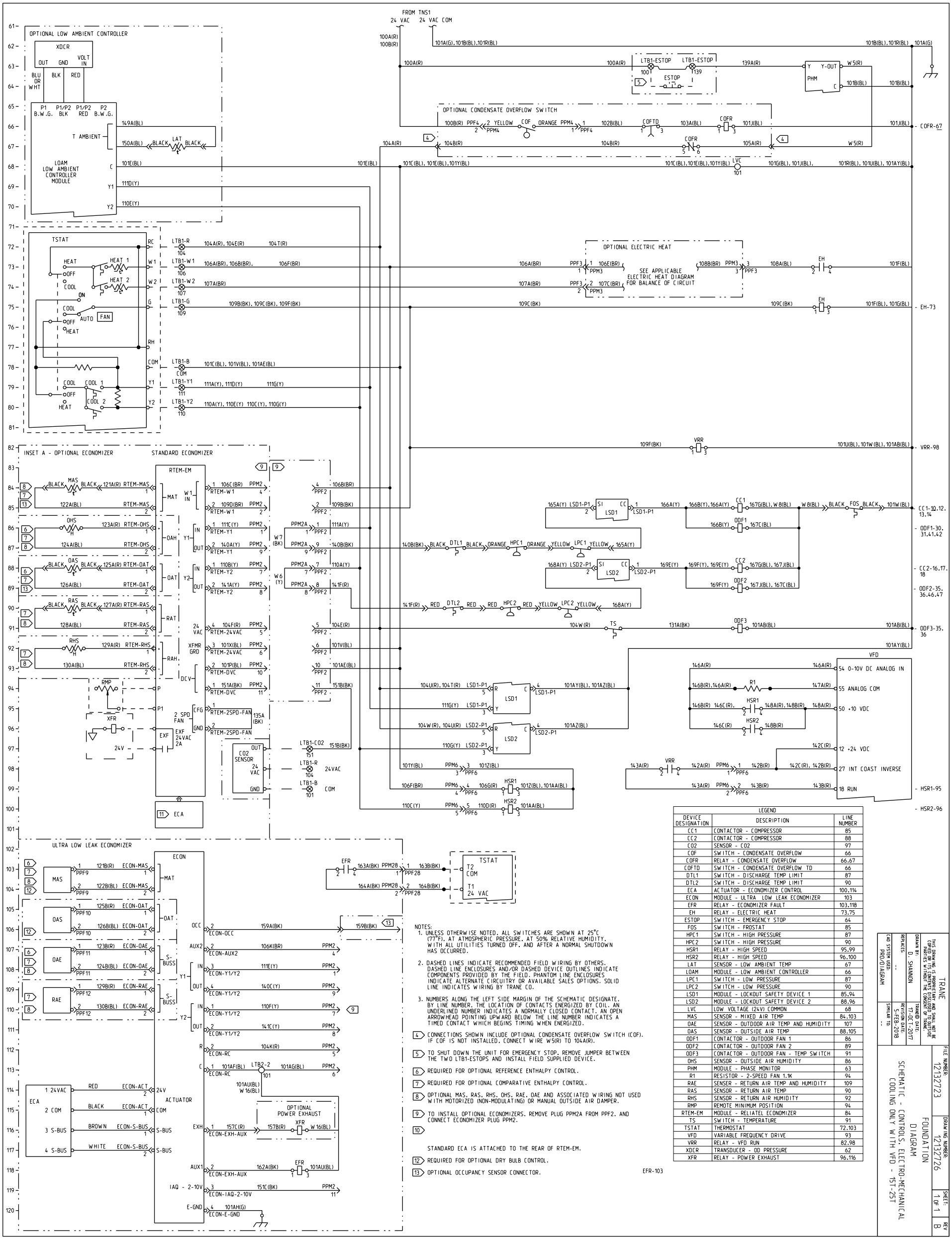

NOTES:

1. UNLESS OTHERWISE NOTED, ALL SWITCHES ARE SHOWN AT 25°C (77°F), AT ATMOSPHERIC PRESSURE, AT 50% RELATIVE HUMIDITY, WITH ALL UTILITIES TURNED OFF, AND AFTER A NORMAL SHUTDOWN HAS OCCURRED.
2. DASHED LINES INDICATE RECOMMENDED FIELD WIRING BY OTHERS. DASHED LINE ENCLOSURES AND/OR DASHED DEVICE OUTLINES INDICATE COMPONENTS PROVIDED BY THE FIELD. PHANTOM LINE ENCLOSURES INDICATE ALTERNATE CIRCUITRY OR AVAILABLE SALES OPTIONS. SOLID LINE INDICATES WIRING BY TRANE CO.
3. NUMBERS ALONG THE LEFT SIDE MARGIN OF THE SCHEMATIC DESIGNATE, BY LINE NUMBER. THE LOCATION OF CONTACTS ENERGIZED BY COIL. AN UNDERLINED NUMBER INDICATES A NORMALLY CLOSED CONTACT. AN OPEN ARROWHEAD POINTING UPWARD BELOW THE LINE NUMBER INDICATES A TIMED CONTACT WHICH BEGINS TIMING WHEN ENERGIZED.

4 CONNECTIONS SHOWN INCLUDE OPTIONAL CONDENSATE OVERFLOW SWITCH (COF). IF COF IS NOT INSTALLED, CONNECT WIRE W5(R) TO 104A(R).

5 TO SHUT DOWN THE UNIT FOR EMERGENCY STOP, REMOVE JUMPER BETWEEN THE TWO LTB1-ESTOPS AND INSTALL FIELD SUPPLIED DEVICE.

6 REQUIRED FOR OPTIONAL REFERENCE ENTHALPY CONTROL.

7 REQUIRED FOR OPTIONAL COMPARATIVE ENTHALPY CONTROL.

8 OPTIONAL MAS, RAS, RHS, OHS, RAE, OAE AND ASSOCIATED WIRING NOT USED WITH MOTORIZED (NON-MODULATING) OR MANUAL OUTSIDE AIR DAMPER.

9 TO INSTALL OPTIONAL ECONOMIZERS, REMOVE PLUG PPM2A FROM PPF2, AND CONNECT ECONOMIZER PLUG PPM2.

10

STANDARD ECA IS ATTACHED TO THE REAR OF RTEM-EM.

12 REQUIRED FOR OPTIONAL DRY BULB CONTROL.

13 OPTIONAL OCCUPANCY SENSOR CONNECTOR.

EFR-103

LEGEND		
DEVICE DESIGNATION	DESCRIPTION	LINE NUMBER
CC1	CONTACTOR - COMPRESSOR	85
CC2	CONTACTOR - COMPRESSOR	88
CO2	SENSOR - CO2	97
COF	SWITCH - CONDENSATE OVERFLOW	66
COFR	RELAY - CONDENSATE OVERFLOW	66.67
COFTD	SWITCH - CONDENSATE OVERFLOW TD	66
DTL1	SWITCH - DISCHARGE TEMP LIMIT	87
DTL2	SWITCH - DISCHARGE TEMP LIMIT	90
ECA	ACTUATOR - ECONOMIZER CONTROL	100.114
ECON	MODULE - ULTRA LOW LEAK ECONOMIZER	103
EFR	RELAY - ECONOMIZER FAULT	103.118
EH	RELAY - ELECTRIC HEAT	73.75
ESTOP	SWITCH - EMERGENCY STOP	64
FOS	SWITCH - FROSTAT	85
HPC1	SWITCH - HIGH PRESSURE	87
HPC2	SWITCH - HIGH PRESSURE	90
HSR1	RELAY - HIGH SPEED	95.99
HSR2	RELAY - HIGH SPEED	96.100
LAT	SENSOR - LOW AMBIENT TEMP	67
LOAM	MODULE - LOW AMBIENT CONTROLLER	66
LPC1	SWITCH - LOW PRESSURE	87
LPC2	SWITCH - LOW PRESSURE	90
LSD1	MODULE - LOCKOUT SAFETY DEVICE 1	85.94
LSD2	MODULE - LOCKOUT SAFETY DEVICE 2	88.96
LVC	LOW VOLTAGE (24V) COMMON	68
MAS	SENSOR - MIXED AIR TEMP	84.103
OAE	SENSOR - OUTDOOR AIR TEMP AND HUMIDITY	107
OAS	SENSOR - OUTSIDE AIR TEMP	88.105
ODF1	CONTACTOR - OUTDOOR FAN 1	86
ODF2	CONTACTOR - OUTDOOR FAN 2	89
ODF3	CONTACTOR - OUTDOOR FAN - TEMP SWITCH	91
OHS	SENSOR - OUTSIDE AIR HUMIDITY	86
PHM	MODULE - PHASE MONITOR	63
R1	RESISTOR - 2-SPEED FAN 1.1K	94
RAE	SENSER - RETURN AIR TEMP AND HUMIDITY	109
RAS	SENSOR - RETURN AIR TEMP	90
RHS	SENSOR - RETURN AIR HUMIDITY	92
RMP	REMOTE MINIMUM POSITION	94
RTEM-EM	MODULE - RELIATEL ECONOMIZER	84
TS	SWITCH - TEMPERATURE	91
TSTAT	THERMOSTAT	72.103
VFD	VARIABLE FREQUENCY DRIVE	93
VRR	RELAY - VFD RUN	82.98
XDCR	TRANSDUCER - OD PRESSURE	62
XFR	RELAY - POWER EXHAUST	96.116

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TRANE

DRAWN BY: D. SHANNON
TRANE® DATE: 17-OCT-2017
REPLACES: --
REVISION DATE: 5-FEB-2018
CAD SYSTEM USED: PRO/DIAGRAM
SIMILAR TO: --

FILE NUMBER: 12132723
DRAWING NUMBER: 12132726
SHEET: 1 OF 1
REV: B

FOUNDATION DIAGRAM

SCHEMATIC - CONTROLS, ELECTRO-MECHANICAL
COOLING ONLY WITH VFD - 15T-25T