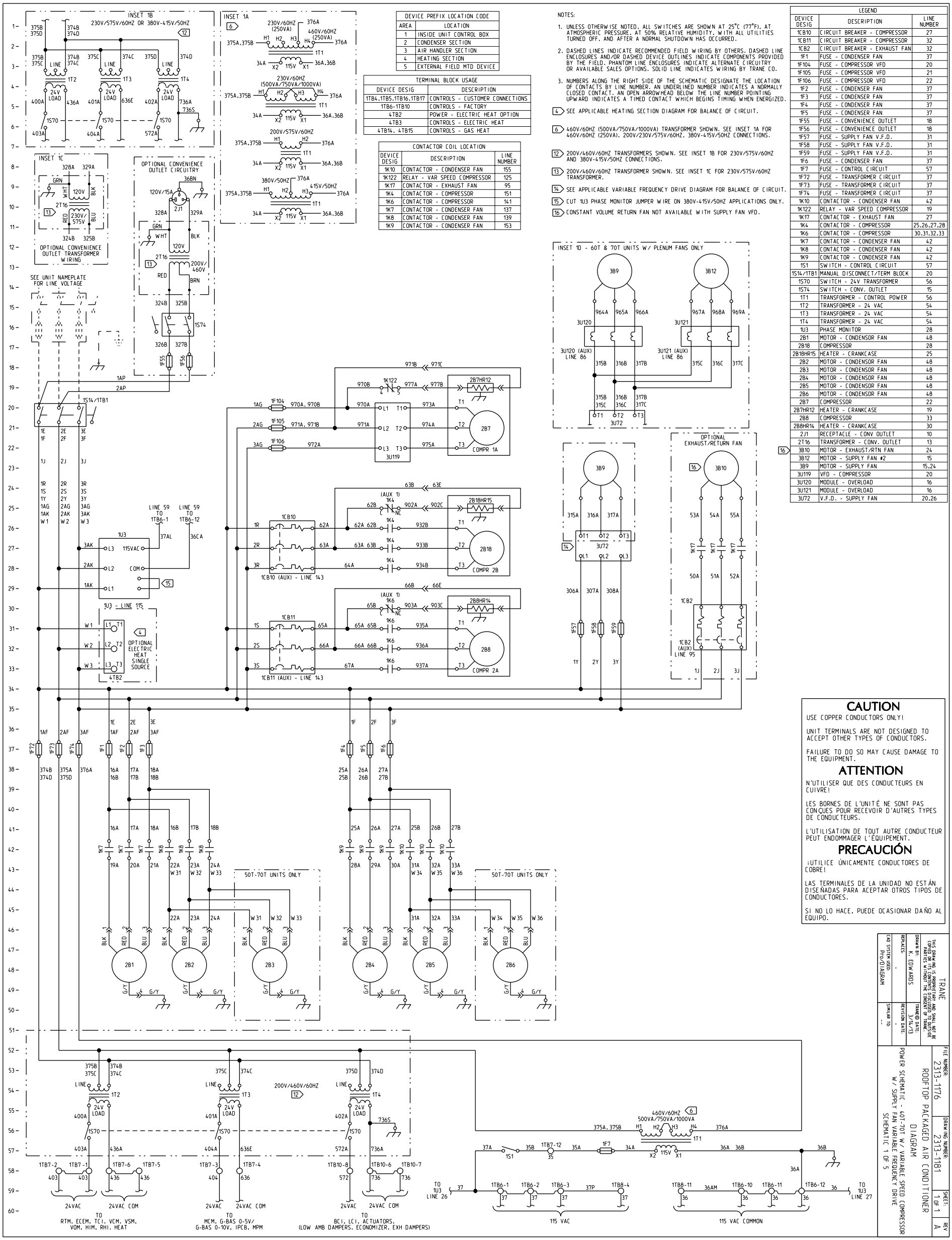

DEVICE PREFIX LOCATION CODE	
AREA	LOCATION
1	INSIDE UNIT CONTROL BOX
2	CONDENSER SECTION
3	AIR HANDLER SECTION
4	HEATING SECTION
5	EXTERNAL FIELD MTD DEVICE

TERMINAL BLOCK USAGE	
DEVICE DESIG	DESCRIPTION
1TB4,1TB5,1TB16,1TB17	CONTROLS - CUSTOMER CONNECTIONS
1TB6-1TB10	CONTROLS - FACTORY
4TB2	POWER - ELECTRIC HEAT OPTION
4TB3	CONTROLS - ELECTRIC HEAT
4TB14, 4TB15	CONTROLS - GAS HEAT

CONTACTOR COIL LOCATION		
DEVICE DESIG	DESCRIPTION	LINE NUMBER
1K10	CONTACTOR - CONDENSER FAN	155
1K122	RELAY - VAR SPEED COMPRESSOR	125
1K17	CONTACTOR - EXHAUST FAN	95
1K4	CONTACTOR - COMPRESSOR	151
1K6	CONTACTOR - COMPRESSOR	141
1K7	CONTACTOR - CONDENSER FAN	137
1K8	CONTACTOR - CONDENSER FAN	139
1K9	CONTACTOR - CONDENSER FAN	153

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 RIGHT SIDE OF THE SCHEMATIC DESIGNATE THE LOCATION OF CONTACTS BY LINE NUMBER. AN UNDERLINED NUMBER INDICATES A NORMALLY CLOSED CONTACT. AN OPEN ARROWHEAD BELOW THE LINE NUMBER POINTING UPWARD INDICATES A TIMED CONTACT WHICH BEGINS TIMING WHEN ENERGIZED.

4 SEE APPLICABLE HEATING SECTION DIAGRAM FOR BALANCE OF CIRCUIT.

6 460V/60HZ (500VA/750VA/1000VA) TRANSFORMER SHOWN. SEE INSET 1A FOR 460V/60HZ (250VA), 200V/230V/575V/60HZ, 380V-415V/50HZ CONNECTIONS.

12 200V/460V/60HZ TRANSFORMERS SHOWN. SEE INSET 1B FOR 230V/575V/60HZ AND 380V-415V/50HZ CONNECTIONS.

13 200V/460V/60HZ TRANSFORMER SHOWN. SEE INSET 1C FOR 230V/575V/60HZ TRANSFORMER.

14 SEE APPLICABLE VARIABLE FREQUENCY DRIVE DIAGRAM FOR BALANCE OF CIRCUIT.

15 CUT 1U3 PHASE MONITOR JUMPER WIRE ON 380V-415V/50HZ APPLICATIONS ONLY.

16 CONSTANT VOLUME RETURN FAN NOT AVAILABLE WITH SUPPLY FAN VFD.

LEGEND		
DEVICE DESIG	DESCRIPTION	LINE NUMBER
1CB10	CIRCUIT BREAKER - COMPRESSOR	27
1CB11	CIRCUIT BREAKER - COMPRESSOR	32
1CB2	CIRCUIT BREAKER - EXHAUST FAN	32
1F1	FUSE - CONDENSER FAN	37
1F104	FUSE - COMPRESSOR VFD	20
1F105	FUSE - COMPRESSOR VFD	21
1F106	FUSE - COMPRESSOR VFD	22
1F2	FUSE - CONDENSER FAN	37
1F3	FUSE - CONDENSER FAN	37
1F4	FUSE - CONDENSER FAN	37
1F5	FUSE - CONDENSER FAN	37
1F55	FUSE - CONVENIENCE OUTLET	18
1F56	FUSE - CONVENIENCE OUTLET	18
1F57	FUSE - SUPPLY FAN V.F.D.	31
1F58	FUSE - SUPPLY FAN V.F.D.	31
1F59	FUSE - SUPPLY FAN V.F.D.	31
1F6	FUSE - CONDENSER FAN	37
1F7	FUSE - CONTROL CIRCUIT	57
1F72	FUSE - TRANSFORMER CIRCUIT	37
1F73	FUSE - TRANSFORMER CIRCUIT	37
1F74	FUSE - TRANSFORMER CIRCUIT	37
1K10	CONTACTOR - CONDENSER FAN	42
1K122	RELAY - VAR SPEED COMPRESSOR	19
1K17	CONTACTOR - EXHAUST FAN	27
1K4	CONTACTOR - COMPRESSOR	25.26.27.28
1K6	CONTACTOR - COMPRESSOR	30.31.32.33
1K7	CONTACTOR - CONDENSER FAN	42
1K8	CONTACTOR - CONDENSER FAN	42
1K9	CONTACTOR - CONDENSER FAN	42
1S1	SWITCH - CONTROL CIRCUIT	57
1S14/1TB1	MANUAL DISCONNECT/TERM BLOCK	20
1S70	SWITCH - 24V TRANSFORMER	56
1S74	SWITCH - CONV. OUTLET	15
1T1	TRANSFORMER - CONTROL POWER	56
1T2	TRANSFORMER - 24 VAC	54
1T3	TRANSFORMER - 24 VAC	54
1T4	TRANSFORMER - 24 VAC	54
1U3	PHASE MONITOR	28
2B1	MOTOR - CONDENSOR FAN	48
2B18	COMPRESSOR	28
2B18HR15	HEATER - CRANKCASE	25
2B2	MOTOR - CONDENSOR FAN	48
2B3	MOTOR - CONDENSOR FAN	48
2B4	MOTOR - CONDENSOR FAN	48
2B5	MOTOR - CONDENSOR FAN	48
2B6	MOTOR - CONDENSOR FAN	48
2B7	COMPRESSOR	22
2B7HR12	HEATER - CRANKCASE	19
2B8	COMPRESSOR	33
2B8HR14	HEATER - CRANKCASE	30
2J1	RECEPTACLE - CONV OUTLET	10
2T16	TRANSFORMER - CONV. OUTLET	13
16 3B10	MOTOR - EXHAUST/RTN FAN	24
3B12	MOTOR - SUPPLY FAN #2	15
3B9	MOTOR - SUPPLY FAN	15.24
3U119	VFD - COMPRESSOR	20
3U120	MODULE - OVERLOAD	16
3U121	MODULE - OVERLOAD	16
3U72	V.F.D. - SUPPLY FAN	20.26

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.

ATTENTION

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.

PRECAUCIÓN

¡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 IMPLIED TO ANYONE OUTSIDE PARTIES WITHOUT THE CONSENT OF TRANE.

DRAWN BY: K. EDWARDS
REPLACES: -
TRANE® DATE: 3/14/13
CAD SYSTEM USED: Pro/DIAGRAM
SIMILAR TO: --
REVISION DATE:

FILE NUMBER: 2313-1176
DRAWING NUMBER: 2313-1181
SHEET: 1 OF 1
REV: A

ROOFTOP PACKAGED AIR CONDITIONER DIAGRAM

POWER SCHEMATIC - 40T-70T W/ VARIABLE SPEED COMPRESSOR W/ SUPPLY FAN VARIABLE FREQUENCY DRIVE SCHEMATIC 1 OF 5